

Section 4.18

Utilities and Service Systems



Active Landfills Profile for Badlands Sanitary Landfill (33-AA-0006)

Overview		Operations		Financial		Contacts		Map	
Profiles Home		Overview Profile		New Landfill				Help	
General Information				State Representatives					
Jurisdiction:		Riverside-Unincorporated County		2 Senate District(s) More...					
County:		Riverside		Benoit, John J. (R)		Senate District 37			
Size:		6,724.0 Sq./Miles		Dutton, Robert (R)		Senate District 31			
Geographic Area:		Southern California		2 Assembly District(s) More...					
Rural/Urban:		Urban		Cook, Paul (R)		Assembly District 65			
LEA:		County of Riverside		Emmerson, Bill (R)		Assembly District 63			
Board Action (Recent Agenda Item)		Search by Name Search by Swis Number							
Site Information (More)				Permit Information					
Latitude:		33.95349		Longitude:		-117.11758		Solid Waste Facility	
Name:		Badlands Sanitary Landfill		Permit Status:		Permitted			
Location:		31125 Ironwood Avenue Moreno Valley CA, 92555		Operational Status:		Active			
Telephone:		(951) 486-3200		Permitted Maximum Disposal:		4,000 Tons/day			
				CIWMB Board Concurrence Date:		4/2011			
				Next Permit Review Date:		4/2016			
U.S. EPA Facility Registration System ID:		110017973335		Permitted Site Area:		278			
				Permitted Disposal Area:		150			
Operator(s)									
County Of Riverside Waste Mgmt Dept 14310 Frederick Street Moreno Valley, CA 92553 Phone: (951) 486-3200 Fax: (951) 486-3205									
Owners(s)									
County Of Riverside Waste Mgmt Dept 14310 Frederick Street Moreno Valley, CA 92553 Phone: (951) 486-3200 Fax: (951) 486-3205									
Associated Facilities									
No Associated Facilities									
Capacity Information (2000) (Closure Date: 1/1/2024)									
Total Estimated Permitted Capacity:		Total Estimated Capacity Used:		Remaining Estimated Capacity:					
33,560,993 (cubic yards)		18,830,968 (cubic yards)		56.1%		14,730,025 (cubic yards)		43.9%	
Surrounding Land Use (Adjacent to facility as noted during inspections)				Statewide Tipping Fee Information (Per Ton) (Survey 2000)					
Open Space - Irrigated				MSW		Tires		Green Waste	
Open Space - Nonirrigated				Lowest		\$2.50		\$42.00	
Other				Highest		\$85.30		\$280.00	
								\$0.45	
								\$5.00	
								\$83.00	

Residential	Median	\$34.10	\$95.00	\$27.00	\$36.50
Rural	Weighted Average	N/R	\$67.67	\$24.29	\$29.65

Distance to Nearest Residence: 0.08 Miles (approx. 422 Feet)



Site Tipping Fee Information (Survey 2000)



MSW	\$30 Per Ton
Green Waste	\$40 Per Ton
Construction/Demolition	\$19.5 Per Ton
Tires	\$84.5 Per Ton

California Environmental Quality Act (CEQA) Information - (CERES)



State/Regional Water Quality Control Board Information



<u>State Clearing House Number</u>	2010101090	<u>Waste Discharge ID#:</u>	8 330305020
Lead CEQA Agency	Solid Waste Authority	Santa Ana Regional Water Quality Control Board	http://www.swrcb.ca.gov/rwqcb8/
Document Name/Project Title	Badlands Landfill Solid Waste Facility Permit Revision	Water Resources Control Board	http://www.swrcb.ca.gov
Date Received	10/28/2010		
CIWMB Comment Date	11/29/2010		

Waste Stream Information Profiles <http://www.calrecycle.ca.gov/Profiles/>
 CalRecycle Webmaster: Webmaster@calrecycle.ca.gov (916) 341-6141

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Facility/Site Summary Details: Clean Harbors Buttonwillow LLC (15-AA-0257)

For this facility, please contact Local Enforcement Agency (LEA) below

CalRecycle Contact: [Christine Karl](#)

Phone Number: (916) 341-6405

[Search New Facility](#)

Detail Inspection Enforcement Maps Documents

Identification:		Local Enforcement Agency (LEA):	
Location:	Clean Harbors Buttonwillow LLC 2500 West Lokern Road Buttonwillow, CA 93206	County of Kern Environmental Health Division 2700 M St Ste 300 Bakersfield, CA 93301 Phone: (661) 862-8700 Fax: (661) 862-8701	
Latitude:	35.40658		
Longitude:	-119.60904		
GIS Confidence:	GPS		
US EPA FRS ID: 110000500912			
Operator/Business Owner:		Land Owner(s):	
Clean Harbors Buttonwillow LLC P.O. Box 787 Buttonwillow, CA 93206-0787 Phone: (661) 762-6200 Fax:		Clean Harbors Buttonwillow LLC 2500 West Lowkern Road P.O. Box 787 Buttonwillow, CA 93206-0787 Phone: (661) 762-6200 Fax:	
Surrounding Land Use:			
Agricultural			
Permit Details:			
Current - Permit or EA Notification Issue Date: May 11 , 2009 Type: Registration View Document			
Unit Specifications:			
Data Dictionary			
Unit: 01			
Activity:	Industrial Waste Codisposal Facility	Inspection Frequency:	Monthly
Classification:	Solid Waste Facility	Max. Permitted Throughput:	10,482.00 Tons/day
Category:	Disposal	Remaining Capacity:	Contact: Christine Karl
Regulatory Status:	Permitted	Remaining Capacity Date:	January 01, 1900

Operational Status:	Active	Max. Permitted Capacity:	14,293,760 Cubic Yards
Operational Type:	BOE Reporting Disposal Facility	Total Acreage:	320.0000 Acres
Ceased Op Date:	01/01/2040	Disposal Acreage:	160.0000 Acres
Closure Type:	Estimated	WDR Landfill Class:	I
Waste Type:	Contaminated soil, Industrial, Other designated, Other hazardous		

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Last updated: Data updated continuously.
Solid Waste Information System (SWIS), <http://www.CalRecycle.ca.gov/SWFacilities/Directory/>
Cody Oquendo, Cody.Oquendo@CalRecycle.ca.gov (916) 341-6719

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Facility/Site Summary Details: Kettleman Hills - B18 Nonhaz Codisposal (16-AA-0023)

For this facility, please contact Local Enforcement Agency (LEA) below

CalRecycle Contact: [Margaret Comotto](#)

Phone Number: (916) 341-6399

[Search New Facility](#)

Detail Inspection Enforcement Maps Documents

Identification:		Local Enforcement Agency (LEA):	
Location:	Kettleman Hills - B18 Nonhaz Codisposal 35251 Old Skyline Road Kettleman City, CA 93239	County of Kings County Health Department Environmental Health Services 330 Campus Dr Hanford, CA 93230 Phone: (559) 584-1411 Fax: (559) 584-6040	
Latitude:	35.95619		
Longitude:	-120.00855		
GIS Confidence:	Map		
US EPA FRS ID:	Not Available		
Operator/Business Owner:		Land Owner(s):	
Chemical Waste Management, Inc. P.O. Box 471 Kettleman City, CA 93239 Phone: (559) 386-9711 Fax: (559) 386-6288		Waste Management, Inc. 1001 Fannin Street, Suite 4000 Houston, TX 77002 Phone: (713) 512-6200 Fax:	
Surrounding Land Use:			
Agricultural			
Permit Details:			
Current - Permit or EA Notification Issue Date: December 4 , 2007 Type: Registration View Document			
Unit Specifications:			
Data Dictionary			
Unit: 01			
Activity:	Industrial Waste Codisposal Facility	Inspection Frequency:	Monthly
Classification:	Solid Waste Facility	Max. Permitted Throughput:	8,000.00 Tons/day
Category:	Disposal	Remaining Capacity:	6,000,000 Cubic Yards
Regulatory Status:	Permitted	Remaining Capacity Date:	October 04, 2000
Operational Status:	Active	Max. Permitted Capacity:	

Operational Type:	BOE Reporting Disposal Facility	Total Acreage:	1600.0000 Acres	10,700,000 Cubic Yards
Ceased Op Date:		Disposal Acreage:	499.0000 Acres	
Closure Type:	Not Available	WDR Landfill Class:	I,II	
Waste Type:	Contaminated soil, Industrial			

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Countywide, Regionwide, and Statewide Jurisdiction Diversion/Disposal Progress Report

ADVISORY! The per capita disposal rate is a jurisdiction-specific index and cannot be compared between jurisdictions. The per capita disposal rate is used as one of several "factors" in determining a jurisdiction's compliance with the intent of AB 939, and allows the California Department of Resources Recycling and Recovery (CalRecycle) and jurisdictions to set their primary focus on successful implementation of diversion programs. Meeting the disposal rate targets is not necessarily an indication of compliance.

Please note! This online database contains some disposal rates calculated with data as submitted by the jurisdiction. This data is subject to change during the formal CalRecycle review process or when a jurisdiction submits updated information. Specifically, the Annual Report Review Status 'Staff Reviewed' means the jurisdiction has submitted their Annual Report and Local Assistance and Market Development Staff have reviewed the data as submitted. However, these reports have not yet been formally presented to or approved by CalRecycle.

Search Criteria:

County: *Riverside*
 Report Year: *2009*
 Disposal Rate Achievement: *All Disposal Rates*

Jurisdiction	# of Programs Implemented	Annual Report Review Status	Population Disposal (PPD)		Employment Disposal (PPD)	
			Target	Annual	Target	Annual
Banning	36	Staff Reviewed	6.1	4.4	30.7	27.6
Beaumont	39	Staff Reviewed	9.7	4.2	42.1	27.6
Blythe	37	Staff Reviewed	4.3	2.1	29.4	12.8
Calimesa	36	Staff Reviewed	4.8	3.7	17.3	21.8
Canyon Lake	32	Staff Reviewed	4.8	3.2	43	34.1
Cathedral City	41	Staff Reviewed	6.9	4.4	31.7	23.5
Coachella	41	Staff Reviewed	5.7	3.7	24.6	17.9
Corona	40	Staff Reviewed	8.6	6	18.6	14
Desert Hot Springs	37	Staff Reviewed	3.8	2.4	31.4	28.1
Hemet	36	Staff Reviewed	7	4.4	25.8	17.7
Indian Wells	42	Staff Reviewed	21.5	12.5	25.5	14.2
Indio	44	Staff Reviewed	8.7	4.6	35.6	23.9
La Quinta	39	Staff Reviewed	10	4.1	34.8	14.2
Lake Elsinore	39	Staff Reviewed	5.3	4.5	23.3	22.8
Moreno Valley	42	Staff Reviewed	4.4	3.3	31.8	26
Murrieta	41	Staff Reviewed	4.6	3.2	23	17.1
Norco	39	Staff Reviewed	11.4	6.8	23.1	14.1
Palm Desert	44	Staff Reviewed	13.3	6.6	22.3	12
Palm Springs	35	Staff Reviewed	13.9	6.5	30.6	13.6
Perris	37	Staff Reviewed	6.3	5.3	20.6	24.3
Rancho Mirage	44	Staff Reviewed	14.7	8.2	20.2	11.5
Riverside	37	Staff Reviewed	8.6	5.6	19.5	12.5
Riverside-Unincorporated	45	Staff Reviewed	6.2	5	32.5	27.3

San Jacinto	40	Staff Reviewed	6.4	3.8	33.3	21.1
Temecula	40	Staff Reviewed	7.5	4.2	13.2	10.2

Total number of Jurisdictions found: 25

[Countywide, Regionwide and Statewide Jurisdiction Diversion Progress Report](#)

Last updated: Data updated continuously.
 Local Government Central <http://www.calrecycle.ca.gov/LGCentral/>
 Larry Stephens: Larry.Stephens@calrecycle.ca.gov (916) 341-6241

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Please note! This online database contains some disposal rates calculated with data as submitted by the jurisdiction. This data is subject to change during the formal CalRecycle review process or when a jurisdiction submits updated information. Specifically, the Annual Report Review Status 'Staff Reviewed' means the jurisdiction has submitted their Annual Report and Local Assistance and Market Development Staff have reviewed the data as submitted. However, these reports have not yet been formally presented to or approved by CalRecycle.

Search Criteria:

County: *Riverside*
 Report Year: *2008*
 Disposal Rate Achievement: *All Disposal Rates*

Jurisdiction	# of Programs Implemented	Annual Report Review Status	Population Disposal (PPD)		Employment Disposal (PPD)	
			Target	Annual	Target	Annual
Banning	36	Staff Reviewed	6.1	5.2	30.7	29.8
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Calimesa	36	Staff Reviewed	4.8	4.2	17.3	23
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Cathedral City	41	Staff Reviewed	6.9	5.1	31.7	23.6
Coachella	41	Staff Reviewed	5.7	4.2	24.6	19.8
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Indian Wells	42	Staff Reviewed	21.5	15	25.5	15.6
Indio	44	Staff Reviewed	8.7	5.6	35.6	26.9
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Perris	35	Staff Reviewed	6.3	5.9	20.6	21.4
Rancho Mirage	43	Staff Reviewed	14.7	10	20.2	13.5
Riverside	37	Staff Reviewed	8.6	6.3	19.5	13.3
Riverside-Unincorporated	45	Staff Reviewed	6.2	5.1	32.5	26.8

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Transportation & Disposal

Buttonwillow, California Facility Facts



Located in central California, the Buttonwillow facility is fully permitted to manage a large number of RCRA hazardous wastes, California hazardous waste, and non-hazardous waste for stabilization treatment, solidification, and landfill. It can handle waste in bulk (solids and liquids) and in containers.

The Buttonwillow facility can also accept Naturally Occurring Radioactive Material (NORM) and Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) wastes containing radionuclides (in the decay series of U-238, U-235 and Th-232) up to 1800 pCi/gram.

This facility operates a permitted drum handling and storage area, which can store and/or transfer up to 1,500 drums. Permitted landfill capacity is in excess of 10 million cubic yards; current constructed landfill capacity is 950,000 cubic yards. The Buttonwillow facility serves a wide variety of industrial customers throughout California.

Permits

- US EPA ID No. CAD980675276
- Hazardous Waste Operating Permit issued by Department of Toxic Substance Control April 6, 1996
- California Regional Water Quality Control Board Waste Discharge Requirements 96-094 issued May 28, 1996
- Kern County Conditional Use Permit No. 94-684
- San Joaquin Valley Air Pollution Control District Air permits for all permitted units

- US Department of Interior Fish and Wildlife Section 7 Permit
- Department of Fish and Game Live-Capture Permit
- US Department of Agriculture Foreign Soils Compliance Agreement

Facility Description & General Information

Start-up Date: 1982

Facility Size: 320 acres

Services Provided:

- Non-Hazardous, California Hazardous, and RCRA Hazardous Landfill
- California Hazardous and RCRA Hazardous Stabilization Treatment
- California Hazardous Solidification
- California Non-Hazardous Surface Impoundment
- NORM and TENORM Disposal up to 1,800 pCi/grm Total Activity

Typical Customers: oil exploration and production companies, oil refineries, government services, and a wide variety of industrial generators.

Typical Waste Streams: non-hazardous soil, California hazardous soil, hazardous soil for direct landfill, hazardous waste for treatment of metals, plating waste, hazardous and non-hazardous liquid, and debris for microencapsulation.

Treatment, Storage and Disposal Capabilities

- Drum Storage Capacity: 1,500 drums (55-gallon equivalent)
- Wide range of RCRA and California waste codes.
- Stabilization treatment operations can process 100 tons per hour.
- Acceptance capabilities are in excess of 200 loads per day.
- Permitted landfill capacity is in excess of 10 million cubic yards.



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1.0 INTRODUCTION

1.1 DOCUMENT PURPOSE

This Draft Environmental Impact Report assesses the potential environmental effects of THE VILLAGES OF LAKEVIEW Specific Plan and related implementing approvals and documents (the project), which is proposed by the Nuevo Development ~~Company, LLC Corporation~~ within the Lakeview/Nuevo area of Riverside County. This Draft Environmental Impact Report (DEIR) document has been prepared to inform decision-makers and the public of the potentially significant environmental effects associated with the approval of the Specific Plan. This DEIR has been prepared in accordance with the California Environmental Quality Act of 1970 (Public Resources Code, Section 21000 *et seq.*) and the *Guidelines for Implementation of the California Environmental Quality Act* (CEQA Guidelines) published by the Public Resources Agency of the State of California (California Code of Regulations, Title 14, Section 15000 *et seq.*). The County of Riverside is the Lead Agency under the California Environmental Quality Act (CEQA, Public Resources Code Section 21067 as amended) and is responsible for the preparation of THE VILLAGES OF LAKEVIEW DEIR, and will use this document to objectively review and assess the proposed project prior to approval or disapproval.

This DEIR is intended to provide information to public agencies, the general public, and decision makers regarding potential environmental impacts related to the five components of the project:

1. ***General Plan Amendment No. 720:*** Changes the land use designations for the project site, and reflects roadway circulation improvements and trails proposed by the project.
2. ***General Plan Amendment No. 721:*** Reflects roadway circulation improvements and trails proposed by the project.
3. ***Specific Plan No. 342:*** Establishes the zoning for the site and the maximum number of dwelling units (11,350 dwelling units), square feet of commercial development (500,000 square feet), and the various types of open spaces.
4. ***Change of Zone No. 07055:*** Changes the zoning classifications to be consistent with THE VILLAGES OF LAKEVIEW Specific Plan No. 342.
5. ***Development Agreement 73:*** ~~Establishes the means by which the land use entitlements are vested.~~ It is anticipated the Development Agreement will include but not be limited to provisions related to the construction of public improvements, requirements to dedicate land for parks, open space, conservation, and transportation, as well as the potential payment of and/or credit for Development Agreement fees and other development related fees.

The purpose of a DEIR, under the provisions of CEQA, is “to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.” (Public Resources Code Section 21002.1[a].)

As authorized by Government Code Section 65450 et seq., the project proposes the adoption of a specific plan (Specific Plan No. 342) for the project site that will establish unique and uniform development of THE VILLAGES OF LAKEVIEW. THE VILLAGES OF LAKEVIEW Specific Plan will describe the location, density, and intensity of development, provide development standards, and discuss the funding and implementation of infrastructure needed for the proposed project. THE VILLAGES OF LAKEVIEW Specific Plan will be adopted by ordinance and will establish the zoning for the entire project site. It describes the overall framework for development of the project site, describes each of the seven villages and the land uses proposed therein, depicts the various planning areas within each village, and the development standards for the various land uses. THE VILLAGES OF LAKEVIEW Specific Plan also establishes the maximum number of dwelling units that could be constructed within the project site (11,350 dwelling units), the maximum square feet of non-residential development (500,000 square feet), and the various types of open spaces (e.g., active open space, community parks, conservation areas, trails, etc.). Due to the size of THE VILLAGES OF LAKEVIEW Specific Plan, which is planned to provide housing for approximately 34,000 residents, some aspects of the project are necessarily programmatic. Therefore, implementing entitlements may require additional documentation to comply with CEQA.

The intentions of CEQA are to: (1) inform governmental decision-makers and the public about the potentially significant environmental effects of proposed activities, (2) identify the ways that environmental damage can be avoided or significantly reduced, (3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible, and (4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved (State CEQA Guidelines Section 15002: Public Resources Code Section 21002.1).

In accordance with CEQA Guidelines Section 15182, where a public agency has prepared an EIR on a specific plan, no EIR or negative declaration need be prepared for a residential project undertaken pursuant to and in conformity to that specific plan if the project meets the requirements set forth in that section of the CEQA Guidelines. THE VILLAGES OF LAKEVIEW project sets out a process in the Administration section that addresses how the County will consider and evaluate subsequent development projects for their conformity with THE VILLAGES OF LAKEVIEW Specific Plan (i.e., the Village Refinement Plan process) in a manner consistent with the County's substantial conformance process set forth in its Ordinance No. 348. Despite the ability to rely upon this EIR, when it is certified and approved, Section 15182 also recognizes that, if after adoption of THE VILLAGES OF LAKEVIEW project, an event requiring preparation of a subsequent or supplement to an EIR is identified, then the County must conduct additional environmental analysis as appropriate. This principle is also reflected in CEQA Section 21166 which provides: "When an environmental impact report has been prepared for a project pursuant to this division, no subsequent or supplemental environmental impact report shall be required by the lead agency or by any responsible agency, unless one or more of the following events occurs:

- a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report.

- b) Substantial changes occur with respect to circumstances under which the project is being undertaken which will require major revisions in the environmental impact report.
- c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

1.2 SCOPE OF THE DEIR

The County Planning Department (County) determined that an EIR should be prepared to analyze the potential impacts associated with approval and implementation of the proposed project. On July 21, 2006, the County circulated a Notice of Preparation (NOP) to local and responsible agencies, as well as other interested parties. A copy of the NOP, Initial Study, and comment letters received during the NOP 30-day public review period, are included in Appendix A of this document. The County conducted an initial public/agency meeting related to the scope of the DEIR on August 9, 2006. A second scoping session occurred on September 21, 2006 and was announced in an errata notice released on August 23, 2006. This errata notice also corrected an inadvertent reference to “Appendix A” which was not included in the Initial Study.

The Initial Study prepared for the project determined that the issue areas listed below, may have significant impacts and are, therefore, included in this DEIR. Comments received during the NOP and changes in regulations since the NOP was circulated have also been considered in the preparation of related issue area analyses in Section 5, Environmental Impact Analysis, of this DEIR. A discussion of all those entities which commented on the NOP/Initial Study is summarized in Section 4, Effects Found Not Significant and NOP Comment Letters, pages 4-6 through 4-10. All of these letters can also be found in their entirety in Appendix A.

Section 5, Environmental Impact Analysis, addresses the following environmental issue areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise
- Population/Housing
- Public Services – Fire, Sherriff, Schools, Libraries, Health Services
- Recreation
- Transportation and Traffic
- Utilities
 - Water, Recycled Water, Sewer, and Storm Drain Systems
 - Electricity and Natural Gas
 - Solid Waste

Section 4 of this DEIR, “Effects Found Not to be Significant and NOP Comment Letters,” also describes the issue areas and specific impacts which were found to be less than significant in the Initial Study and are not discussed further in this DEIR.

1.3 FORMAT OF DEIR DOCUMENT

In addition to hardcopy, this DEIR, Specific Plan, and related technical appendices can be found on separate CDs as follows:

Specific Plan	CD #1
Draft EIR	CD #2
Technical Appendices A – H	CD #3
Technical Appendices I – N	CD #4

This DEIR has been set up in the following way:

Section 1 – Introduction – This section describes the scope and purpose of the DEIR, provides a brief summary of the CEQA process to date, and establishes the document format.

Section 2 – Executive Summary – Includes location of the project both locally and regionally. Includes a brief project description and summary of actions, summary of each significant environmental impact with proposed mitigation measures and alternatives that would reduce or avoid each impact, areas of controversy known to the Lead Agency, and any issues to be resolved including the choice among alternatives or how to mitigate the significant effects. (CEQA Guidelines Section 15123)

Section 3 – Project Description – Includes the project land uses, project objectives and attributes, and a general description of the project’s technical, economic, and environmental characteristics. This section also includes approvals related to the project and a listing of agencies or entities that may use the project’s DEIR in making decisions.

Section 4 – Effects Found Not Significant and NOP Comment Letters – Summarizes the effects found to be less than significant in the Initial Study or DEIR analyses, and discusses why effects were found to be not significant. This section also summarizes the comment letters received during the NOP process.

Section 5 – Environmental Impact Analysis – Includes an analysis of each environmental issue area, defines the background/environmental setting at the time the NOP was circulated to which each issue area is analyzed against, defines the related regulations affecting the project, defines the thresholds used to determine significance, describes any project attributes or design considerations which would reduce impacts, analyzes the project’s impacts, and provides a description of the mitigation measures used to reduce or lessen project impacts.

Section 6 – Consistency with Regional Plans – Summarizes the project’s consistency with regional plans and projections from such regional agencies as the Southern California Association of Governments.

Section 7 – Other CEQA Topics – Includes the cumulative impact analysis, unavoidable adverse impacts of the project, irreversible, and growth inducing impact discussions.

Section 8 – Project Alternatives – Based on the significant unavoidable impacts of the project, this section provides alternatives to the proposed project which can potentially avoid or lessen unavoidable significant impacts of the project.

Section 9 – References – Includes a listing of all reference materials, including those incorporated by reference, document preparation staff, and those consulted during the document preparation process.

2.0 EXECUTIVE SUMMARY

2.1 Project Location

THE VILLAGES OF LAKEVIEW is located in an unincorporated area of Riverside County known as the Lakeview/Nuevo community; the project is situated east of the city of Perris and directly west of the city of San Jacinto on both sides of the Ramona Expressway. Please refer to **Figures 2-1, Regional Location Map** and **2-2, Project Location Map**. The project is nestled between the Lakeview Mountains and San Jacinto River, and is adjacent to the San Jacinto Wildlife Area, which is operated by California Department of Fish and Game.

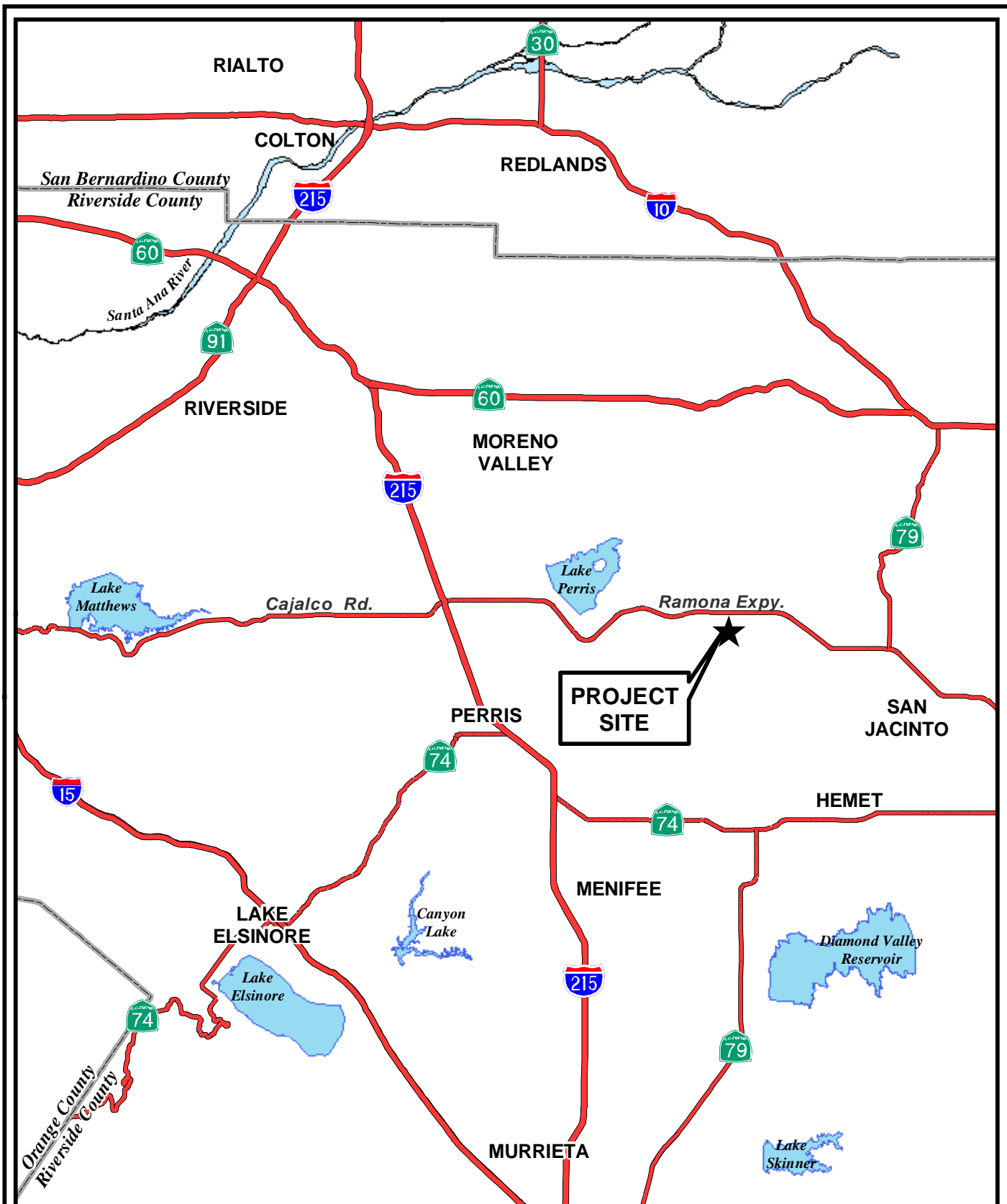
2.2 Project Description

THE VILLAGES OF LAKEVIEW proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of THE VILLAGES OF LAKEVIEW. **Figure 3-1, Conceptual Land Use Diagram**, shows all the planning areas, acreages, densities, land uses and proposed circulation system.

Existing land uses on site at the time of circulation of the NOP include irrigated and dryland farming, a poultry ranch, Metropolitan Water District (MWD) aqueduct and basin, a thoroughbred farm, an abandoned RV park, and less than 10 residences, as well as mountainous open space. The Ramona Expressway extends east/west separating a northern village from the remaining villages to the south.

2.3 Summary of Environmental Impacts

Table 2-A, Summary of Project Impacts and Mitigation, shows each of the issue areas discussed in Section 5.0 of this Draft Environmental Impact Report (DEIR), proposed mitigation measures, regulations, and project design considerations, and the level of significance after mitigation.



Not to Scale

ALBERT A.
WEBB
ASSOCIATES

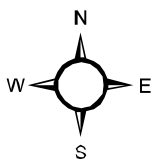
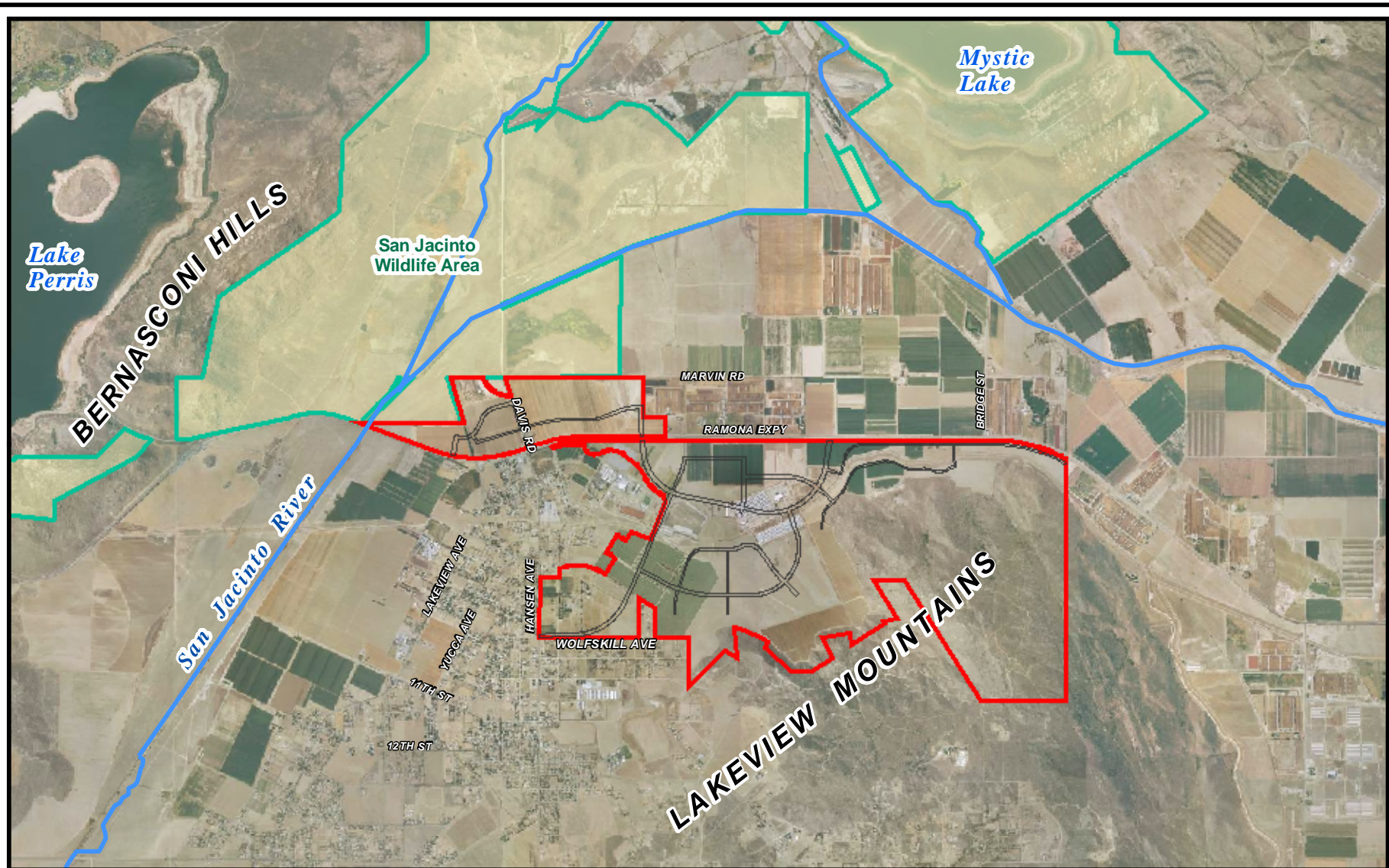


Figure 2-1

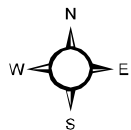
Regional Location Map

The Villages of Lakeview EIR No. 471



Sources: AirPhoto USA April 2007

A L B E R T A.
WEBB
 A S S O C I A T E S



0 2,000 4,000 6,000
 Feet

Figure 2-2

Project Location Map

The Villages of Lakeview EIR No. 471

2.4 Summary of Project Alternatives

The CEQA Guidelines also state that the discussion of alternatives must focus on options capable of either avoiding any significant environmental effects of the project or substantially lessening those impacts. According to the analysis presented in this DEIR, adoption of the project as described will result in unavoidable significant impacts with regard to the following issue areas:

- Aesthetics (Threshold C), due to potential to obstruct existing open views of agriculture and potentially obstructing distant panoramic views from existing development (cumulatively significant, only);
- agriculture (Thresholds A, B, and D), due to loss of Designated Farmland (project and cumulatively significant) and loss of active agricultural uses;
- air quality (Thresholds B, C, and E), both project-specific and cumulative with respect to exceedance of SCAQMD thresholds (Regional and Local, both short-and long-term impacts), health risks associated with diesel emissions from Ramona Expressway, cumulative impacts to greenhouse gas emissions;
- cultural resources (Threshold B) indirect impacts only from population increases and proximity (both project and cumulative);
- land use (Threshold A), resulting from changes in land uses and intensity of development from the current General Plan and zoning;
- noise (Threshold A), due to increases in ambient levels in excess of 5 dbA;
- population (Thresholds A and B), due to substantial increase over regional projections for the area; and
- traffic (Threshold A), project-specific, cumulative, and temporary.

As identified in the DEIR, in addition to these significant unavoidable impacts, the analysis presented in Section 5.0 identified significant impacts related to the following issue areas, all of which can be mitigated below a level of significance: project-specific aesthetics impacts (Thresholds A, B, and C), direct and indirect biological impacts (Thresholds A, B, C, D, and E), cultural (Thresholds A, B-direct, C, and E), geology and soils (Thresholds A and H), hazardous materials (Thresholds B and E), hydrology (all thresholds), land use (Thresholds D, E, and G), noise (Thresholds B, C, and D), public services (Threshold A), traffic (Thresholds B, C, and D)) and utilities (Thresholds B, E, F, G, and H). Other thresholds not mentioned as unavoidable or mitigated were found through the analysis to be less than significant without mitigation.

As described in CEQA Guidelines Section 15126.6(a), each alternative considered must be capable of avoiding or substantially lessening any significant effects of the proposed project described in this DEIR. The rationale for selecting the alternatives to be evaluated and a discussion of the "no project" alternative are also required, per Section 15126.6 (c) and (e).

Alternative 1 – No Project/No Development

Alternative 1 – No Project/No Development is required under CEQA to evaluate the environmental effects associated with no action on the part of the Lead Agency. The No Project/No Development Alternative includes continued use of the site for agricultural operations

and no additional changes to the existing land uses (**Figure 8-3, Alternative 1 – No Project/No Development Alternative**). This alternative evaluates the environmental impacts resulting from a hypothetical continuance of the existing land uses. Existing land uses include: less than 10 single-family residences, a thoroughbred farm, a chicken ranch, field crops, vacant hillsides, and some existing roads and utilities. All houses are on septic systems. Agricultural uses are primarily on wells, although domestic water is provided to the area by Eastern Municipal Water District (EMWD).

Alternative 2 – No Project/Development under Existing Plans and Entitlements

For purposes of analysis, the No Project/Development/Existing Plans and Entitlements Alternative (Alternative 2) would involve development of agricultural, commercial, industrial, and residential uses pursuant to the current General Plan with no proposed amendments (**Figure 8-4, Alternative 2 – No Project/Existing Plans Alternative**). Approximately 802 acres of THE VILLAGES OF LAKEVIEW Specific Plan area is already designated with a “Community Development Overlay.” As defined within the County of Riverside General Plan, a Specific Community Development Overlay “Permits flexibility in land use designations to account for local conditions.” The description also states, “Consult the applicable Area Plan text for details,” referring to development characteristics, densities, and specific policies for each specific CDO. However, the Lakeview Nuevo Area Plan is silent on the “details.” Therefore, without set development details in the Area Plan, Alternative 2 includes the mix of land uses with densities permissible within the underlying General Plan designations.

This alternative also includes development of single-family homes within existing residential lots in the mountains where legal lots exist today. Land uses under this alternative include: 826 acres of agriculture with up to 82 houses, a chicken ranch, 27 residences in the Lakeview Mountains, and 436 residences and up to 239,571 square feet of commercial/industrial businesses shown in the Lakeview/Nuevo Area Plan. This alternative assumes that no specific plan or other unifying entitlement mechanism would be prepared for the area. Therefore, comprehensive items covered under THE VILLAGES OF LAKEVIEW Specific Plan would not be addressed in a comprehensive manner, such as: a regional water quality treatment solution, or comprehensive design guidelines. The level of development allowed under this Alternative would not warrant the cost of extending sewer systems to the area, so all development would have to be accommodated with septic systems.

Rationale for Alternative Selection

Alternative 2 is also required by CEQA and is evaluated to address unavoidable impacts resulting in degradation of air quality, loss of agricultural land, ambient noise increases, inconsistency with the County General Plan land uses, and cumulative traffic impacts.

Alternative 3 – No Development North of Ramona Expressway

Description of Alternative 3

This Alternative includes continued agricultural use of the property located north of Ramona Expressway. Since the County General Plan designates this area with a Community Development Overlay, anticipating development, it will be assumed for purposes of this analysis of Alternative 3 that the Community Development Overlay does not exist and that the area is protected in some way from future development. All 11,350 dwelling units proposed by THE VILLAGES OF LAKEVIEW will be built south of Ramona Expressway, as shown in **Figure 8-5, Alternative 3 No Development North of Ramona**.

Alternative 3 would be developed under a specific plan similar to the proposed project so comprehensive design elements such as regional drainage/water quality facilities and design guidelines would be a part of this alternative. Constructing all 11,350 units south of Ramona Expressway results in higher density housing than the target densities for the project for several planning areas (i.e., more buildings and/or taller buildings), but does not require any changes to the maximum densities allowed under THE VILLAGES OF LAKEVIEW Specific Plan Planning Areas. The commercial square footage assumptions would match those of the project. At least one additional school would be needed south of Ramona Expressway. The Greenbelt, which is proposed to be located north of Ramona Expressway in the project was created as a setback/buffer to the San Jacinto Wildlife Area. There would be no need for such a setback in this Alternative therefore, this large recreational area would not be a part of the No Development North of Ramona Expressway Alternative (Alternative 3) as it is not required to meet Quimby requirements. Other park acreages would be provided within the developed area. Sewer and water services would be extended to serve the area.

Rationale for Alternative Selection

The primary significant unavoidable impact which Alternative 3 addresses is loss of agricultural land and Designated Farmland. Of the 289 acres of Prime Farmland which will be developed by the project, 165 acres of it are located north of the Ramona Expressway. Therefore, Alternative 3 provides a 57 percent reduction in impacted Prime Farmland. Only 6 acres of Unique Farmland and Farmland of Statewide Importance, combined, will be avoided by this alternative. In addition, some NOP commenters have expressed concern about human habitation too close to the San Jacinto Wildlife Area, however, the direct and indirect impacts to biological resources have been found to be less than significant with mitigation for the project. Alternative 3 would also lessen significant unavoidable adverse health risks to future residents from diesel emissions of traffic on Ramona Expressway by relocating some homes to the south into planning areas that would not be affected by diesel Toxic Air Contaminants that exceed significance thresholds.

Alternative 4 – Reduced Density Alternative

Description of Alternative

For purposes of analysis, the Reduced Density Alternative (Alternative 4) will reduce the total number of dwelling units by proposing single-family residential lots over the project site. Alternative 4 includes 7,200 square-foot lots over the majority of the site, except MWD properties, the area the General Plan currently designates as “Conservation,” the 100-year floodplain, and the 27 larger lots which exist now in the Rural Mountainous area (see **Figure 8-6, Alternative 4 – Reduced Density**). The reduced number of units will reduce impacts to traffic and therefore air quality and noise. Reduced density with no commercial services nearby does not necessarily result in fewer vehicle miles traveled. The reduced number of cars may have to travel much further to obtain goods and services. This coupled with the potentially higher energy emissions associated with less dense development can result in higher GHG emission. It is assumed that this alternative would build out under several developers/owners and one comprehensive specific plan or other unifying entitlement mechanism is not a part of Alternative 4.

Rationale for Alternative Selection

This alternative was chosen to address significant unavoidable impacts associated with air quality, traffic, noise, and water resources by reducing the number of units and providing development similar to the pattern of residential development found historically elsewhere in the County.

Alternative 5 – Light Industrial/Reduced Density

Description of Alternative 5

This Alternative includes 192 acres of office and light industrial development north of Ramona Expressway. The Light Industrial land use designation would mirror what the County allows in the General Plan which includes a wide variety of industrial and related uses, including assembly and light manufacturing, repair and other service facilities, warehousing, distribution centers, and supporting retail uses. Building intensity ranges from 0.25 to 0.6 FAR. The Alternative also includes 969 acres of conservation in the Lakeview Mountains and 29 acres of conservation in the floodplain, and 166.5 acres within the eastern end of the project site (the Enclave Village within the project) to be free of development and used for agricultural uses and to act as a buffer between the city of San Jacinto and the project site. The Alternative would also have a reduced density with 6,500 dwelling units proposed to be built south of Ramona Expressway, as shown in **Figure 8-7, Alternative 5 Light Industrial/Reduced Density**.

Alternative 5 would be developed under a specific plan similar to the proposed project so comprehensive design elements, such as regional drainage/water quality facilities and design guidelines, would be a part of this alternative. Differences between entitlements would be the exclusion of a Development Agreement given the smaller overall development. The east end of the proposed project would be excluded and left as agriculture, but the wildlife corridor and

mountain conservation area would be conserved by the Western Riverside County Regional Conservation Authority (RCA). It is assumed that the smaller residential density would result in the decrease of public services from the level proposed within the project, including the removal of the library, and a smaller public community center. Alternative 5 would be served by sewer, as with the proposed project.

Rationale for Alternative Selection

Alternative 5 was chosen to address the jobs/housing balance by reducing the number of units and providing light industrial uses, which would add office and industrial buildings. This alternative would also address unavoidable impacts to air quality, greenhouse gas emissions, traffic, agricultural resources, and water resources by reducing the number of units and increasing non-residential uses.

A more detailed description and a comparative analysis of the impacts alleviated by and resulting from each alternative can be viewed in Section 8.0, Alternatives to the Proposed Project, Table 8-B.

2.5 Areas of Controversy Issues to be Resolved

THE VILLAGES OF LAKEVIEW project has been in the planning/due diligence stages since 2003. Over that period of time, the applicant and County of Riverside have initiated contact with local groups, citizens, and agencies which might have an interest in the project approval. Based on early consultations, responses from the Notice of Preparation, and as a result of Scoping Sessions held for the project, the following is a brief listing of areas of controversy related to the project approval:

- The proximity of the project site to the San Jacinto Wildlife Area related to the wildland/urban interface
- Water quality impacts to San Jacinto River and Watershed from stormwater runoff
- Development in the floodplain
- Geological issues related to liquefaction and subsidence
- Hunting in the Wildlife Area
- Loss of Prime agricultural lands
- Loss of sensitive soils
- Ramona Expressway as a scenic resource
- Trails – existing vs. proposed
- Wildlife corridor between the San Jacinto River and Lakeview Mountains

2.6 Issues to be Resolved

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR identify issues to be resolved. This includes choices among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved for the project include decisions by the County of Riverside as to whether:

- This Draft EIR adequately describes the potential environmental impacts of the proposed project;
- The recommended mitigation measures should be adopted or modified;
- Additional mitigation measures need to be identified;
- The project should or should not be approved as proposed; or
- The project should be modified based on the alternatives considered in this Draft EIR.

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
AESTHETICS	A: Have a substantial effect upon a scenic highway corridor within which it is located.	Regulatory compliance (GP Policies re: Avoid blocking public views with solid walls, 50’ setbacks from Ramona, undergrounding lines on Ramona, preserving Lakeview Mtns., LU 13.1,2,5 and OS 21.1,22.1,22.3) MM Aesthetics 1: To mitigate for potential substantial adverse effects upon a scenic highway corridor and to avoid the creation of an aesthetically offensive site open to public view, the water tank(s) to be located within Planning Area 81 in the Lakeview Mountains shall be screened using landscaping and paint colors that blend in with the surrounding hills. A combination of earthen berms and landscaping may be used. The landscape screening plans shall be submitted to Eastern Municipal Water District for approval prior to approval of final construction documents for the tank(s).	Significant impact	Prior to the issuance of building permits	EMWD	Landscape Plans shall be submitted to EMWD for approval	Less than significant with mitigation and regulatory compliance
		MM Aesthetics 2: To reduce potential significant adverse impacts upon the scenic views from Ramona Expressway (a County Eligible Scenic Highway corridor), landscaping shall be provided adjacent to the Mixed-Use Town Center Village to address foreground views from Ramona Expressway. The extent and nature of the landscaping shall be identified <u>reviewed and approved by the County during the Village Refinement Process for this village</u> <u>The landscaping shall include drought-tolerant, low groundcover and shrubs with mulch or rock to provide an attractive ground plain. Because views of the Lakeview Mountains may be afforded trees shall be grouped in such a way as to allow open areas for intermittent views (i.e., no solid rows of trees).</u>	Significant impact	Prior to Town Center Village Refinement Plan (VRP) approval.	Planning Department Building & Safety Department	VRP submitted to Planning Department for approval.	Less than significant with mitigation and regulatory compliance.
	B: Substantially damage scenic resources on site, including, but not limited to, trees, rock outcroppings, and unique or landmark features.	Regulatory compliance (GP Policies re: Avoid blocking public views with solid walls) and Design Consideration within the project (30’ equestrian trail along southern boundary, Hansen Park, trail access to Lakeview Mountains). MM Aesthetics 3: To reduce potential significant adverse impacts to local scenic resources, the landscaping of the Hansen Avenue area park shall include the preservation of existing mature trees, if possible, and the use of white split rail fences. The preservation of the trees shall be confirmed at the approval of the VRP for the Garden Village and finalized prior to Final Inspection <u>building permit issuance for the</u> of <u>last adjacent residential unit. If the 24 existing trees along the entry to the thoroughbred farm cannot be preserved, then they shall be replaced within the planned park at a ratio of 1:1 by the planting of new 36-inch box trees of the same species as the mature trees being removed</u> <u>The equestrian trail Multi-Purpose Community Trail</u> along Hansen and Wolfskill Avenues and Poppy Road shall also include trees spaced	Significant impact	Tree preservation confirmation prior to VRP approval for the Garden Village. Trails and landscaping prior to the <u>last building permit</u> Final Inspection of Residential Uses in implementing maps adjacent to Hansen and Wolfskill Avenues and/or Poppy Road.	Planning Department and Building & Safety Department	VRP submitted to Planning Department for approval. Landscape plans shall be submitted to the Building & Safety department for approval	Less than significant with design considerations and mitigation

Table 2-A, Impact and Mitigation Summary Matrix

[illegible]

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		open-space district, regional park or open-space authority, a nonprofit organization, or other entity authorized to acquire and hold conservation easements under Civil Code Section 815.3. The purpose of this Easement is to restrict the property's use to only those uses that will not impair or interfere with the property's agricultural productive capacity, its soils, and its agricultural character, values, and utility. To the extent that the preservation of the open space character and scenic, habitat, natural, or historic values of the property are consistent with such use, it will be within the purpose of this easement to protect those values. Rural enterprises or activities, including, but not limited to, grazing, hunting and fishing, wildlife habitat improvement, predator control, timber harvesting, and firewood production, shall be permitted uses provided that the agricultural productivity of the land and is not significantly impaired by those activities. The Easement shall be recorded on or before the issuance of the 1,500 th building permit.					
		MM Ag 3: Master Developer shall preserve within the project no less than 3 acres of "Prime Farmland" as defined by Public Resources Code Section 10213 for use as a community garden or gardens by recordation of a conservation easement as defined by Section 815.1 of the California Civil Code. To the extent that the preservation of the open space character and scenic, habitat, natural, or historic values of the property are consistent with such use, it will be within the purpose of this easement to protect those values. The Community Garden will be run by the Homeowners' Association or County Service Area so as to be available to the public for the purpose of gardening. The location of the community garden or gardens shall occur within the 500-foot Greenbelt as defined by Planning Areas 5, 7, 8, 21 and 22. An easement shall be recorded and the community garden or gardens shall be available for use on or before the issuance of the 1,500 th building permit.	Significant impact	Prior to the issuance of the 1,500 th building permit	Building & Safety Department	An Easement for the community garden shall be submitted and recorded by the County of Riverside	Significant after mitigation for both project and cumulative impacts
	B: Conflict with existing agricultural use, or a Williamson Act Contract.	No feasible mitigation beyond MM Ag 2 and MM Ag 3 to eliminate or significantly reduce conflicts with existing agricultural uses. No Williamson Act contracts exist on-site.	Significant impact	See MM Ag 2 and MM Ag 3 , above	See MM Ag 2 and MM Ag 3 , above	See MM Ag 2 and MM Ag 3 , above	Significant impact with mitigation with respect to loss of and conflict with existing agricultural uses.
	C: Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (County of Riverside Ordinance No. 625, Right-to-Farm).	MM Ag 1: To reduce potential significant adverse impacts due to incompatibility between agricultural uses and proposed suburban development, proposed residences, school buildings, and commercial structures shall be setback 300 feet from existing active agricultural uses of an offensive nature, which are defined as: corrals, chicken houses, dairy waste ponds, manure stockpiles, or commercial livestock. This setback shall not apply to areas of the project where Ramona Expressway intervenes between active	Significant impact	Prior to the approval of tentative tract map for each implementing projects	Planning Department	Tentative Tract Maps shall be submitted to the Planning department for approval. The map shall show the 300-feet setback from active agricultural uses.	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
AIR QUALITY		agriculture and proposed development because the expressway will act as the buffer. The 300-foot buffer area may include public road rights-of-way, parking lots, and service or maintenance areas. In addition to project edge conditions, the 300-foot setback shall also apply to interim conditions on-site between occupied project-related buildings and existing on-site agricultural uses of an offensive nature (e.g., chicken ranch) that are located in a later phase of project development and may remain operational while earlier phases of development are being built.					
	D: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Designated Farmland to non-agricultural use, including Farmland of Local Importance.	No feasible mitigation beyond MM Ag 2 and MM Ag 3 to eliminate or significantly reduce impacts which otherwise result in the conversion of Designated Farmland to non agricultural uses, including Farmland of Local Importance.	Significant impact	Not Applicable	Not Applicable	Not Applicable	Significant impact with mitigation
	A: Conflict with or obstruct implementation of the applicable air quality plan.	No feasible mitigation available.	Significant impact	Not Applicable	Not Applicable	Not Applicable	Significant impacts
	B: Violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation.	Required regulation (Rule 403) MM Air 1: During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers’ specifications to the satisfaction of the Department of Building and Safety. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the Department of Building and Safety. MM Air 1a: All project developers funded privately rather than publicly (public funding requires that the winning proposal go to the lowest responsible bidder) shall provide preference to qualified grading contractor proposals that include the use of construction equipment that demonstrates early compliance for off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) – and/or – meets or exceeds Tier 3 standards with available CARB verified or U.S. EPA-certified technologies or use of alternative fueled off-road construction equipment. Proof of preference shall be reviewed by the Department of Building and Safety’s Grading Division prior to issuance of a grading permit.	Significant impact	During construction	Building & Safety Department	Equipment maintenance records and equipment specification data sheets shall be kept onsite	Significant impact with regulatory compliance and mitigation. (Regional and Local, both short and long term impacts) CO Hot Spots: Less than significant without mitigation.
			Significant impact	Prior to the issuance of grading permit	Building & Safety Department/ Grading Division	All proposals for privately funded developers shall be submitted for review to show preference was provided to qualified grading contractors that use qualifying construction equipment prior to selecting the winning proposal.	Significant impact with regulatory compliance and mitigation.

Table 2-A, Impact and Mitigation Summary Matrix

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		MM Air 2: Where economically and physically feasible, electricity from power poles shall be used instead of temporary diesel- or gasoline powered generators to reduce the associated emissions. Feasibility shall be determined by the contractor and approved by the Department of Building and Safety’s Grading Division prior to issuance of grading permits.	Significant impact	Prior to the issuance of grading permit	Building & Safety Department/ Grading Division	Issuance of grading permit	Significant impact with regulatory compliance and mitigation. (Regional and Local, both short and long term impacts)
		MM Air 3: To reduce construction vehicle (truck) idling while waiting to enter/exit the site, prior to issuance of grading permits, the contractor shall submit a traffic control plan that will describe in detail safe detours to prevent traffic congestion to the best of the project’s ability, and provide temporary traffic control measures during construction activities that will allow both construction and on-street traffic to move with less than 5-minute idling times. <u>Additional traffic control measures may include, but are not limited to:</u> <ul style="list-style-type: none">• <u>require construction parking to be configured such that traffic interference is minimized,</u>• <u>provide dedicated turn lanes for movement of construction trucks and equipment on- off-site,</u>• <u>schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable,</u>• <u>reroute construction trucks away from congested streets or sensitive receptor areas, and</u>• <u>improve traffic flow by signal synchronization.</u>	Significant impact	Prior to the issuance of grading permit	Building & Safety Department/ Grading Division and Transportation Department	A Traffic Control Plan shall be submitted for approval.	Significant impact with regulatory compliance and mitigation. (Regional and Local, both short and long term impacts)
		MM Air 3a: <u>To reduce fugitive dust emissions, the developer shall provide the County of Riverside with sufficient proof of compliance with Rule 403 and other dust control measures including, but not limited to:</u> <ul style="list-style-type: none">• <u>requiring the application of non-toxic soil stabilizers according to manufacturers’ specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain),</u>• <u>requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered,</u>• <u>suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per</u>	Significant impact	<u>Prior to the issuance of grading permit</u>	<u>Building & Safety Department/ Grading Division</u>	<u>Issuance of grading permit</u>	<u>Significant impact with regulatory compliance and mitigation.</u>

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<u>hour.</u> <ul style="list-style-type: none">• <u>post contact information outside the property for the public to call if specific air quality issues arise.</u>• <u>use SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials.</u>• <u>replace ground cover in disturbed areas as quickly as possible.</u>					
		MM Air 3b: In order to improve air quality by reducing VOC emissions associated with the application of architectural coating, homebuilders shall apply coatings and solvents with a VOC content lower than required under Rule 1113 as amended July 13, 2007 to residential dwelling units. In addition, homebuilders are encouraged to consider the use of pre-coated construction materials and materials that do not require painting. Construction specifications shall be included in the building specifications that assure these requirements are implemented. The specifications shall be reviewed by the County of Riverside’s Building and Safety Department for compliance with this mitigation measure prior to issuance of a building permit.	Significant impact	Prior to the issuance of building permit	Building & Safety Department	Construction specifications shall be included in the building specifications that assure these requirements are implemented.	Significant impact with regulatory compliance and mitigation.
		MM Air 4 through 11 , MM Air 13 and MM Air 14, below.	Significant impact	See MM Air 4 through 11, MM Air 13 and MM Air 14, below.	See MM Air 4 through 11, MM Air 13 and MM Air 14, below.	See MM Air 4 through 11, MM Air 13 and MM Air 14, below.	Significant impact with regulatory compliance and mitigation.
	C: 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). Although no thresholds of significance exist for GHG emissions, cumulatively they contribute to global warming and are discussed herein.	MM Air 1 through 3 above.	Significant impact	See MM Air 1, 2 & 3, above	See MM Air 1, 2 & 3, above	See MM Air 1, 2 & 3, above	Significant after mitigation
		MM Air 4: In order to reduce energy consumption from proposed project development, applicable plans (e.g., electrical plans, improvement maps, etc.) submitted to the County shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable Department (e.g., Department of Building and Safety or Department of Transportation) prior to conveyance of applicable streets.	Significant impact	Prior to the approval of Street Improvement Plans	Transportation Department and Building & Safety Department	Street Improvement Plan shall indicate energy-efficient street lighting throughout the project.	Significant after mitigation
		MM Air 5: In order to reduce energy consumption from the proposed project development, construction of <u>large residential buildings, large public buildings (library, public community center, schools, and joint-use facilities), large private recreation buildings owned by the Homeowners’ Association (HOA) and large commercial buildings (retail and office)</u> all homes and businesses shall exceed the 2007 California Energy Code - Title 24, Part 6 energy efficiency standards by 35% (<u>schools and joint-use facilities are subject to Nuview Union School District approval</u>). Submission of a Title 24 worksheet with building plans	Significant impact	Prior to issuance of Building Permit	Building & Safety Department	Submission of a Title 24 worksheet with building plans shall be required. The worksheet shall include both the calculations showing the minimum Title 24 compliance requirements and calculations demonstrating that the	Significant after mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		shall be required by the Department of Building and Safety in order to obtain a building permit. The worksheet shall include both the calculations showing the minimum Title 24 compliance requirements and calculations demonstrating that the project will increase <u>reduce</u> energy efficiency consumption <u>efficiency</u> 35% beyond <u>below</u> Title 24. Compliance is determined by comparing the energy efficiency <u>use</u> of the proposed development to a minimally Title 24 compliant development. The calculations must be from an energy analysis computer program approved by the California Energy Commission in accordance with Title 24, Part 1, Article 1, Section 10-109. These approved programs include, as of February 2009, EnergyPro and Micropas 7 for residential buildings and EnergyPro, Perform 2005, and eQuest/D2Comply for non-residential buildings. (Note: “large” is defined as the <u>primary residence, main private recreation building, main public community center building, retail space with an anchor, etc.;</u> “large” excludes a shed in a residential yard, small utility buildings, small pool buildings, trash enclosures, etc.)				project will increase <u>reduce</u> energy efficiency consumption <u>efficiency</u> 35% beyond <u>below</u> Title 24. Compliance is determined by comparing the energy efficiency <u>use</u> of the proposed development to a minimally Title 24 compliant development. The calculations must be from an energy analysis computer program approved by the California Energy Commission in accordance with Title 24, Part 1, Article 1, Section 10-109. These approved programs include, as of February 2009, EnergyPro and Micropas 7 for residential buildings and EnergyPro, Perform 2005, and eQuest/D2Comply for non-residential buildings.	
		MM Air 6: In order to reduce energy consumption from the proposed project development, The Villages of Lakeview homebuilders shall, if installing major appliances such as dishwashers, washing machines, and refrigerators in homes, install Energy Star-rated models. <u>Major appliances installed in large public buildings (library, public community center, schools, and joint-use facilities) and large private recreation buildings owned by the HOA shall be Energy Star-rated (schools and joint-use facilities are subject to Nuview Union School District approval).</u> Proof of compliance will be required by the Department of Building and Safety in order to obtain a Final Inspection. (Note: “large” is defined as the <u>primary residence, main private recreation building, main public community center building, retail space with an anchor, etc.;</u> “large” excludes a shed in a residential yard, small utility buildings, small pool buildings, trash enclosures, etc.)	Significant impact	Prior to the issuance of Final Inspection	Building & Safety Department	Building Plans shall identify Energy Star-rated appliances in all floor plans	Significant after mitigation
		MM Air 6a: In order to increase renewable energy sources and reduce greenhouse gas emissions, large public buildings (library, public community center, schools, and joint-use facilities) and large private recreation buildings owned by the HOA shall be	Significant impact	Prior to issuance of Building Permit	Building & Safety Department	Building Plans shall identify solar panels, photovoltaic cells, solar thermal systems or other	Significant after mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<u>installed with solar panels, photovoltaic cells, solar thermal systems or other renewable energy generating technology (schools and joint-use facilities are subject to Nuvview Union School District approval). Homebuilders are required to: 1) offer to home buyers solar panels, photovoltaic cells, solar thermal systems or other renewable energy generating technology as part of the homebuilder’s option program, or 2) be consistent with the Governor’s Million Solar Roofs plan. Proof of compliance shall be shown on the panel of plans or the homebuilder’s option package and be required by the Department of Building and Safety in order to obtain a building permit. (Note: “large” is defined as the primary residence, main private recreation building, main public community center building, retail space with an anchor, etc.; “large” excludes a shed in a residential yard, small utility buildings, small pool buildings, trash enclosures, etc.)</u>				<u>renewable energy generating technology or contain the homebuilder’s option package.</u>	
		MM Air 7: Because The Villages of Lakeview residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouses gases such as carbon dioxide, The Villages of Lakeview will provide a transit center, including a bus stop opportunity and park–n-ride lot to facilitate carpooling and/or use of public transportation. Proof of compliance will be required prior to the issuance of the 2,632 st building permit.	Significant impact	Prior to the 2,632 nd building permit	Building & Safety Department	Installation of a transit center, including a bus stop and park–n-ride lot to facilitate carpooling and/or use of public transportation	Significant after mitigation
		MM Air 8: Because The Villages of Lakeview residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouses gases such as carbon dioxide, The Villages of Lakeview will designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required prior to the approval of the Plot Plan for each of the projects listed above.	Significant impact	Prior to the approval of a Plot Plan for each implementing project	Planning Department	The Plot Plan shall show the designated parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing at the transit center, library, public community center, Central Park parking area, and in commercial areas	Significant after mitigation
		MM Air 9: Adequate bicycle parking (one space per 20 car spaces) shall be provided at the transit center, library, public community center, Central Park parking area, and the commercial areas. Proof of compliance will be required prior to approval of the Plot Plan for each implementing project.	Significant impact	Prior to the approval of a Plot Plan for each implementing project	Planning Department	The Plot Plan shall show bicycle parking stalls (areas) at the transit center, library, public community center, Central Park parking area, and the commercial areas.	Significant after mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Air 10: Because The Villages of Lakeview residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouses gases such as carbon dioxide, public information shall be provided to residents about opportunities to utilize <u>walking</u> , public transportation, <u>carpooling</u> , and bicycles. This <u>effort</u> will be implemented through signage and information posted at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required prior to issuance of the building permit for each of the above facilities.	Significant impact	Prior to the issuance of a building permit	Building & Safety Department	Plot Plan shall show signs.	Significant after mitigation
		MM Air 11: Because THE VILLAGES OF LAKEVIEW residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouses gases such as carbon dioxide, a community vehicle shall be provided by the Homeowners Association (or like entity) for resident transport. It shall be an electric or alternative fuel vehicle. <u>Proof of compliance will be required prior to the issuance of the 9,551st building permit.</u>	Significant impact.	Prior to the occupancy of the 9,551 st dwelling unit, or an equivalent amount of non-residential building permits	Homeowners Association and Building and Safety Department	HOA shall provide Building and Safety Department with proof of: 1) purchase of a vehicle, 2) lease of a vehicle, or 3) contracting with a 3 rd -party for service to provide vehicle(s).	Significant after mitigation
		MM Air 12: Because The Villages of Lakeview residents will be adding additional sources of solid waste to nearby landfills and thereby indirectly contributing to methane emissions, in addition to mitigation measures found in Section 5.15 (MM Util 9 through 11) separate recycling and waste receptacles will be provided at all public garbage bins along sidewalks and at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required prior to issuance of a building permit. Signage and information regarding the recycling bins and acceptable recycling materials shall be posted at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required by the Department of Building and Safety prior to the Plot Plan <u>F</u> inal Inspection of each the above-listed facilities.	Significant impact	Proof of compliance with waste receptacle locations will be required prior to issuance of a building permit. Proof of compliance will be required by the Department of Building and Safety prior to the Plot Plan <u>F</u> inal Inspection of each the above-listed facilities.	Building and Safety Department Building and Safety Department	Issuance of building permit Issuance of Plot Plan Final Inspection	Significant after mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Air 13: Because THE VILLAGES OF LAKEVIEW residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouses gases such as carbon dioxide, THE VILLAGES OF LAKEVIEW will coordinate with the transportation department and with local and regional agencies where possible in order to maximize integration of the project with local transportation planning and implementation efforts. These efforts include the possibility of extending the Riverside Transit Agency’s Bus Rapid Transit System into the area and bus connections to proposed Metrolink stations along the Perris Valley Line. Proof of coordination shall be provided to the County Transportation Department prior to the issuance of the 2,632 nd , 6,771 st , and 11,350 th building permits which correspond with the completion of each Phase of development, respectively. Coordination materials shall include a Staff Report or Meeting Minutes.	Significant impact	Proof of coordination shall be provided to the County Transportation Department prior to the issuance of the 2,632 nd , 6,771 st , and 11,350 th building permits which correspond with the completion of each Phase of development, respectively.	Transportation Department	Coordination materials shall include a Staff Report or Meeting Minutes.	Significant after mitigation
		MM Air 14: Within the Central Park's campus of public facilities, which includes a public community center and a library, up to 5 parking spaces (in excess of standard parking requirements) shall be dedicated for the installation of an EV charging facility or for a car sharing program.	Significant impact	Prior to the approval of a Plot Plan for each implementing project	Planning Department	The Plot Plan shall show the designated parking spaces for the installation of an EV charging facility or for a car sharing program	Significant after mitigation
	D: Expose sensitive receptors which are located within one mile of the project site to project substantial point source emissions.	No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant
	E: Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter, specifically: - Expose sensitive receptors to any toxic air contaminant, at a level that exceeds 10 excess cancer cases per one million people (per SCAQMD); - Expose sensitive receptors to a hazard index of 1.0 or greater using a chronic	No mitigation required for Nutrilite. Avoidance of impacts from Ramona Expressway would involve complete redesign and change in land uses for the project, limiting sensitive receptors located within one-quarter mile south and approximately one-eighth of a mile north of Ramona Expressway. Such designs are considered in Alternatives 3 and 5, Section 8.0.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with respect to Nutrilite and project traffic only on Ramona Expressway. Significant with respect to Ramona Expressway for cumulative.

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	reference exposure level for chronic non-cancer risks associated with Toxic Air Contaminants (TAC) (per SCAQMD).						
	F: Would create objectionable odors affecting a substantial number of people. Addresses odors from construction, sewer lift station and composting.	No mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant.
BIOLOGY	A: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan.	<p>Required regulation (MSHCP, SKRHCP) and Design Considerations (preservation of Lakeview Mountains and OS near river, adherence to ban on invasive plant species, 500-foot setback from SJWA, wildlife corridor)</p> <p>MM Bio 1: The project will introduce new sources of nighttime lighting and glare near conservation areas for outdoor security purposes and the residences located on site. Proposed land uses immediately adjacent to the SJWA (northern interface) consist of conservation and open space with drainage facilities (including but not limited to drainage facilities, water quality basins, and passive parks). Proposed land uses adjacent to the Lakeview Mountains (southern interface) consist of residential development (including a fuel modification zone for fire protection) and park use. Potential impacts from introduced lights include impacts to migratory birds that use constellations to guide them during migration and impacts to foraging, reproduction, and circadian rhythms of other species. The CC&Rs and Homeowners’ Associations will ensure that lighting is not projected into the Conservation Area at either interface. Street lighting will be designed with internal baffles to direct the lighting towards the ground and have a zero side angle cut off to the horizon. At the interface with the Lakeview Mountains, street lighting will be at least 50 feet away from the Conservation Area. North of Ramona Expressway, street lighting will be at least 400 feet from the project’s proposed conservation areas and at least 500 feet away from the existing SJWA. The shielded lighting and adequate setback will ensure that there will be no spillage of lighting into the Conservation Area. The CC&Rs shall be submitted to the Planning Department and County Counsel prior to Map Recordation and will restrict the placement and use of lighting on private residential properties, such that individual residences will not direct lighting into the Conservation Area.</p>	Significant impact	Prior to Map Recordation	Planning Department and County Counsel	CC & R’s shall be submitted and approved by the Planning Department	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Bio 2: Planning Areas and roads adjacent to the SJWA, Proposed Constrained Linkage 20 (wildlife corridor) and the Lakeview Mountains will incorporate barriers (as appropriate) to minimize unauthorized public access, domestic animal predation, illegal trespass, or unauthorized dumping. The exception will be public access locations, which will direct the public into authorized access areas within the Conservation Area (i.e., SJWA and the Lakeview Mountains). All barriers will be placed within the boundaries of the development and will be outside of the Conservation Areas. Barriers will be located between the SJWA/Lakeview Mountains and houses/paved roads. Barriers will be designed to accommodate wildlife movement, but directing wildlife away from residential areas. Barriers may consist of, but not be limited to, walls, plants, fences, berms, and other means (such as horizontal distance and vertical distance) or combination of means to achieve the desired result. <u>The final design of the barriers shall be completed based on consultation between the developer, County Planning Department, and as approved by the County Environment Programs Department when tentative tract maps and/or road plans are approved. California Department of Fish and Game San Jacinto Wildlife Area representatives will be consulted regarding final design of barriers along the SJWA edge.</u> Where barriers are required between established conservation areas and other areas of the project site, impacts to cultural resources shall be taken into consideration with respect to location, design, and installation such that cultural resources adjacent to the conservation areas are avoided and that the setting is respected or enhanced. The County Archaeologist, or designee thereof, shall review all barrier plans proposed adjacent to conservation areas on-site to assure consistency with this mitigation measure.	Significant impact	Prior to the approval of tentative tract map for each implementing projects	Riverside County Environmental Programs Department (EPD)	Tentative Tract Maps and street improvement plans shall be submitted for approval	Less than significant with mitigation
		MM Bio 3: The project Conditions, Covenants and Restrictions shall restrict the number of domestic animals (e.g., dogs, cats and other predatory animals) allowed per residence to two, thus further limiting potential impacts. Cats shall be limited to indoors. Copies of the CC&Rs shall be provided to the County Planning Department prior to Map Recordation. [Note: Current County zoning allows up to 4 dogs per premises.] This mitigation measure applies to development north of Ramona Expressway (Resort Village) and the following planning areas south of Ramona Expressway: 58, 66-69, 73, and 77.	Significant impact	Prior to Map Recordation	Planning Department and County Counsel	CC & R's shall be submitted and approved by the Planning Department	Less than significant with mitigation
		MM Bio 4: No more than 30 days prior to ground disturbance associated with the development of the project regarding clearing, grading, or demolition, a qualified biologist will conduct a pre-construction burrowing owl survey to satisfy Objective Number 5 of the MSHCP species-specific objectives for the burrowing owl.	Significant impact	Prior to the issuance of grading permit	Riverside County Environmental Programs Department (EPD)	Pre-construction Burrowing Owl Survey from a qualified biologist	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

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		If breeding burrowing owls are detected on site, the Master Developer will coordinate with the County of Riverside Environmental Programs Department (EPD) to determine if the occupied habitat will need to be avoided, or if the owls can be relocated from the site. If the relocation of owls is approved, the Master Developer will prepare a plan of relocation (passive or active) to be approved by EPD and the responsible wildlife agencies (i.e., U.S. Fish and Wildlife Service and CDFG). If approved, relocation will be conducted outside of the breeding season. If non-breeding owls are identified on site, including wintering owls, the proponent will also notify EPD, and will relocate the owls following a protocol to be approved by EPD and the wildlife agencies.					
		MM Bio 9: To allow for future flexibility in the hydrological function of the project drainage system so as to best meet the needs of the off-site wetlands and on-site vernal pool areas, the Central Park detention basin shall be designed to allow flows to be detained (as currently planned) or to bypass (completely or partially) the basin such that greater flows can be released to the wetland area to most closely mimic existing conditions in the 2-year and 10-year storm.	Significant impact	Prior to the approval of tentative tract map for each implementing projects	Riverside County Flood Control District and/or Planning Department	A Drainage Plan shall be submitted for approval	Less than significant with mitigation
		MM Bio 10: The County of Riverside is a participating entity or permittee of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The purpose of the MSHCP is to conserve open space and habitat on a county-wide, cumulative basis. Take authorization for the MSHCP was granted by the USFWS and CDFG on June 22, 2004. The County of Riverside will be allowed to utilize its allotted authorized take for projects in compliance with the MSHCP. Compliance with the MSHCP fee requirements will provide adequate mitigation for potential impacts to the burrowing owl and other species and plant communities determined to be adequately conserved by the MSHCP. To address the impacts associated with the cumulative loss of habitat for special status birds by the loss of habitat, the proposed project shall be conditioned to pay Riverside County MSHCP mitigation fees as set forth under Ordinance No. 810.2.	Significant impact	Prior to the issuance of building permits	Planning Department	Payment of fees	Less than significant with mitigation
		MM Bio 11: In order to increase public awareness and knowledge about local environmental issues and reduce potential significant indirect effects of development adjacent <u>near</u> to Conservation Areas, the Master Developer of the proposed project shall provide an Environmental Stewardship Program. The program will include methods of community education such as interpretive and directional signs, pamphlets, and demonstrations. The types of information presented shall include, but not be	Significant impact	Prior to Final Occupancy inspection <u>Building Permit issuance approval</u> for the 1,600th <u>1,601st</u> unit.	Environmental Programs Department (EPD) and/or Planning Department	Master Developer shall submit program materials to EPD for review.	Less than significant with mitigation.

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		limited to: lighting, noise, keeping on trails, wildlife, plants, habitats, barriers, domestic animals, toxics such as pesticides, and invasive species. <u>The Environmental Stewardship Program shall include a fund to be administered by the Lakeview Community Services Organization and a portion of the fund shall be used for SJWA management items, including feral animal trapping, removal of trash, invasive species removal and enforcement. The budget will be developed in consultation with the California Department of Fish and Game.</u>					
		MM Bio 11a: In order to reduce the potential significant indirect effects of invasive species to Conservation Areas, the Specific Plan will design landscaped areas adjacent to the SJWA and Lakeview Mountains to avoid the use of invasive plant species identified in Table 6-2 of the MSHCP document. Of the 86 species identified in the MSHCP table (see also Appendix D (CD #3) and Appendix C (CD #3) of the Specific Plan), 71 of them will be outright prohibited within the Specific Plan. Of the remaining 15 plants, if used, they shall be placed at least 150 feet from the existing and proposed conservation areas in the Lakeview Mountains and shall not be used within 500 feet of the San Jacinto Wildlife Area and the downstream conservation areas along the San Jacinto River. CC&Rs will be enforced through the Home Owners’ Association to exclude 71 invasive species from properties throughout the project and 86 invasive species from properties within the above-prescribed distances from the urban/wildland interfaces. Maintenance of landscaping in these areas will include the removal of invasives that may establish through natural dispersal mechanisms. Such maintenance shall be funded through the Environmental Stewardship Program.	Significant impact	<u>Ongoing review of landscape plans.</u> <u>Prior to Building Permit issuance for the 1,601st unit for CC&R approval.</u>	<u>Planning Department and/or EPD shall approve landscape plans, and County Counsel shall approve CC&Rs</u>	<u>CC & R’s shall be submitted and approved by the Planning Department</u>	<u>Less than significant with mitigation.</u>
		MM Bio 11b: In order to reduce the potential significant indirect effects of pesticides and rodenticides to conservation areas, the Environmental Stewardship Program established under MM Bio 11, shall include an Integrated Pest Management (IPM) program. The IPM program will 1) Establish minimum action thresholds for the application of pesticides; 2) Provide educational materials to promote accurate identification of pests by homeowners, so appropriate control decisions can be made in conjunction with action thresholds; 3) Educate homeowners to promote the prevention of pests before infestation occurs; and 4) Recommend thresholds for utilization of control methods. Compliance with the IPM program will be made a requirement of the project Conditions, Covenants and Restrictions, and enforced through the homeowners association.	Significant impact	<u>Prior to Building Permit issuance for the 1,601st unit.</u>	<u>Environmental Programs Department (EPD) and/or Planning Department</u>	<u>Master Developer shall submit program materials to EPD for review.</u>	<u>Less than significant with mitigation.</u>

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Bio 12: Where barriers are required between established conservation areas and other areas of the project site, impacts to cultural resources shall be taken into consideration with respect to location, design, and installation such that cultural resources adjacent to the conservation areas are avoided and that the setting is respected or enhanced. The County Archaeologist, or designee thereof, shall review all barrier plans proposed adjacent to conservation areas on-site to assure consistency with this mitigation measure.	Significant impact	Barrier plans should be submitted with implementing maps.	County Archaeologist, or designee thereof	Approval of implementing maps requires satisfaction of this measure	Less than significant with mitigation.
		MM Bio 13: Prior to issuance of grading permit for all Planning Areas located adjacent to a conservation area that will come under Riverside Conservation Authority Management, sensitive resources (conservation areas) shall be delineated with temporary construction fencing. Training for construction workers and construction management personnel shall have occurred which informs project workers of their responsibilities in regards to avoiding and minimizing impacts to sensitive biological resources through avoiding the fenced areas.	Significant impact	Prior to issuance of grading permit	Building & Safety Department County Grading Inspector	Notification of construction worker training sent to Planning Department, Building Dept., and EPD; notes of the training	Less than significant with mitigation.
		MM Bio 14: To further deter wildlife from entering developed areas, trash receptacles and refuse containers located within the Greenbelt and parks located within 100 feet of all Conservation Areas shall be provided with mechanisms which prevent scavenging animals from gaining access to the contents of such trash containers.	Significant impact	Prior to plan approval for the Greenbelt and parks within 100 feet of all on-site Conservation Areas	Planning Department and/or EPD	Park plans approval	Less than significant with mitigation.
	B: Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12) or on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service.	Required regulation (MSHCP, SKRHCP) and Design Considerations (preservation of Lakeview Mountains and OS near river, adherence to ban on invasive plant species, 500-foot setback from SJWA) and mitigation See mitigation measure MM Bio 1, above.	Significant impact	See MM Bio 1 , above	See MM Bio 1 , above	See MM Bio 1 , above	Less than significant with mitigation.
		See mitigation measure MM Bio 2, above.	Significant impact	See MM Bio 2 , above	See MM Bio 2 , above	See MM Bio 2 , above	Less than significant with mitigation.
		See mitigation measure MM Bio 3, above.	Significant impact	See MM Bio 3 , above	See MM Bio 3 , above	See MM Bio 3 , above	Less than significant with mitigation.
		See mitigation measure MM Bio 4, above.	Significant impact	See MM Bio 4 , above	See MM Bio 4 , above	See MM Bio 4 , above	Less than significant with mitigation.

Table 2-A, Impact and Mitigation Summary Matrix

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		MM Bio 5: If habitat suitable to support the coastal California gnatcatcher is to be removed between March 1 and August 15, focused surveys shall first be conducted to determine if the habitat is occupied by gnatcatchers. If gnatcatchers are present and are determined to be nesting, the occupied areas shall be avoided until after August 15.	Significant impact	Prior to the issuance of grading permit. If construction commences between March 1 st and August 15th	Riverside County Environmental Programs Department (EPD)	If construction commences between March 1 st and August 15 th , a focused survey shall be submitted to EPD.	Less than significant with mitigation.
		<u>See mitigation measure MM Bio 13, above.</u>	<u>Significant impact</u>	<u>See MM Bio 13, above</u>	<u>See MM Bio 13, above</u>	<u>See MM Bio 13, above</u>	<u>Less than significant with mitigation.</u>
	C: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites	MM Bio 6: The removal of potential nesting vegetation of sensitive bird species will be conducted outside of the nesting season (February 1 to August 31) to the extent that this is feasible. If vegetation must be removed during the nesting season, a qualified biologist will conduct a nesting bird survey of potentially suitable nesting vegetation prior to removal. Surveys will be conducted no more than three (3) days prior to scheduled removals. If active nests are identified, the biologist will establish buffers around the vegetation containing the active nest (500 feet for raptors and 200 feet for non raptors). The vegetation containing the active nest will not be removed, and no grading will occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest). If clearing is not conducted within three days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.	Significant impact	Prior to the issuance of grading permit. If construction commences between February 1 st and August 30th	Riverside County Environmental Programs Department (EPD)	If construction commences between February 1 st and August 30 th , a focused Nesting Bird Survey shall be submitted to EPD.	Less than significant with mitigation.
		<u>See mitigation measure MM Bio 13, above.</u>	<u>Significant impact</u>	<u>See MM Bio 13, above</u>	<u>See MM Bio 13, above</u>	<u>See MM Bio 13, above</u>	<u>Less than significant with mitigation.</u>
	D: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service	MM Bio 7: Prior to the issuance of a grading permit, individual projects will obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters. Authorizations may include, but are not limited to, a Section 404 permit from the Army Corps of Engineers, a Section 401 Water Quality Certification from the Regional Board, and a Section 1602 Streambed Alteration Agreement from California Department of Fish and Game.	Significant impact	Prior to the issuance of grading permit.	Building and Safety Department	Authorization/Permits from the appropriate agency	Less than significant with mitigation
		MM Bio 8: Project-specific impacts to jurisdictional waters will be mitigated at a 4:1 <u>3:1</u> ratio in a manner to be determined by the Master Developer and to be approved by the Army Corps of Engineers, California Department of Fish and Game, and the Regional Water Quality Control Board through the permitting process.	Significant impact	Prior to the issuance of grading permit	Building and Safety Department	Authorization/Permits from the appropriate agency	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

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		MM Bio 9: To allow for future flexibility in the hydrological function of the project drainage system so as to best meet the needs of the off-site wetlands and on-site vernal pool areas, the Central Park detention basin shall be designed to allow flows to be detained (as currently planned) or to bypass (completely or partially) the basin such that greater flows can be released to the wetland area to most closely mimic existing conditions in the 2-year and 10-year storm.	Significant impact	Prior to the approval of tentative tract map for each implementing projects	Riverside Flood Control District and/or Planning Department	A Drainage Plan shall be submitted for approval	Less than significant with mitigation
		<u>See mitigation measure MM Bio 13, above.</u>	<u>Significant impact</u>	<u>See MM Bio 13, above</u>	<u>See MM Bio 13, above</u>	<u>See MM Bio 13, above</u>	<u>Less than significant with mitigation.</u>
	E: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	MM Bio 7, MM Bio 8, and MM Bio 9 and MM Bio 13.	Significant impact	See MM Bio 7, 8 & 9, & 13, above	See MM Bio 7, 8 & 9, & 13, above	See MM Bio 7, 8 & 9, & 13, above	Less than significant with mitigation.
	F: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	With design considerations and regulatory compliance, no mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant

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CULTURAL	A: Substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5	<p>MM Cultural 1: A master Cultural Resources Management Plan (CRMP) was prepared and is contained in Chapter 9 of the Cultural Resources Study. The master CRMP contains mitigation measures for prehistoric sites and strategies to implement the mitigation measures over the course of the project development.</p> <p>When a tentative tract or other development project within the Specific Plan area is filed on land containing, or within 500 feet of, prehistoric sites, an addendum to the master CRMP will be prepared to address the sites affected by that tentative tract or project. Each such addendum to the CRMP will be prepared in consultation with the Native American tribes consulted for the project, the Tribal Traditional Resources Advisory Committee, and landowners and shall be reviewed and approved by the County. <u>Riverside County Transportation Commission shall also be consulted during preparation of any addendums to the master CRMP for properties located adjacent to the MCP project.</u></p> <p>As required by CEQA Guidelines Sections 15064.5(e) and (f), the CRMP addendum shall contain detailed provisions for the treatment of unanticipated discoveries during project construction, including human remains. The provisions of the CRMP should be consistent with state law as contained in Health and Safety Code Section 7050.5, and PRC Sections 5097.94 and 5097.98. Such mitigation shall be addressed in a manner consistent with the following:</p> <p>a. If buried materials of potential historical, cultural or archaeological significance are accidentally discovered during any earth-moving operations associated with the proposed project, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. If the find is determined to be an historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State CEQA Guidelines), avoidance or other appropriate measures as discussed in the CRMP shall be implemented.</p> <p>b. If evidence of potentially significant prehistoric or historic resources is uncovered during project-related grading outside of the high sensitivity areas in which archaeological and Native American monitoring has already been required, the extent of monitoring shall be amended and the presence of a Native American monitors shall be incorporated into the monitoring program for all</p>	Significant impact	Prior to approval of implementing project	Planning Department and County Archaeologist	CRMP shall be submitted to the Planning Department	Less than significant project-specific impacts with mitigation.

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		<p>areas in the affected tentative tract.</p> <p>c. <u>If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to whether the remains are Native American. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission (NAHC) shall be contacted pursuant to the law, and the NAHC shall identify the most likely descendant. The most likely descendant shall then make recommendations in the time frames set forth in the Public Resources Code, and engage in consultation with the project proponent and landowner concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until the most likely descendant has made his or her recommendation regarding the treatment and disposition of the human remains and any associated grave goods. Should the most likely descendant fail to make a recommendation or the landowner or his or her authorized representative rejects the recommendation of the descendant, the landowner (or authorized representative) is required to inter the human remains and associated grave goods with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.</u></p> <p>c. If human remains are uncovered at any time, all activities in the immediate area of the find shall be halted by the developer or its contractor and the County Coroner shall be notified immediately pursuant to CA Health & Safety Code Section 7050.5 and CA PRC Section 5097.98. If the Coroner determines that the remains are of Native American origin, the Coroner shall proceed as directed in Section 15064.5(e) of the CEQA Guidelines.</p> <p>In addition to unanticipated discoveries, the CRMP addendum shall incorporate the following recommendations to mitigate impacts to identified cultural resources:</p> <p>d. CA-RIV-6726H is the historical-period Colorado River Aqueduct (CRA). The CRA is currently in use and will not be modified by the proposed TVOL plan. SRI does not recommend any archaeological</p>					

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		<p>work in association with the CRA corridor. Two benchmarks that associated with the CRA are located within the TVOL project area and outside of the CRA corridor. Each is located within a separately recorded prehistoric site. One benchmark, Feature 2, is located within Locus C of site RIV-8712, and will be preserved in place. The other, Feature 1, is located on a boulder within site RIV-4156/H, which is in an area subject to direct impacts from development. These benchmarks are considered contributing elements to the CRA and should be preserved in place if possible. If preservation is not feasible, as may be the case with Feature 1, the affected benchmark shall be fully documented and relocated or salvaged for interpretive uses.</p> <p>Treatment of the benchmark recorded as RIV-6762H Feature 1 shall be documented as part of the Data Recovery Plan for site RIV-4156/H to be prepared in an addendum to the CRMP.</p> <p>e. RIV-8710H is a historical-period refuse dump that most likely derives from a construction camp for the CRA. The dump has good integrity and is eligible due to its association with the CRA and the potential of the site contents to provide additional information about chronology of the dump, subsistence at the camps, the relationship between the camp and the local and regional economies, and the technology of CRA construction. The site is situated at the northern edge of the TVOL project area, adjacent to the San Jacinto Wildlife Area, and is believed to be located on land owned by Lewis Operating Corp.</p> <p>Because the site will be subject to indirect impacts from possible illicit artifact collection due to the increased population of the project area, a data recovery plan in the form of detailed recording and mapping of all items at the dump, along with photographic documentation or collection of diagnostic and unique items shall be implemented. Although subsurface deposits are unlikely at the site, a limited set of shovel probe excavations to determine if any dump materials have become completely buried shall be implemented, and recovery of a representative sample of such materials, if present shall be conducted.</p> <p>The recommended data recovery work shall be conducted prior to issuance of a grading permit for</p>					

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		<p>Phase 1a of the TVOL project. Prior to conducting the fieldwork, the California Department of Fish and Game, and the U.S. Army Corps of Engineers shall be notified and provided with a plan of work for the data recovery. The results of the data recovery investigations at site RIV-8710H shall be documented in a professional quality technical report, and as public interpretive information to be presented in the form of brochures, public lectures, and signage placed within public parks and facilities.</p> <p>f. Sites RIV-394 and RIV-8707 are not <u>to be</u> subject to direct adverse impacts, <u>and are to be preserved in place in their entirety.</u> and no mitigation measures for direct impacts are needed. Current plans for the Public Facilities planning area call for water tanks to be placed and a pipeline to be installed south and west of the sites. To mitigate potential indirect effects from possible vandalism, future development within the Public Facilities planning area, and activities within the nearby fuel modification zone, the Site Preservation Plan for these sites will include provisions for the sites to be flagged and avoided, and for archaeological and Native American monitors <u>from the tribes consulted for the project</u> to be present during all activities that could cause ground disturbance within 100 feet of the sites.</p> <p>g. CA-RIV-397 consisting of a boulder outcrop and rockshelter with pictographs and an associated midden area, is located at the edge of a Medium High Residential planning area near the toe of the slope of the Lakeview Mountains. The boulder containing the rockshelter and rock art is located in the Open Space planning area, and thus will be avoided and preserved from direct impacts. The remainder of the site will be added to the Open Space planning area and preserved from development, which will prevent direct impacts to all known cultural deposits, and provide a buffer between residential development the Split Rock boulder and associated rock art panels. To mitigate potential indirect effects from possible vandalism, illicit artifact collection, and changes in the integrity if setting, feeling, and association resulting from the proximity of the residential use, a Site Preservation Plan shall be prepared prior to approval of any tentative tract within 500 feet of the site. The Site Preservation Plan shall be based on consultation</p>					

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<p>among the Tribes, Tribal Traditional Resources Advisory Committee, Regional Conservation Authority, and, <u>if possible and culturally appropriate</u>, the County, and shall include provisions for removal of modern graffiti, detailed recording of rock art elements by a recognized rock art expert, capping of exposed cultural deposits with fill and restoration of native vegetation, and protection of the site area from vandalism through appropriate fencing, landscaping, and interpretation.</p> <p>h. Sites CA-RIV-806, 2585, 4155, 8698, 8699, 8700, 8704, 8705, and 8711 consist of varying numbers of milling features, including both slicks and mortars, some with associated cultural deposits, all located within Open Space planning areas. The sites are not <u>to be</u> subject to grading or other ground disturbances associated with development and therefore no direct impacts to these sites are anticipated; however, indirect impacts could occur as a result of the proximity of residential areas, the recreational use of nearby trails, and activities within adjacent fuel modification zones. No mitigation measures are proposed for RIV-806 because of the distance to the trails. For the remainder of the sites, to provide long term management and protection, a Site Preservation Plan shall be prepared prior to approval of any tentative tract within 500 feet of the site. The Site Preservation Plans for these sites should include provisions for the sites to be flagged and avoided, and for archaeological and Native American monitors <u>from the tribe(s) consulted for the project</u> to be present during all activities that could cause ground disturbance within 100 feet of the sites.</p> <p>i. CA-RIV-1842 is a small- to moderate-size milling complex site in the center of THE VILLAGES OF LAKEVIEW Specific Plan area. It includes two milling features with milling slicks. Trenching investigations identified ground stone fragments, flaked stone artifacts, a faunal bone, and midden deposit approximately 1.3 to 2.6 feet west of the milling feature area. A midden deposit was encountered as deep as 4 feet below ground surface. Overall, whereas the surface condition of the site is fair, the midden deposits suggest some subsurface integrity and the potential to hold additional cultural materials. The northern boundary of the site has not been clearly defined.</p>					

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<p>The Data Recovery Plan for RIV-1842 shall include provisions for additional testing to determine firmly the northern boundary of the site and assess the composition and structure of the subsurface deposits. Based on the testing data, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. All collections resulting from data recovery excavations shall be curated in perpetuity in a facility that meets the standards of the State of California <i>Guidelines for the Curation of Archaeological Collections</i> (OHP 1993) and 36 CFR 79. Such standards include: climate control, security, adequate staffing, access by qualified researchers and descendant groups. The appropriate disposition of all cultural resource collections resulting from data recovery excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.</p> <p>j. CA-RIV-4156/H contains four milling features with a total of six slicks and one mortar. Although three trenches were excavated in the vicinity of the site with negative results, the immediate site area was not tested and subsurface deposits cannot be ruled out. The Data Recovery Plan for RIV-4156/H shall include provisions for testing to confirm the presence or absence of subsurface deposits. If the testing indicates that a subsurface deposit is present, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. All collections resulting from data recovery excavations should be curated in perpetuity in a facility that meets the standards of the State of California <i>Guidelines for the Curation of Archaeological Collections</i> (OHP 1993) and 36 CFR 79. The appropriate disposition of all cultural resource collections resulting from data recover excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.</p> <p>k. CA-RIV-4158, which is believed be a redeposited</p>					

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<p>assortment of artifacts removed from other nearby sites. Trenching results indicate that, although RIV-4158 appears to contain sparse subsurface archaeological deposits, this site may retain relatively little subsurface integrity.</p> <p>The Data Recovery Plan for RIV-4158 shall include provisions for additional testing to assess the composition and structure of the subsurface deposits. Based on the testing data, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. All collections resulting from data recovery excavations should be curated in perpetuity in a facility that meets the standards of the State of California Guidelines for the Curation of Archaeological Collections (OHP 1993) and 36 CFR 79. <u>The appropriate disposition of all cultural resource collections resulting from data recover excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.</u></p> <p>1. Sites RIV-8702, 8703, and 8706, with three slicks, each on a separate boulder, will be subject to direct adverse effects from grading for residential uses. Each will require preparation and implementation of a Data Recovery Plan to mitigate adverse impacts from site destruction. The Data Recovery Plans for these sites shall include provisions for testing to confirm the presence or absence of subsurface deposits. If the testing indicates that a subsurface deposit is present, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. All collections resulting from data recovery excavations should be curated in perpetuity in a facility that meets the standards of the State of California Guidelines for the Curation of Archaeological Collections (OHP 1993) and 36 CFR 79. <u>The appropriate disposition of all cultural resource collections resulting from data recover excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in</u></p>					

Table 2-A, Impact and Mitigation Summary Matrix

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		<p><u>the data recovery plans contained in addenda to the CRMP.</u></p> <p>m. Site RIV-8712 covers an area of 78.5 acres containing five previously recorded sites, now defined as loci within the larger site complex. The portions of the site containing the rock art and milling features and having the highest surface artifact density are within an Open Space planning area that covers 47 acres (60 percent) of the site area. Approximately 12.5 acres (16 percent) of the site have already been disturbed by previous construction of the CRA and the IFP. The remaining portions of the site, approximately 19 acres, or 24 percent of the site area, will be subject to direct adverse effects.</p> <p>To provide for long-term management and protection of the portions of site 8712, a Site Preservation Plan shall be prepared prior to approval of any tentative tract within 500 feet of the site. The Site Preservation Plan shall be based on consultation among the Tribes, Tribal Traditional Resources Advisory Committee, Regional Conservation Authority, and the County, and shall include provisions for protection of the site area from vandalism through appropriate fencing, landscaping, and interpretation.</p> <p>The Data Recovery Plan for the portion of RIV-8712 subject to direct impacts shall include provisions for additional testing to assess the composition and structure of the subsurface deposits. Based on the testing data, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. All collections resulting from data recovery excavations should be curated in perpetuity in a facility that meets the standards of the State of California <i>Guidelines for the Curation of Archaeological Collections</i> (OHP 1993) and 36 CFR 79. <u>The appropriate disposition of all cultural resource collections resulting from data recover excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.</u></p> <p>n. Isolates 6 and 7 are subsurface items identified during the excavation of trenches 51 and 68. Located approximately 197 feet apart, the materials do not</p>					

Table 2-A, Impact and Mitigation Summary Matrix

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		<p>meet the criteria for consideration as a site. However, one flaked stone artifact was identified on the surface between two trenches and, as it is possible that additional materials are present below the surface between trenches 51 and 68; therefore, it is recommended by SRI that this area is includes additional subsurface investigation. SRI recommends excavation of four additional trenches around TRs 51 and 68 and four more between TRs 65 and 50 to the east. This work should be conducted for and reported in the CRMP Addendum to be prepared for the tentative tract containing these resources.</p> <p>If the results of the testing indicate the presence of an intact subsurface cultural deposit, a Data Recovery Plan for the newly identified site shall be prepared according to the provisions of the CRMP. The DRP shall contain monitoring during ground-disturbing activities, preparation of a professional report and public interpretive information, and curation of the collection. The DRP shall be reviewed and accepted by the County archaeologist prior to approval of any tentative tract containing or within 500 feet of the site. All DRP measures for the site shall be implemented prior to issuance of a grading permit for the associated tentative tract. A technical report of findings, including disposition of the recovered archaeological collection, for the DRP shall be submitted and approved by the County archaeologist prior to issuance of occupancy permits for the associated tentative tract.</p>					
	B: Substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5	<p>See MM Cultural 1, above.</p> <p>MM Cultural 2: Even after full implementation of data recovery through MM Cultural 1, it is possible that significant buried resources could be present in many areas that will be graded. Therefore, to mitigate for discovered buried sites, the entire area designated as having high sensitivity for buried sites (see Figure 5.5-1, Cultural Resources Sensitivity) shall be monitored by a qualified archaeologist and a Native American monitor during any ground-disturbing activities. Full time archaeological and Native American monitoring during excavations shall be conducted in these areas. A full report of all monitoring activities, including disposition of all resulting collections, shall be prepared according to the provisions of the Cultural Resources Management Plan.</p>	Significant impact	During construction	Project Construction Manager Planning Department	Monitoring report from a qualified archeologist/Native American shall be submitted to the Planning Department	Less than significant with mitigation for <i>project direct impacts</i> . Significant unavoidable project-specific and cumulative impacts with respect to <i>indirect impacts</i> .
	C: Disturb any human remains, including those	See MM Cultural 1 and MM Cultural 2 , above.	Significant impact	See MM Cultural 1 & 2 , above	See MM Cultural 1 & 2 , above	See MM Cultural 1 & 2 , above	Less than significant with mitigation.

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	interred outside of formal cemeteries						
	D: Restrict existing religious or sacred uses within the potential impact area	Design considerations (avoiding sacred sites) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant without mitigation
	E: Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature.	MM Paleontology 1: Should any paleontological resources be accidentally discovered during construction, construction activities shall be moved to other parts of the project site and a qualified paleontologist shall be contacted to determine the significance of these resources. If the find is determined to be a significant paleontological resource, and if the area was identified as having a “Low” sensitivity for containing paleontological resources, similar sediments may be reassigned as “High” sensitivity and would be subject to MM Paleontology 2 .	Significant impact	During construction	Project Construction Manager Planning Department	Monitoring report from a qualified paleontologist shall be submitted to the Planning Department	Less than significant with mitigation
		MM Paleontology 2: For areas of the site identified as having a “High” sensitivity for finding paleontological resources, prior to the issuance of a grading permit, a qualified paleontologist shall be retained and a Paleontological Resource Monitoring and Treatment Plan (PRMTP) shall be prepared. Once the PRMTP is approved by the County of Riverside Planning Department, grading and construction activities may commence under the provisions of the PRMTP. The plan should include the following: 1. Pregrade meeting with a qualified paleontologist. The paleontologist will explain the likelihood for encountering paleontological resources, what resources may be discovered, and the methods that will be employed if anything is discovered. 2. In areas mapped with High B rating, a qualified vertebrate paleontologic monitor shall be present during construction excavation. The monitor shall inspect fresh cuts and/or spoils piles to recover paleontological resources. The monitor shall be empowered to temporarily divert construction equipment away from the immediate area of the discovery. 3. If the qualified paleontologist is not present when fossil remains are uncovered by earth-moving activities, these activities shall be stopped and a qualified paleontologist shall be called to the site immediately to evaluate the significance of the fossil remains. 4. It is recommended that native sediments occasionally be spot-screened through one-eighth to one-twentieth-inch mesh screens to determine whether microfossils are	Significant impact	During construction	Project Construction Manager Planning Department	PRMTP shall be submitted to the Planning Department	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

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		<p>present. If microfossils are encountered, additional sediment samples as determined by the paleontological monitor shall be collected and processed to recover additional fossils.</p> <p>5. If the qualified paleontologist determines that insufficient fossil remains have been found after fifty percent of earth moving activities have been completed, monitoring can be reduced or discontinued.</p> <p>6. Any recovered specimens shall be prepared to the point of identification and permanent preservation, which may include the picking of any washed mass samples to recover small invertebrate and vertebrate fossils, if present, the removal of surplus sediment from around larger specimens to reduce the volume of storage for the repository and the hardeners/stabilizers to fragile specimens.</p> <p>7. Specimens shall be identified to the lowest taxonomic level possible and curated at an institutional repository approved by the County of Riverside.</p> <p>8. A report shall be prepared that details the methods and results of the monitoring program, even if the results are negative. If applicable, this shall include an appended itemized inventory of identified specimens. This report shall be submitted by the project paleontologist to the County of Riverside, Planning Department, prior to the issuance of the final grading inspection for the area under each grading permit issued.</p>					
GEOLOGY	<p>A: 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, collapse, or rockfall hazards.</p>	<p>Regulatory requirements (County Ordinance No. 457 will be observed regarding setback requirements with regard to slopes, UBC, geotechnical reports) and mitigation.</p> <p>MM Geo 1: To protect life, occupied buildings and water tanks, rockfall hazards shall be addressed to planning areas adjacent to the Lakeview Mountains. Evidence of past rockfalls exist onsite; consequently, based upon field investigation, the majority of the areas adjacent to the slopes have at least a minimal level for rockfall hazard. Therefore, slope areas have been delineated by three distinct rockfall hazard zones, RH Zone 1 has the least potential, and RH Zone 3 has the highest potential. The following recommendations for remediation are based upon the Preliminary Rockfall Hazard Evaluation. Adherence to these remediation measures will reduce the level of impact to less than significant.</p>	<p>Significant impact</p>				<p>Less than significant with regulatory compliance and mitigation</p>

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IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<p><u>RH Zone 1</u> – Due to the isolated nature of hazards within this zone, the hazard of individual rock falls can be generally neutralized by the removal of individual rocks and/or construction of low impact walls. Blasting may be required in this zone in order to completely remove the individual rock hazard.</p> <p><u>RH Zone 2</u> – Local areas in this zone may only require a few isolated rocks to be removed while other areas may require a more regional alternative. The following measures are provided as options for remediation in Zone 2.</p> <ul style="list-style-type: none">• Construction of a debris ditch with a 5-foot tall, 1.5:1 (horizontal to vertical) manufactured slope, which will capture falling debris. Due to the granular nature of on-site soils, the slope will need to be reinforced with geogrid, which is a synthetic polymer-coated material that is used to reinforce an earth-fill slope, wall, and base layer construction. Geogrid provides a stabilizing force within the soil structure itself and will improve the surficial stability of fill slopes inclined at 1.5:1. This manufactured slope should be a minimum of 15 feet from the toe of the natural slope. Fencing at the top of the manufactured slope will be constructed to provide additional protection.• Construction of a debris ditch with a 5-foot tall, 2:1 manufactured slope and 3-foot tall, top of slope impact wall. The impact wall should be designed using an equivalent fluid pressure of 125 pounds per cubic foot (pcf). The toe of the manufactured slope should be a minimum 15 feet from the toe of the natural slope.• Construction of a debris ditch with a 3-foot tall retaining wall. The base of the wall should be a minimum 15 feet from the toe of the natural slope.• Construct a 6-foot tall Caltrans-type rock fence that should be setback a minimum of 15 feet from the toe of the natural slope.• Implementation of a 50-foot setback from the toe of the natural slope to the property line of the proposed lots and construct fencing that will provide some additional measure of protection from rockfall hazards. <p>Specific Details for construction of these remediation options are provided in Geotechnical reports prepared by Leighton provided in Appendix F (CD #3).</p> <p><u>RH Zone 3</u> – Due to the abundant hazards in this zone, a regional remediation measure is recommended, as opposed to individual remediation/removal of specific hazardous rocks. However, due to the existence of local, large, rounded boulders located high up on the perimeter slopes in these areas, local blasting of these large</p>		<p>Prior to the issuance of a Grading permit in Planning Areas 58, 59, 68 and 73.</p> <p>Prior to the issuance of a Grading permit I Planning Areas 58, 68, 69 and 73.</p> <p>Prior to the issuance of a Grading permits in Planning Areas 66 and 68.</p>	<p>Planning Department</p> <p>Planning Department</p> <p>Planning Department</p>	<p>A Grading Plan shall be submitted to the Planning Department</p> <p>A Grading Plan shall be submitted to the Planning Department</p> <p>A Grading Plan shall be submitted to the Planning Department</p>	

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		<p>fragments may be required in addition to the implementation of rockfall zone mitigation measures.</p> <ul style="list-style-type: none">• Construction of a debris ditch with an 8-foot tall, 1.5:1 (horizontal to vertical) manufactured slope. Due to the granular nature of on-site soils, the slope will need to be reinforced with geogrid. This manufactured slope should be a minimum of 15 feet from the toe of the natural slope. A 5-foot tall fence constructed at the top of the manufactured slope will provide additional protection.• Construction of debris ditch with a 5-foot tall, 2:1 manufactured slope and 5-foot tall top of slope impact wall. The impact wall should be designed using an equivalent fluid pressure of 125 pcf. The toe of the manufactured slope should be a minimum 15 feet from the toe of the natural slope.• Construction of a debris ditch with a 5-foot tall retaining wall. The base of the wall should be a minimum 15 feet from the top of the natural slope.• Construct a 6-foot tall Caltrans-type rock fence that should be setback a minimum of 15 feet from the toe of the natural slope.• Implementation of a 75-foot setback from the toe of the natural slope to the future property line of the proposed lots and construct fencing that will provide some additional measure of protection from rockfall hazards. <p>Specific Details for construction of these remediation options are provided in geotechnical reports prepared by Leighton provided in Appendix F (CD #3).</p>					
	B: 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 ground subsidence	<p>Design Consideration (over-excavation and re-compaction of onsite alluvial soil)</p> <p>MM Geo 2: The upper 5 to 15 feet of alluvial soil is considered to be slightly, to moderately compressible, therefore, partial removal and re-compaction of this material will be necessary in areas where structures are planned, in order to reduce the potential for excessive total and differential settlement of the structures. The depth of removal and recompaction will be determined in the field based on conditions exposed but is expected to include complete removal of manure and organic-rich soil, complete removal of uncontrolled fill soils and removal of the upper 5 to 8 feet of alluvial soil.</p>	Less than significant	<p>Submittal of sampling and monitoring results, prior to the issuance of building permits</p> <p>Installation of mitigation materials completed prior to the issuance of Final Inspection</p>	<p>Building & Safety Department and Environmental Health Department</p> <p>Building & Safety Department</p>	<p>Testing report submitted to Building & Safety Department</p> <p>On-site inspection</p>	Less than significant with design consideration and mitigation

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		MM Geo 3: Prior to issuance of a grading permit on any implementing project, an updated soils report and geotechnical study reviewing the most current development plan shall be prepared to analyze on-site soil conditions and slope stability and include appropriate measures to provide foundation stability, seismic design, and limit damage from erosion.	<u>Less than significant</u>	Prior to issuance of Grading Permit on any implementing project	Planning Department County Geologist	An updated soils/geotechnical report shall be submitted with the Grading Plan to the Planning Department	Less than significant with design consideration and mitigation
	C: Be subject to strong seismic ground shaking, expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death from seismic shaking; be subject to 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, or as delineated on County of Riverside Earthquake Fault Hazard Zones Maps or based on other substantial evidence of a known fault.	Required regulations (Riverside County Standards relating to ground shaking) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	€D: Be subject to geologic hazards, such as seiche, mudflow, volcanic hazard, dam failure	Required regulations (California Civil Code Section 1103-1103.4 applies to the transfers of real property between private parties, as defined therein, and requires notification upon transfer if the property is affected by one or more natural hazards (including dam failure). General Plan policies: S 4.1) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	C: Be subject to strong seismic ground shaking, expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death from seismic shaking; be subject to 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, or as delineated on County of Riverside Earthquake Fault Hazard	Required regulations (Riverside County Standards relating to ground shaking) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance

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	Zones Maps or based on other substantial evidence of a known fault.						
	D : Change topography or ground surface relief features, create cut or fill slopes greater than 2:1 or higher than 10 feet, or result in grading that affects or negates subsurface sewage disposal systems	Design Considerations (Slope Stability Report, where cut and fill slopes are created higher than ten feet (10') a landscaping and irrigation plan shall be submitted to the County Building and Safety Department with the Rough Grading Plan submittal) No mitigation required <u>See MM Geo 3, above.</u>	Less than significant	Not Applicable <u>See MM Geo 3, above.</u>	Not Applicable <u>See MM Geo 3, above.</u>	Not Applicable <u>See MM Geo 3, above.</u>	Less than significant with design consideration <u>and mitigation</u>
	D : Be subject to geologic hazards, such as seiche, mudflow, volcanic hazard, dam failure.	Required regulations (Division of Safety of Dams regulations, 2007 California Building Code, and Riverside County General Plan Safety Policy 4.1) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	E F: <u>Result in substantial soil erosion or the loss of top soil, and or B</u> be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	Design Consideration (site specific detailed soil reports as well as geotechnical studies must be conducted by the geotechnical engineer prior to final grading activities, which would indicate where expansive soils exist). No mitigation required <u>See MM Geo 3, above.</u>	Less than significant	Not Applicable <u>See MM Geo 3, above.</u>	Not Applicable <u>See MM Geo 3, above.</u>	Not Applicable <u>See MM Geo 3, above.</u>	Less than significant with design consideration <u>and mitigation</u>
	E : Change or modify site topography or ground surface relief features and/or create cut or fill slopes greater than 2:1 or higher than 10 feet, or result in grading that affects or negates subsurface sewage disposal systems.	Specific Plan Development Standards (Water and Sewer Development Standards) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with Specific Plan standards
	F : The proposed project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	Design Consideration (require additional testing and design recommendations) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with design consideration
	G: The proposed project would change deposition, siltation, or erosion which may modify the channel of a river or stream or the bed of a lake.	Required regulations (SWPPP, WQMP) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance and design consideration

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	H: The proposed project would result in an increase in water-induced erosion either on or off site.	Required regulations (SWPPP) and Design Consideration (all common areas and opens space to be maintained and all recreational facilities to be landscaped and irrigated.) <u>See MM Geo 3, above.</u> <u>No mitigation required</u>	Less than significant	Not Applicable <u>See MM Geo 3, above.</u>	Not Applicable <u>See MM Geo 3, above.</u>	Not Applicable <u>See MM Geo 3, above.</u>	Less than significant with design consideration and <u>mitigation</u>
	I: The proposed project would result in methane levels, after grading, that exceed the Riverside County standard of 5,000 ppm.	Design Consideration (require a detailed soils report and geotechnical investigation (per Section 7 or the Specific Plan Standards), prior to initial grading activities, which will analyze on-site soil conditions) <u>See MM Geo 3, above.</u> <u>No mitigation required</u>	Less than significant	Not Applicable <u>See MM Geo 3, above.</u>	Not Applicable <u>See MM Geo 3, above.</u>	Not Applicable <u>See MM Geo 3, above.</u>	Less than significant with design consideration and <u>mitigation</u>
	J: The proposed project would result in areas with organic material in soil that exceed County of Riverside requirements.	Required regulations (County Requirements for Methane Mitigation Protocol on Vacant Lots (version 7/27/01-Final) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	I: The proposed project would result in areas with organics in compacted fill that exceed the industry standard of 3 percent of total volume.	Required regulations (County Requirements for Methane Mitigation Protocol on Vacant Lots (version 7/27/01-Final) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
HAZARDS	A: Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials.	Required regulations (the EPA, the Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Applicable federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). In particular, CFR Title 49 governs the manufacture of packaging and transport containers; packing and repacking, labeling, and the marking of hazardous material transport. State enforcement agencies for hazardous materials transportation regulations are the CHP and Caltrans. General Plan policies (S6.1, 7.1)) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	B: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Required regulations (SCAQMD Rules and Regulations pertaining to asbestos, DOT office of Hazardous Materials Safety regulations, and Titles 8, 22, and 26 or the CCR) MM Hazards-Mat 1: <u>To assure that contaminated soils are not used on-site or improperly exported off-site, appropriate soils testing and handling shall occur.</u> Prior to approval of tentative tract maps, site plans, or other discretionarily approvals for a given phase of development or specific plan area, the County shall confirm that a Phase I ESA has been prepared for the area that is the subject of the discretionary action. If a Phase I ESA has not been previously prepared for the area, a Phase I ESA shall be performed by a registered environmental assessor (REA) prior to the approval of the discretionary action. If the property had historically been used for agricultural activities, the Phase I ESA shall address the potential for pesticide residues. If potential hazardous materials or conditions are identified in the Phase I report, the recommendations of the ESA shall be implemented. Such recommendations could include surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the County of Riverside and shall be included in any CEQA analysis prepared in connection with the consideration of the future discretionary approvals for development.	Significant	Prior to approval of any implementing project	Planning Department	Phase I Report shall be submitted to the Planning department	Less than significant with mitigation
		MM Hazards-Mat 2: To address impacts related to a release of hazardous materials into the environment, an asbestos and lead paint survey will be required prior to issuance of a demolition permit for the demolition of existing site structures. Recommendations of the study shall be implemented in compliance with all applicable regulations.	Significant	Prior to demolition permit	Building & Safety Department	Submission of asbestos and lead paint survey	Less than significant with mitigation.
		MM Hazards-Mat 3: Removal of structures including buildings, tanks, or buried materials from contaminated areas will require monitoring by a Hazardous Materials trained archaeologist. If buried materials of potential historical, cultural or archaeological significance are accidentally discovered during any earth-moving operations associated with the proposed project, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. If the find is determined to be an historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State CEQA Guidelines), avoidance or other appropriate measures as discussed in the Cultural Resources Management Plan shall be implemented (See MM Cultural 1+ in Section 5.5 for further information).	Significant	During earthwork on the site.	Planning Department/County Archaeologist	Report at the completion of in-field monitoring	Less than significant with mitigation
		MM Hazards-Mat 3a: <u>If, while performing any excavation as part of project construction, material that is believed to be</u>	<u>Significant</u>	<u>During earthwork on the site.</u>	<u>Developer and County of Riverside Community</u>	<u>Report at the completion of in-field monitoring</u>	<u>Less than significant with mitigation</u>

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		hazardous waste is discovered, as defined in Section 25117 of the California Health & Safety Code, the developer shall contact the <u>County of Riverside Community Health Agency, Department of Environmental Health</u> . Excavation shall be stopped until the material has been tested and the presence of hazardous waste has been confirmed. If no hazardous waste is present, excavation may continue. If hazardous waste is determined to be present, the County Department of Environmental Health will provide <u>guidance regarding necessary oversight so that the material is be removed and disposed of pursuant to applicable provisions of California law.</u>			<u>Health Agency, Department of Environmental Health</u>		
		MM Hazards-Mat 4a: To properly assess the suitability of on-site soils to be used as fill, a geotechnical evaluation shall be performed by a qualified professional prior to the approval of all <u>Tentative Tract maps or site plans for a given phase of development. This evaluation will include an analysis of the organic matter content of soils on the site. If the organic matter content of the soils is greater than 2 percent when mixed with subsurface soils and/or imported fill, then manure will be removed from the site and properly disposed of, or mixed with other soils to reduce the organic matter to less than 2 percent prior to grading operations.</u>	<u>Less than significant</u>	Prior to approval of all implementing maps for a given phase	<u>Planning Department</u> <u>County Geologist</u>	<u>An updated soils/geotechnical report shall be submitted with the implementing maps to the Planning Department</u>	<u>Less than significant with design consideration and mitigation</u>
	C: Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.	Required regulations (County of Riverside’s Ordinance No. 787.1, the Uniform Fire Code, General Plan policies (S 5.1) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	D: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile [1,320-feet] of an existing or proposed school.	Required regulations (County’s Fire Code and any additional element as required in the California Health and Safety Code Article 1 Chapter 6.95 for the Business Emergency Plan) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	E: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 [CORTESE] and, as a result, would it create a significant hazard to the public or the environment.	See mitigation measure MM Hazards 1, above. MM Hazards-Mat 4: If the <u>burn</u> dump is not fully remediated by the time development starts, a 300-foot buffer from the <u>burn</u> dump site is required from any proposed development until remediation of the <u>burn</u> dump site is complete, <u>or other measure acceptable to the RCWMD, such as a barrier, to eliminate exposure pathways will be completed.</u> No setbacks <u>or other measures to eliminate exposure pathways</u> are required if remediation has been completed and cleared by the County and State Departments of Health.	Significant	Prior to construction start of Planning Areas 4, 6, 7, 10, & 12 and the Drainage Channel	Planning Department County of Riverside Waste Management Department Project Proponent	Prior to construction of PA 4, 6, 7, 10, & 12 and the Drainage Channel, the project proponent shall show proof from the County Waste Management Department that the dump site has been remediated.	Less than significant with mitigation
	F: Expose people or structures	Design Considerations (100-foot fuel modification zone, 500’ of	Significant	Prior to the issuance of	Building &Safety	Building Plans shall be	Less than significant with

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	open space/regional park is designated between proposed development and the San Jacinto Wildlife Area) MM Hazards-Fire 5: All buildings shall be constructed with fire retardant roofing material as described in Section 1503 of the Uniform Building Code.		building permits	Department and County Fire Department	submitted and approved	project design considerations and mitigation
		MM Hazards-Fire 6: Prior to the approval of any development plan for lands adjacent to open space areas (Planning Areas 58, 66, 68, 69, 73, and 81), a fire protection/vegetation management (fuel modification) plan shall be submitted to the fire department for review and approval. The Homeowners’ Association or appropriate management entity shall be responsible for maintaining the elements of the plan. If significant eligible cultural resources are located within or adjacent to a fuel modification zone, the fire protection/vegetation management plan shall be prepared in conjunction with parties knowledgeable about the cultural resources such as the County Archaeologist, and Native American representatives.	Significant	Prior to construction of Planning Areas 58, 66, 68, 69, 73, and 81.	County Fire Department	A Fuel Modification Plan shall be submitted and approved by the Fire Department prior to construction of PA 58, 66, 68, 69, 73, and 81.	Less than significant with project design considerations and mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
HYDROLOGY	A: Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.	Required regulation (WQMP, General Plan policies: OS 3.3, OS 5.3) and Design Considerations (THE VILLAGES OF LAKEVIEW Specific Plan Drainage Plan Development Standards). No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with design considerations and regulatory compliance
	B: Violate any water quality standards or waste discharge requirements.	Required regulation (NPDES, WQMP, General Plan policies: OS 3.3) No mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	C: 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).	Design Considerations (THE VILLAGES OF LAKEVIEW Specific Plan Drainage Plan Development Standards and Drainage Plan). No mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with design considerations
	D: 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 run-off.	Required regulation (WQMP, General Plan policies: OS 3.3,) and Design Considerations (roadside swales, water quality basins, etc.) MM Hydro 1: To address potential significant adverse environmental impacts associated with interim conditions that may exist prior to the completion of the overall project storm drain and water quality treatment system, the following mitigation shall be required. Prior to approval of future Tentative Tract maps within THE VILLAGES OF LAKEVIEW SPECIFIC PLAN which are proposed prior to completion of the overall project drainage improvements, hydrology studies will be required to analyze potential impacts and identify any needed improvements within the tract and/or within the Specific Plan or offsite which are required to accommodate storm water flows and address water quality, as required by the County of Riverside and Regional Water Quality Control Board. Potential operational BMPs may include vegetated swales, sand filtration systems, water quality inlets, mechanical separators, and/or other proprietary devices as needed to treat expected pollutants from development (See Table 5.8-D.).	Significant	Prior to the approval of tentative tract map for each implementing project	Riverside Flood Control District and/or Planning Department	Submittal of drainage studies and WQMP’s to Riverside Flood Control District	Less than significant with mitigation, design consideration and regulatory compliance.

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	E: 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.	No mitigation required.	No impact	Not Applicable	Not Applicable	Not Applicable	No impacts
	F: Place within a 100-year flood hazard area structures which would impede or redirect flood flows.	Design Considerations (proposed backbone drainage facilities, passive parks, Line A, water quality basin) No mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with design considerations
	G: Otherwise substantially degrade water quality.	Required regulation (SWPPP, General Plan policies: OS 3.3) and Design Consideration (WQMP). No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with design consideration and regulatory compliance
	H: Include new or retrofitted storm water Treatment Control Best Management Practices (BMPs) (e.g., water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects	Required regulations (WQMP) and Design Considerations (Design guidelines for swales and debris basins) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with design consideration and regulatory compliance
	I: Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.	Required regulation (WQMP, General Plan policies: OS 5.3, S 4.8, S 4.9, S 4.18) and Design Consideration (Master Drainage Plan) See mitigation measures MM Hydro 1, above.	Significant	See MM Hydro 1 , above	See MM Hydro 1 , above	See MM Hydro 1 , above	Less than significant with mitigation measure, design considerations and regulatory compliance.
	J: Change in absorption rates or the rate and amount of surface run-off.	Required regulations (Regional WQMP, NPDES) and Design Considerations (open space preservation, parks and tree planting, an increase of the floodplain storage capacity) No mitigation required	Less than significant	Not Applicable	Less than significant	Less than significant	Less than significant with design consideration and regulatory compliance
	K: 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	Regulatory requirements (Real estate code disclosure). No mitigation required	Less than significant	Not Applicable	Less than significant	Less than significant	Less than Significant without mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	(Dam Inundation Area).						
	L: Change in the amount of surface water in any water body.	Design Considerations (Project Master Drainage Plan) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with design considerations
LAND USE	A: Result in a substantial alteration of the present or planned land use of an area	No feasible mitigation, regulation, or design consideration can lessen the impacts with respect to substantial alteration from present land use of the area. Section 8.0, Alternatives, presents alternatives which reduce this impact and the No Project Alternative (Alt. 2) eliminates this impact but creates impacts different than those of the project, as discussed in Section 8.0. Required regulations (7% Ag. conversion) and Design Consideration (General Plan Amendment).	Significant	Not Applicable	Not Applicable	Not Applicable	Significant impacts result related to existing land uses – both project and cumulative.
	B: Have an effect on land use within a city sphere of influence and/or within adjacent city or county boundaries	No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant
	C: Be inconsistent with the site’s existing or proposed zoning	If the project GPA is approved, then SP is consistent with what zoning will be required for consistency, therefore, no mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant without mitigation
	D: Be incompatible with existing surrounding zoning	MM Land Use 1: To reduce potential significant adverse impacts due to incompatibility between agricultural uses and proposed suburban development, proposed residences, school buildings, and commercial structures shall be setback 300 feet from existing active agricultural uses of an offensive nature which are defined as: corrals, chicken houses, dairy waste ponds, manure stockpiles, or commercial livestock. This setback shall not apply to areas of the project where Ramona Expressway intervenes between active agriculture and proposed development because the expressway will act as the buffer. The 300-foot buffer area may include public road rights-of-way, parking lots, and service or maintenance areas. In addition to project edge conditions, the 300-foot setback shall also apply to interim conditions on-site between occupied project-related buildings and existing on-site agricultural uses of an offensive nature (e.g., chicken ranch) that are located in a later phase of project development and may remain operational while earlier phases of development are being built. (Same as MM Ag 1.)	Significant	Prior to the approval of tentative tract map for each implementing project	Planning Department	Tentative tract Maps shall be submitted to the Planning Department for approval. The TTM shall show the 300-ft setback from active agricultural uses.	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

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		MM Land Use 2: To reduce potential land use density/intensity conflicts between existing rural residences on Mike Lane and future residential homes within Planning Areas 55, 57, and 58, a sight line study or evidence showing avoidance of views from proposed residences into existing homes on Mike Lane shall be submitted at the time of Tract Map submittal, or as otherwise approved by the Planning Director. Conflicts may be avoided through use of various means including but not limited to: location of windows and balconies, landscaping, walls, elevation differences, or setbacks.	Significant impact	Prior to the approval of tentative tract map for each implementing project	Planning Department	Tentative tract Maps shall be submitted to the Planning Department for approval. The TTM shall show the recommended setbacks and landscaping screens.	Less than significant with mitigation
	E: Be incompatible with existing and planned surrounding land uses	With MM Land Use 1 and 2 above, and design considerations such as the equestrian trail, impacts due to incompatibility with adjacent existing and planned surrounding land uses will be less than significant. With the implementation of hunting regulations within the SJWA, no land use incompatibilities will exist between the SJWA and the project. No mitigation required.	Significant impact	See MM Land Use 1 & 2 , above	See MM Land Use 1 & 2 , above	See MM Land Use 1 & 2 , above	Less than significant with mitigation.
	F: Disrupt or divide the physical arrangement of an established community	No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant without mitigation
	G: Be inconsistent with the land use designations and policies of the General Plan	MM Land Use 3: To eliminate inconsistencies with General Plan Policy LU.4.1, which encourages public art, and to provide a mechanism for interpretation of some of the historic land uses of the project site, public art and/or historic interpretation art or exhibits, shall be incorporated into the project in a minimum of three locations. At least one exhibit will focus on the project site’s prehistoric archaeological resources and interpretation at a location(s) to be determined at a later date depending on subject matter. Examples of the other exhibits may include but are not limited to: interpretative exhibits regarding the thoroughbred farm located within the park to be built in PA 53, art as a part of community entry monumentation, or art within fountains at a plaza within a pedestrian-oriented commercial center.	Significant impact	Prior to approval of VRPs for the Park Village, Town Center Village, and Enclave Village.	Planning Department	VRP submitted to Planning Department for approval.	Significant impacts related to inconsistencies with policies directed at conservation of agriculture, reduced commutes, and indirect effects of substantial population growth on open space and rural character remain with mitigation.
NOISE	A: Substantial [5dBA or greater] permanent increase in ambient noise levels in the project vicinity above levels existing without the project	No feasible mitigation.	Significant impact	Not Applicable	Not Applicable	Not Applicable	Significant and unavoidable area-wide noise impacts
	B: Substantial [5 dBA or greater] temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project	MM Noise 1: Whenever a construction site is within one-quarter (1/4) of a mile of an occupied residence or residences, no construction activities shall be undertaken between the hours of 6 p.m. and 6 a.m. during the months of June through September and between 6 p.m. and 7 a.m. during the months of October through May. Exceptions to these standards shall be allowed only with the written consent of the building official.	Significant impact	During project construction	Building & Safety Department	On-site verification	Less than significant with mitigation.

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Noise 2: Provide portable barriers for high-noise activities (dumping of ballast materials for example) taking place adjacent to existing sensitive receptors. The barrier is to be placed near the mass-producing equipment, between the noise source and the receptors. These barriers may be constructed on-site (for example) from 4-foot by 8-foot sheets of marine plywood (minimum one-inch thick) or one and one eighth inch (1 1/8”) tongue-in-groove sub-floor, backed with three and a half inch (3 ½”) thick R-11 fiberglass insulation for sound absorption. Several such panels may be hinged together in order to be self-supporting and to provide a continuous barrier.	Significant impact	During project construction	Building & Safety Department	On-site verification	Less than significant with mitigation.
		MM Noise 3: All construction vehicles and equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.	Significant impact	During project construction	Building & Safety Department	On-site verification	Less than significant with mitigation.
		MM Noise 4: To the extent feasible, the noisiest operations shall be scheduled to occur simultaneously in the construction program to avoid prolonged periods of annoyance.	Significant impact	Prior to construction scheduling	Building & Safety Department	On-site verification	Less than significant with mitigation.
		MM Noise 5: The construction contractor shall locate equipment/vehicle staging and stockpiling as far as practicable from existing residential dwellings and other noise-sensitive receptors.	Significant impact	During project construction	Building & Safety Department	On-site verification	Less than significant with mitigation.
		MM Noise 6: Have no music or electronically reinforced speech from construction workers audible at noise-sensitive property.	Significant impact	During project construction	Project construction managers Building & Safety Department	On-site verification	Less than significant with mitigation.
		MM Noise 7: All project workers exposed to noise levels above 80 dBA shall be provided with personal protective equipment for hearing protection (i.e., earplugs and/or earmuffs); areas where noise levels are routinely expected to exceed 80 dBA shall be clearly posted with signs requiring hearing protection be worn.	Significant impact	During project construction	Project construction managers Building & Safety Department	On-site verification	Less than significant with mitigation.
		MM Noise 7a: The developer shall notify neighboring residents within ¼ mile of any areas that will require blasting, as to the timing and duration of any potential blasting activities associated with the proposed project. Notification shall take place a minimum of five working days prior to anticipated blasting activities.	Significant impact	Notification shall take place a minimum of five working days prior to anticipated blasting activities.	Planning Department	Planning Department shall be notified at the same time residents are notified.	Less than significant with mitigation.

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	C: Exposure of persons to or generation of noise levels that exceed Riverside County General Plan standards	<i>To reduce or eliminate impacts related to the project exceeding Riverside County General Plan standards, the following mitigation measures shall be implemented:</i> MM Noise 8: Prior to approval of each tentative tract and plot plan, an acoustical impact analysis shall be submitted with the required acoustical review application form and fees to Riverside County Department of Environmental Health Office of Industrial Hygiene for review and approval. The acoustical impact analysis will address the noise that might be produced from traffic with respect to residential structures and stationary noise sources and will identify the sound barrier requirements for each tentative tract or plot plan to ensure that the 65 dBA exterior standard for sensitive receptors is met. Sound barrier heights will be based upon specific lot configurations, landscaping, and other details provided with the tentative tract maps and plot plans. Required sound barriers shall be constructed prior to final inspection <u>building permit issuance of the last residential/commercial unit</u> . To retain visibility and access, a combination of setbacks, berms, and walls may be used to achieve acceptable noise levels.	Significant impact	Prior to approval of any implementing project, <u>acoustical impact analysis approved.</u> <u>Prior to building permit issuance of the last residential/commercial unit the sound barrier, if required, shall be complete.</u>	Department of Public Health- Office of Industrial Hygiene	A Noise Study shall be submitted to the Office of Industrial Hygiene	Less than significant with mitigation with respect to interior and exterior noise levels. Less than significant with 500-foot buffer with respect to potential project noise impacts on the SJWA. Less than significant with mitigation with respect to impacts from hunting on project residents.
		MM Noise 9: Prior to issuance of building permits within a tract, a final noise study shall be submitted with the required acoustical review application form and fees to the Riverside County Department of Environmental Health Office of Industrial Hygiene for review and approval. The final noise study will verify the effectiveness of mitigation measures proposed in acoustical impact analysis required in MM Noise 8 and will calculate necessary Sound Transmission Class (STC) sound ratings for the windows of homes subject to exterior noise impacts greater than 65 dBA and provide the structural requirements necessary to meet an interior level of 45 dBA. A unit-to-unit transmission analysis should be performed for multi-family structures for structures containing more than one use (e.g., residential and commercial live-at-work buildings). This type of analysis attempts to ensure that noise does not spill from one unit over into another.	Significant impact	Prior to the issuance of building permits	Department of Public Health- Office of Industrial Hygiene	A Final Noise Study shall be submitted to the Office of Industrial Hygiene	Less than significant with mitigation with respect to interior and exterior noise levels.
		MM Noise 10: Prior to approval of a site development permit for commercial/office development, a noise study will be required for the final version of the commercial portions of the project site to ensure that noise from the commercial area will not impact adjacent residential land uses by exceeding the County’s noise limits of 65 dBA during the day and 45 dBA at night in any ten minute period. To retain visibility and access, setbacks, berms, and walls may be used to achieve acceptable noise levels.	Significant impact	Prior to approval of any implementing project	Department of Public Health- Office of Industrial Hygiene	A Final Noise Study shall be submitted to the Office of Industrial Hygiene	Less than significant with mitigation with respect to interior and exterior noise levels.

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		<i>To reduce impacts of noise from hunting activities in the SJWA, the following mitigation measure shall be implemented:</i> MM Noise 11: To inform future residents of The Village of Lakeview that hunting is allowed in the San Jacinto Wildlife Area, and their proximity to said hunting, which may cause loud intermittent noises from gunshots, a disclosure statement shall be provided to prospective buyers prior to the purchase of homes within the proposed project. A copy of the Department of Real Estate (DRE) White Report shall be given to the County Planning Department that the sales staff/escrow officers, for each housing area being sold have included such notification prior to Final Inspection.	Significant impact	Prior to the issuance of Final Inspection	Planning Department	Submittal of disclosure to the Planning Department	Less than significant with 500-foot buffer with respect to potential project noise impacts on the SJWA. Less than significant with mitigation with respect to impacts from hunting on project residents.
	D: Expose people to excess ground-borne vibration or ground-borne noise levels	See mitigation measures MM Noise 1 through 7 , above.	Significant impact	See MM Noise 1-7 , above	See MM Noise 1-7 , above	See MM Noise 1-7 , above	Less than significant with mitigation

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POPULATION	A: Cumulatively exceed official regional or local population projections	No feasible mitigation. See Alternatives Section 8.0 for discussion of alternative which reduce population.	Significant impact	Not Applicable	Not Applicable	Not Applicable	Significant impact without mitigation
	B: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	No feasible mitigation. See Alternatives Section 8.0 for discussion of alternative which reduce population.	Significant impact	Not Applicable	Not Applicable	Not Applicable	Significant impact without mitigation
PUBLIC SERVICES	A: (Fire) Result in substantial adverse physical impacts associated with the provision of new or physically altered fire service facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.	MM Fire 1: To assure that the project development does not proceed faster than adequate fire service facilities are provided, the necessary fire station identified in the Development Agreement shall be constructed and operational prior to issuance of building permit for the 5,500 th dwelling unit within the project, to accommodate the equipment and staff necessary to serve all development within THE VILLAGES OF LAKEVIEW Specific Plan in accordance with the terms of THE VILLAGES OF LAKEVIEW Development Agreement or other agreement with the Riverside County Fire Department.	Significant impact	Prior to the issuance of the 5,500 th Final Inspection <u>Building Permit</u>	County Fire Department		Less than significant with mitigation
		MM Fire 2: To ensure that adequate fire stations are provided to serve project development, the Master Developer shall pay fire services development impact fees pursuant to Ordinance 659.7 or, provide land and/or facilities to satisfy Fire Department services standards and ensure the construction and operations of adequate fire stations in accordance with the terms of The Villages of Lakeview Development Agreement or other agreement with the Riverside County Fire Department.	Significant impact	Prior to the issuance of building permits	County Fire Department	Payment of Fees	Less than significant with mitigation
		MM Fire 3: All water mains and fire hydrants providing required fire flows shall be constructed in accordance with the appropriate sections of Riverside County Ordinance No. 460 and/or No. 787, subject to review and approval by the Riverside County Fire Department.	Significant impact	Prior to the approval of Water and Sewer Plans	County Fire Department	Water Improvement Plans shall be submitted and approved by the County Fire Department	Less than significant with mitigation
	B. (Medical) Result in substantial adverse physical impacts associated with the provision of new or physically altered medical service facilities, the construction of which could cause significant	Required regulations (Mitigation Measure 4.15.7A of the County General Plan EIR (Health Services)), Design Considerations (Health clinics/educational programming, and medical clinics/offices allowed on-site). No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance and project design considerations

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	environmental impacts, in order to maintain acceptable service ratios, response times, or other established performance objectives.						
	C: (Libraries) Result in the need for the provision of new or physically altered library service facilities in order to maintain acceptable service ratios, response times, or other established performance objectives.	Required regulations (Ordinance No. 659.6 (Libraries)), and project design considerations (provision of a library).	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance and design considerations
	D: (Schools) Result in the need for the provision of new or physically altered school facilities in order to maintain acceptable service ratios, response times, or other established performance objectives	Payment of school fees.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	E: (Sheriff) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios of (1) one sworn officer per 1,000 residents	Required regulations (Ordinance No. 659.6, General Plan polices (LU 5.1)	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
RECREATION	A: Includes recreational facilities or requires the construction or expansion of recreational facilities which might have a significant adverse physical effect on the environment	Required regulations (General Plan policies (OS 20.4, OS 20.5, OS 20.6) No mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance
	B: Is located within a County Service Area or recreation and park district with a Community Parks and	Required regulations (Riverside County Ordinance No. 460.143, Section 10.35) and Design Considerations (Specific Plan Standard B.1.d.12).	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance and design considerations

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	Recreation Plan where Quimby fees could apply and adequate park land and/or fees are not provided	No mitigation required.					
	C: Includes the increased use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated	Required regulations (Riverside County Ordinance No. 460.143, Section 10.35) and Design Considerations (Specific Plan Standard B.1.d.12). No mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance and design considerations
	D: Does not include recreational trails that connect to regional and local trails or the project splits or eliminates an existing recreational trail	No mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant
TRANS/TRAFFIC	A: Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways and/or cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.	Required regulations (TUMF, RBBD, DIF.) MM Trans 1: All roads shall be improved to the recommended General Plan or Specific Plan designation, as approved by the County Board of Supervisors, or as approved by the Transportation Department. If there is a conflict between the General Plan and Specific Plan, the General Plan designation would prevail unless specific findings are made by the County that the Specific Plan improvement is consistent with the General Plan.	Significant Impact	Ongoing	Transportation Department	Approval of Street Improvement Plans	Less than significant after mitigation
		MM Trans 2: The project proponent shall prepare a traffic impact study for each “Village” of development within the SP. The Village-level traffic analysis will be a refinement of the SP Traffic Impact Analysis. Traffic studies for individual implementing projects may be required for individual implementing projects within the boundaries of Specific Plan No. 342, at the discretion of the Transportation Department. Traffic studies for individual implementing projects, if needed, shall identify the impacts of the implementing project and needed roadway improvements to be constructed prior to each implementing project. If development within SP 342 occurs in a different order than the phasing assumptions stated on page 3 of the County Condition of Approval 10. TRANS, or if phases overlap substantially, a new traffic study may be required to determine if any improvements from the prior un-built phase need to be constructed to mitigate impacts by the phase being developed.	Significant Impact	Concurrently with the first implementing map in each Village. Or As required by the Transportation Department.	Transportation Department	Approval of traffic study	Less than significant with mitigation.

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 3: Roadways internal to the project shall be constructed as needed for development; as determined on the basis of Village-level traffic studies.	Significant Impact	Pursuant to Conditions of Approval for each implementing map.	Transportation Department	Traffic study	Less than significant with mitigation.
		MM Trans 4: Prior to the 1 st occupancy, applicant shall widen Ramona Expressway to four lanes from westerly of Lakeview Avenue to easterly of Hansen Avenue, and signalize the intersection at Lakeview Avenue and Ramona Expressway.	Significant Impact	Prior to 1 st Certificate of Occupancy	Transportation Department	Final Inspection of required improvements.	Less than significant with mitigation.
		MM Trans 5: At such time as the project phasing requires the construction of AA Street and its connection via Reservoir Avenue to Ramona Expressway, applicant shall install a traffic signal at the intersection of Reservoir Avenue and Ramona Expressway, connect Reservoir Avenue to Lakeview Avenue via an alignment approved by the Transportation Department, and close the intersection at Lakeview Avenue and Ramona Expressway. The new signal at Reservoir Avenue and Ramona Expressway is eligible for traffic signal fee credit in accordance with the County’s DIF Program. As an alternative, the project proponent shall provide a village-level traffic study to demonstrate that an interim/temporary solution is possible to mitigate the traffic impacts of the project and to provide accessibility until the grade separated interchange at Reservoir Avenue and Ramona Expressway is completed.	Significant Impact	Prior to construction of AA Street and its connection via Reservoir Avenue to Ramona Expressway	Transportation Department	Approval of Street Improvement Plans or traffic study	Less than significant with mitigation.
		MM Trans 6: Prior to the issuance of occupancy permits for the 1,201 st dwelling unit, or an equivalent amount of non-residential building permits, applicant shall widen Ramona Expressway to 4 lanes with a median between Lakeview Avenue and the existing 4-lane section of Ramona Expressway located easterly of the City of Perris, OR - The County shall have awarded a construction contract, with full funding in place, for this improvement. - The widening of this section of Ramona Expressway may require construction of a bridge. The project shall receive credit against the TUMF fees and RBBD fees for this improvement. In the event that the cost of these improvements exceeds the project’s TUMF and RBBD contributions for this phase, County shall make its best efforts to secure additional funds from the TUMF Program or other Regional funding programs administered by WRCOG or RCTC to contribute the additional funding, and/or identify funds collected from other development in the proposed Lakeview/Nuevo RBBD area to fully fund these improvements. - In addition to the County’s efforts to secure funding for the	Significant Impact	Prior to 1,201 st issuance of Certificate of Occupancy or an equivalent amount of non-residential building permits Or Award by County of construction contract with full funding in place	Transportation Department Building & Safety Department Project proponent	Approval of road and bridge Improvement Plans Payment of TUMF and RBBD fees by the project proponent	Temporary Significant Unavoidable project-specific and Cumulative Impacts After Mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		road widening and bridge improvements from WRCOG and RCTC, applicant will establish a Community Facilities District (CFD) or other acceptable funding mechanism to fully fund any shortfall in the delivery of the four lane improvement. The funds generated by the CFD shall be used to fund the improvements and applicant shall receive corresponding credits against RBBD and TUMF fees that the current phase of development would generate.					
		MM Trans 7: Prior to the issuance of occupancy permits for the 1,201 st dwelling unit, or an equivalent amount of non-residential building permits, applicant shall install a traffic signal at Bridge Street/Ramona Expressway, and widen Ramona Expressway to 4 through lanes through the intersection, this improvement is eligible for traffic signal fee credit, or The County shall have awarded a construction contract, with full funding in place, for this improvement.	Significant Impact	Prior to 1,201 st issuance of Certificate of Occupancy or an equivalent amount of non-residential building permit Or Award of contract	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant After Mitigation
		MM Trans 8: Prior to the issuance of occupancy permits for the 2,201 st dwelling unit, or an equivalent amount of non-residential building permits, applicant shall widen Ramona Expressway to 4 through lanes with a median from Hansen Avenue easterly to 5th Street, OR - The County shall have awarded a construction contract, with full funding in place, for this improvement. - In the event that the cost of these improvements exceeds the project’s TUMF and RBBD contributions for this phase, County shall make its best efforts to secure additional funds from the TUMF Program or other Regional funding programs administered by WRCOG or RCTC to contribute the additional funding, and/or identify funds collected from other development in the proposed Lakeview/Nuevo RBBD area to fully fund these improvements. - In addition to the County’s efforts to secure funding for the road widening improvements from WRCOG and RCTC, applicant will establish a Community Facilities District (CFD) for its then current phase of development. The funds generated by the CFD shall be used to fund the improvements and applicant shall receive corresponding credits against RBBD and TUMF fees that the current phase of development would generate.	Significant Impact	Prior to 2,201 st issuance of Certificate of Occupancy or an equivalent amount of non-residential building permit Or Award of contract	Transportation Department Building & Safety Department	Approval of Street Improvement Plans Payment of TUMF and RBBD fees	Temporary Significant Unavoidable project-specific and Cumulative Impacts After Mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 9: Prior to the issuance of the 2,391st residential occupancy permit, or building permit for an equivalent amount of non-residential buildings, the applicant shall construct Reservoir Avenue as a two-lane facility between Nuevo Road and 10 th Street, OR funding for this improvement shall be assured, otherwise.	Significant Impact	Prior to 2,391 st issuance of Certificate of Occupancy or an equivalent amount of non-residential building permit Or funding assured	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than Significant with mitigation
		MM Trans 10: Prior to the issuance of the 2,581st residential occupancy permit, or building permit for an equivalent amount of non-residential buildings, the applicant shall improve Nuevo Road from two lanes to four lanes between Dunlap Road and Foothill Avenue, OR funding for this improvement shall be assured, otherwise.	Significant Impact	Prior to 2,581 st issuance of Certificate of Occupancy or an equivalent amount of non-residential building permit or funding is assured	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Temporary Significant Unavoidable project-specific and Cumulative Impacts After Mitigation
		MM Trans 11: Prior to the issuance of the 2,741st residential occupancy permit, or building permit for an equivalent amount of non-residential buildings, the applicant shall improve Nuevo Road from two lanes to four lanes between Foothill Avenue and Menifee Road, OR funding for this improvement shall be assured, otherwise.	Significant Impact	Prior to 2,741 st issuance of Certificate of Occupancy or an equivalent amount of non-residential building permit or funding assured	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant
		Signals To the extent that others have not installed the signals prior to the time they are needed for SP 0342, the proponent of SP 342 and all subsequent implementing projects within the Specific Plan shall be responsible for design, construction, and installation of traffic signals at the following off-site intersections or as approved by the Transportation Department. The timing of the off-site signal needs in each phase will be determined based on detailed Village-level traffic studies. The need for signals at on-site intersections will be determined based on detailed Village-level traffic studies.					
		MM Trans 12: The following signals shall be installed prior to the issuance of the 1,601 st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies: <ul style="list-style-type: none">• Bridge Street (NS) at Ramona Expressway (EW)• Lakeview Avenue (NS) at Ramona Expressway (EW) - temporary connection, disconnected when signal or grade separation is installed at Reservoir Avenue (realigned) (NS) at Ramona Expressway (NS).• Hansen Avenue/Davis Road (NS) at Ramona Expressway (EW) (modification)• On-site signals as needed to support development	Significant Impact	Prior to 1,601 st issuance of Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits or earlier, as determined by Village level traffic study	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant after mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 13: The following signals shall be installed prior to the issuance of the 3,201 st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies: <ul style="list-style-type: none">Reservoir Avenue (NS) at 10th Street (EW)Menifee Road (NS) at Nuevo Road (EW)5th Street/Town Center Boulevard (NS), or location in vicinity, at Ramona Expressway (EW) – temporary signal, disconnected when Town Center is connected to Ramona Expressway at its ultimate location.On-site signals as needed to support development	Significant Impact	Prior to 3,201 st issuance of Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		Intersections If, prior to the recordation of the first tract in Phase 1A or the issuance of a building permit for any non-residential uses in Phase 1A, funding is assured for the County-led improvements along the Ramona Expressway corridor, the mitigation measures preceded by ** may be waved at the discretion of the County. <i>The following intersection improvements shall be provided prior to the issuance of the 1,601st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies:</i>					
		MM Trans 14: The City of Perris and the County of Riverside are coordinating with Caltrans on the improvements at the I-215 interchange ramps. The following geometrics are included in the current Caltrans improvement plan for this intersection and are expected to be completed by this phase. The intersection of I-215 Southbound Ramps at Ramona Expressway shall be improved to provide the following geometrics: Northbound: Not applicable. Southbound: One left turn lane. One shared left turn and through lane. One right turn lane. Eastbound: One through lane. One shared through and right turn lane. Westbound: One left turn lane. Two through lanes.	Significant	Prior to the issuance of the 1,601st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Final Inspection	Less than significant
		MM Trans 15: Improve the intersection of Hansen Avenue/Davis Road and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant	Prior to the issuance of the 1,601st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 16: Improve the intersection of Lakeview Avenue and Ramona Expressway to provide signalization and include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One right turn lane. Westbound: One left turn lane. One through lane. One right turn lane.	Significant	Prior to the issuance of the 1,601st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 17: Improve the intersection of Lakeview Avenue and 10th Street to provide signalization and include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant	Prior to the issuance of the 1,601st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Temporary Significant Impact After Mitigation
		MM Trans 18: Improve the intersection of Reservoir Avenue and 10th Street to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Southbound: One shared left turn, through, and right turn lane. Eastbound: One shared left turn, through, and right turn lane. Westbound: One shared left turn, through, and right turn lane.	Significant	Prior to the issuance of the 1,601st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant after mitigation
		MM Trans 19: **Improve the intersection of Bridge Street and Ramona Expressway to include the following geometrics: Northbound: Not applicable. Southbound: One left turn lane. One right turn lane. Eastbound: One left turn lane. Two through lanes. Westbound: One left turn lane. Two through lanes. One right turn lane.	Significant	Prior to the issuance of the 1,601st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department Caltrans	Approval of Street Improvement Plans	Less than significant after mitigation.

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<i>The following intersection improvements shall be provided prior to the issuance of the 3,201st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies:</i>					
		MM Trans 20: Improve the intersection of Reservoir Avenue and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One through lane. One right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One right turn lane. Westbound: One left turn lane. One shared through and right turn lane. OR A village-level traffic study shall be provided to demonstrate that an interim/temporary solution is possible to mitigate the traffic impacts of the project and to provide accessibility until the grade separated interchange at Reservoir Avenue and Ramona Expressway is completed.	Significant	Prior to the issuance of the 3,201 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permit	Transportation Department Building & Safety Department	Approval of Street Improvement Plans Or Village level traffic study	Less than significant with mitigation
		MM Trans 21: Improve the intersection of 5th Street and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One right turn lane. Southbound: Not applicable. Eastbound: Two through lanes. One right turn lane. Westbound: One left turn lane. Two through lanes.	Significant	Prior to the issuance of the 3,201 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permit	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 22: Improve the intersection of Reservoir Avenue and 10th Street to provide signalization and include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One shared through and right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant	Prior to the issuance of the 3,201 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permit	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 23: Improve the intersection of Lakeview Avenue and Nuevo Road to include the following geometrics: Northbound: Not applicable. Southbound: One left turn lane. One right turn lane. Eastbound: One left turn lane. One through lane. Westbound: One shared through and right turn lane.	Significant	Prior to the issuance of the 3,201 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permit	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Temporary significant impact after mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<i>Roadways internal to the project shall be constructed as needed for Phase I development per the following geometrics and as determined on the basis of Village-level traffic studies:</i>					
		MM Trans 24: Construct the intersection of Reservoir Avenue and AA Street to include the following geometrics: Northbound: One shared through and right turn lane. Southbound: One shared left turn and through lane. Eastbound: Not applicable. Westbound: One shared left turn and right turn lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 25: Construct the intersection of AA Street and NN Street to include the following geometrics: Northbound: One shared left turn and right turn lane. Stop controlled. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Westbound: One shared left turn and through lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 26: Construct the intersection of CC Street and BB Street to include the following geometrics: Northbound: Not applicable. Southbound: One shared left turn and right turn lane. Stop controlled. Eastbound: One shared left turn and through lane. Westbound: One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 27: Construct the intersection of School Access and PP Street to include the following geometrics: Northbound: Not applicable. Southbound: One shared left turn and right turn lane. Stop controlled. Eastbound: One shared left turn and through lane. Westbound: One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 28: Construct the intersection of QQ Street and PP Street to include the following geometrics: Northbound: One shared left turn and right turn lane. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Stop controlled. Westbound: One shared left turn and through lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 29: Construct the intersection of Hansen Avenue and Project Access to include the following geometrics: Northbound: One shared through and right turn lane. Southbound: One shared left turn and through lane. Eastbound: Not applicable. Westbound: One shared left turn and right turn lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 30: Construct the intersection of SS Boulevard and Project Access to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Stop controlled. Southbound: One shared left turn, through, and right turn lane. Stop controlled. Eastbound: One shared left turn, through, and right turn lane. Westbound: One shared left turn, through, and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 31: Construct the intersection of SS Boulevard and MM Street to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Southbound: One shared left turn, through, and right turn lane. Eastbound: One shared left turn, through, and right turn lane. Stop controlled. Westbound: One shared left turn, through, and right turn lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 32: Construct the intersection of SS Boulevard and Lakeview Avenue to include the following geometrics: Northbound: One shared left turn and through lane. Southbound: One shared through and right turn lane. Eastbound: One shared left turn and right turn lane. Stop controlled. Westbound: Not applicable.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 33: Construct the intersection of Town Center Boulevard and Retail Access to include the following geometrics: Northbound: One shared through and right turn lane. Southbound: One shared left turn and through lane. Eastbound: Not applicable.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Westbound: One shared left turn and right turn lane. Stop controlled.					
		MM Trans 34: Construct the intersection of SS Boulevard - RR Street and Town Center Boulevard - Park Center Boulevard to include the following geometrics: Northbound: One shared left turn and through lane. Stop controlled. Southbound: One shared through and right turn lane. Stop controlled. Eastbound: One shared left turn and right turn lane. Westbound: Not applicable.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 35: Participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees (Riverside County Traffic Signal Systems Fee Program).	Significant Impact	Prior to approval of each implementing map	Transportation Department	Payment of fees per the Riverside County Traffic Signal Systems Fee Program	Temporary significant impact after mitigation due to uncertain time of improvements
		MM Trans 36: The project proponent shall be required to pay the Transportation Uniform Mitigation Fee (TUMF) in accordance with the fee schedule in effect at the time of issuance of a building permit, pursuant to Ordinance No. 824.	Significant Impact	Issuance of Building Permit	Transportation Department	Payment of TUMF	Temporary significant impact after mitigation due to uncertain time of improvements
		MM Trans 37: Prior to the issuance of building permits for any implementing project for SP 342, each implementing project within any phase of SP 342 shall be asked to pay the RBBB fee once it has been established and adopted. In the event the RBBB is not formed prior to the time when an implementing project is ready to record a map or obtain a building permit (for non-residential projects), the proponent of the implementing project will have the option of paying an estimated RBBB fee or constructing those RBBB roadway improvements identified by the Transportation Department based on the Traffic Impact Study Report needed to mitigate its proportional share of cumulative impacts, or as approved by the Transportation Department.	Significant Impact	Prior to issuance of Building Permits	Building & Safety Department	Payment of RBBB fees	Temporary significant impact after mitigation due to uncertain time of improvements
		MM Trans 38: Proposed project-level mitigation measures shall be coordinated with the RBBB to ensure that they are in conformance with the ultimate improvements planned by the RBBB. The applicant shall be eligible to receive proportional credits against the RBBB for construction of project level mitigation included in the RBBB.	Significant Impact	Prior to approval of all street and other plans for all RBBB funded improvements	Transportation Department	Payment of RBBB fees	Temporary significant impact after mitigation due to uncertain time of improvements
		Construction of the following roadways shall comply with Riverside County Standards as approved in SP 342. Roadways internal to the project shall be constructed as needed for development; as determined on the basis of village-level traffic studies.					

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 39: Prior to the issuance of occupancy permits for the 4,001 st dwelling unit, or an equivalent amount of non-residential building permits: <ul style="list-style-type: none">- Applicant shall widen Ramona Expressway to 4 lanes with a striped median from 5th Street to connect to the existing 4 lane section west of Warren Road, Or- The County shall have awarded a construction contract, with full funding in place, for this improvement.- In the event that the cost of these improvements exceeds the project’s TUMF and RBBD contributions for this phase, County shall make its best efforts to secure additional funds from the TUMF Program or other Regional funding programs administered by WRCOG or RCTC to contribute the additional funding, and/or identify funds collected from other development in the proposed Lakeview/Nuevo RBBD area to fully fund these improvements.- In addition to the County’s efforts to secure funding for the road widening improvements from WRCOG and RCTC, applicant will establish a Community Facilities District (CFD) for its then current phase of development. The funds generated by the CFD shall be used to fund the improvements and applicant shall receive corresponding credits against RBBD and TUMF fees that the current phase of development would generate.	Significant Impact	Prior to the issuance of Certificate of Occupancy for the 4,001 st dwelling unit or an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans Payment of TUMF and RBBD fees	Temporary significant impact after mitigation due to uncertain time of improvements
		MM Trans 40: Prior to the issuance of the 4,331 st residential occupancy permit, or building permit for an equivalent amount of non-residential buildings, the applicant shall improve 10 th Street from two to four lanes between Reservoir Avenue and Hanson Avenue, OR funding for this improvement shall be assured, otherwise.	Significant Impact	Prior to the issuance of the 4,331 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building and Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		Signals To the extent that others have not installed the signals prior to the time they are needed for SP 0342, the proponent of SP 342 and all subsequent implementing projects within the Specific Plan shall be responsible for design, construction, and installation of traffic signals at the following off-site intersections or as approved by the Transportation Department. The timing of the off-site signal needs in each phase will be determined based on detailed village-level traffic studies. The need for signals at on-site intersections will be determined based on detailed village-level traffic studies.					
		MM Trans 41: The following signals shall be installed prior to the issuance of the 5,101 st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies:	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building	Transportation Department Building and Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<ul style="list-style-type: none">Bridge Street (NS) at Gilman Springs Road (EW)Yucca Avenue (NS) at 10th Street (EW)On-site signals as needed to support development.		permits			
		Intersections If, prior to the recordation of the first tract or the issuance of a building permit for any non-residential uses in Phase 2, funding is assured for the County-led improvements along the Ramona Expressway corridor, the mitigation measures preceded by ** may be waved at the discretion of the County. <i>The following intersection improvements shall be provided prior to the issuance of the 5,101st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of Village-level traffic studies:</i>					
		MM Trans 42: **Improve the intersection of Antelope Road and Ramona Expressway to include the following geometrics: Northbound: One shared left turn and right turn lane. Southbound: Not applicable. Eastbound: One through lane. One shared through and right turn lane. Westbound: One left turn lane. Two through lanes.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 43: **Improve the intersection of Bernasconi Road and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 44: **Improve the intersection of Hansen Avenue/Davis Road and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. Two through lanes. One right turn lane. Westbound: One left turn lane. Two through lanes. One right turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 45: **Improve the intersection of Town Center Boulevard and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. Two through lanes. One right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 46: **Improve the intersection of Park Center Boulevard and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One right turn lane. Southbound: Not applicable. Eastbound: Two through lanes. One right turn lane. Westbound: One left turn lane. Two through lanes.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 47: Improve the intersection of Hansen Avenue and 10th Street - Wolfskill Avenue to provide signalization and include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 48: Improve the intersection of Bridge Street and Gilman Springs Road to include the following geometrics: Northbound: One left turn lane. One right turn lane. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Westbound: One left turn lane. One through lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 49: Improve the intersection of Reservoir Avenue and 10th Street to include the following geometrics: Northbound: One left turn lane. Two through lanes. One free-flow right turn lane. Southbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: Two left turn lanes. Two through lanes. One right turn lane.					
		MM Trans 50: Improve the intersection of Reservoir Road/Menifee Road and Nuevo Road to include the following geometrics: Northbound: One left turn lane. One through lane. One right turn lane. Southbound: One left turn lane. One through lane. One right turn lane. Eastbound: One left turn lane. One shared through and right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 51: Improve the intersection of Yucca Avenue and 10th Street to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 52: Improve the intersection of Antelope Road and Nuevo Road to include the following geometrics: Northbound: Not applicable. Southbound: One shared left turn and right turn lane. Eastbound: One left turn. Two through lanes. Westbound: One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 53: Improve the intersection of Lakeview Avenue and 10th Street to provide signalization and include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn. One through lane. One shared	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		through and right turn lane. Westbound: One left turn. One through lane. One shared through and right turn lane.					
		MM Trans 54: The intersection of Hansen Avenue (NS) at 10 th Street (EW) shall be signalized and improved to provide the following geometrics: Northbound: one left-turn lane, one shared through/right-turn lane. Southbound: one left-turn lane, one shared through/right-turn lane. Eastbound: one left-turn lane, one through lane, one shared through/right-turn lane. Westbound: one left-turn lane, one through lane, one shared through/right-turn lane.	Significant Impact	Prior to the issuance of the 5,101 st Certificate of Occupancy or the issuance of an equivalent amount of non-residential building permits	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		<i>Roadways internal to the project shall be constructed as needed for Phase 2 development per the following geometrics and as determined on the basis of Village-level traffic studies:</i>					
		MM Trans 55: Construct the signalized intersection of QQ Street and PP Street to include the following geometrics: Northbound: One shared left turn and right turn lane. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Westbound: One left turn lane. One through lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 56: Construct the signalized intersection of SS Boulevard and Project Access to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One shared through and right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 57: Construct the signalized intersection of SS Boulevard and MM Street to include the following geometrics: Northbound: One left turn lane. One through lane. One right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One shared through and	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		right turn lane. Westbound: One left turn lane. One shared through and right turn lane.					
		MM Trans 58: Construct the signalized intersection of SS Boulevard - RR Street and Town Center Boulevard - Park Center Boulevard to include the following geometrics: Northbound: One left turn lane. One through lane. One right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 59: Construct the signalized intersection of EE Street and Park Center Boulevard to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One shared through and right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 60: Construct the signalized intersection of MM Street and Park Center Boulevard to include the following geometrics: Northbound: One left turn lane. One right turn lane. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Westbound: One left turn lane. One through lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 61: Construct the signalized intersection of Park Center Boulevard and FF Street to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Westbound: One left turn lane. One shared through and right turn lane.					
		MM Trans 62: Construct the intersection of Park Center Boulevard and VV Street to include the following geometrics: Northbound: One through lane. Southbound: One shared through and right turn lane. Eastbound: One right turn lane. Stop controlled. Westbound: Not applicable.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 63: Construct the intersection of RR Street and DD Street to include the following geometrics: Northbound: One shared left turn and right turn lane. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Stop controlled. Westbound: One shared left turn and through lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 64: Construct the intersection of EE Street and DD Street to include the following geometrics: Northbound: One left turn lane. Southbound: Not applicable. Eastbound: One right turn lane. Stop controlled. Westbound: Not applicable.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 65: Construct the intersection of EE Street and FF Street to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Southbound: One shared left turn, through, and right turn lane. Eastbound: One shared left turn, through, and right turn lane. Stop controlled. Westbound: One shared left turn, through, and right turn lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 66: Construct the intersection of OO Street and MM Street to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Stop controlled. Southbound: One shared left turn, through, and right turn ane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Eastbound: One shared left turn, through, and right turn lane. Westbound: One shared left turn, through, and right turn lane.					
		MM Trans 67: Construct the intersection of KK Street and MM Street to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Stop controlled. Southbound: One shared left turn, through, and right turn lane. Stop controlled. Eastbound: One shared left turn, through, and right turn lane. Westbound: One shared left turn, through, and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 68: Construct the intersection of LL Street and MM Street to include the following geometrics: Northbound: Not applicable. Southbound: One shared left turn and right turn lane. Stop controlled. Eastbound: One shared left turn and through lane. Westbound: One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 69: Construct the intersection of FF Street and GG Street to include the following geometrics: Northbound: Not applicable. Southbound: One left turn lane. Stop controlled. Eastbound: Not applicable. Westbound: One right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 70: Construct the intersection of II Street and HH Street to include the following geometrics: Northbound: Not applicable. Southbound: One shared left turn and right turn lane. Stop controlled. Eastbound: One shared left turn and through lane. Westbound: One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 71: Construct the intersection of HH Street and JJ Street to include the following geometrics: Northbound: One shared left turn and right turn lane. Stop	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		controlled. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Westbound: One shared left turn and through lane.					
		MM Trans 72: Construct the intersection of II Street and JJ Street to include the following geometrics: Northbound: One right turn lane. Stop controlled. Southbound: Not applicable. Eastbound: Not applicable. Westbound: One left turn lane.					
		MM Trans 73: Prior to the issuance of the 6,671 st residential occupancy permit, or building permit for an equivalent amount of non-residential buildings, the applicant shall improve Reservoir Avenue from two lanes to four lanes between Nuevo Road and 10 th Street, OR funding for this improvement shall be assured, otherwise.	Significant Impact	Prior to the issuance of 6,671 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings or funding assured	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Temporary significant impact
		MM Trans 74: Prior to the issuance of occupancy permits for the 8,681 st dwelling unit, or an equivalent amount of non-residential building permits, applicant shall widen Ramona Expressway from Reservoir Avenue to Hansen Avenue from 4 lanes to 6 lanes or provide equivalent capacity through 4 lanes with grade separations at intersections, OR – The County shall have awarded a construction contract, with full funding in place, for this improvement. – In the event that the cost of these improvements exceeds the project’s TUMF and RBBD contributions for this phase, County shall make its best efforts to secure additional funds from the TUMF Program or other Regional funding programs administered by WRCOG or RCTC to contribute the additional funding, and/or identify funds collected from other development in the proposed Lakeview/Nuevo RBBD area to fully fund these improvements. – In addition to the County’s efforts to secure funding for the road widening improvements from WRCOG and RCTC, applicant will establish a Community Facilities District (CFD) for its then current phase of development. The funds generated by the CFD shall be used to fund the improvements and applicant shall receive corresponding credits against RBBD and TUMF fees that the current phase of development would generate.	Significant Impact	Prior to the issuance of 8,681 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Payment of TUMF and RBBD fees	Less than significant after mitigation
		MM Trans 75: Prior to the issuance of occupancy permits for	Significant Impact	Prior to the issuance of	Transportation Department	Payment of TUMF and	Less than significant with

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<p>the 9,141st dwelling unit, or an equivalent amount of non-residential building permits, applicant shall widen Ramona Expressway from Hansen Avenue to Park Center Boulevard from 4 lanes to 6 lanes or provide equivalent capacity through 4 lanes with grade separations at intersections, OR</p> <ul style="list-style-type: none">- The County shall have awarded a construction contract, with full funding in place, for this improvement.- In the event that the cost of these improvements exceeds the project’s TUMF and RBBD contributions for this phase, County shall make its best efforts to secure additional funds from the TUMF Program or other Regional funding programs administered by WRCOG or RCTC to contribute the additional funding, and/or identify funds collected from other development in the proposed Lakeview/Nuevo RBBD area to fully fund these improvements.- In addition to the County’s efforts to secure funding for the road widening improvements from WRCOG and RCTC, applicant will establish a Community Facilities District (CFD) for its then current phase of development. The funds generated by the CFD shall be used to fund the improvements and applicant shall receive corresponding credits against RBBD and TUMF fees that the current phase of development would generate.		9,141 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings or contract award	Building & Safety Transportation Department	RBBD feesStreet Improvement Plans Payment of TUMF and RBBD fees	mitigation
		<p>MM Trans 76: Prior to the issuance of occupancy permits for the 9,551st dwelling unit, or an equivalent amount of non-residential building permits, applicant shall widen Ramona Expressway from Reservoir Avenue westerly to the Perris City limits from 4 lanes to 6 lanes or provide equivalent capacity through 4 lanes with grade separations at intersections, OR</p> <ul style="list-style-type: none">- The County shall have awarded a construction contract, with full funding in place, for this improvement.- In the event that the cost of these improvements exceeds the project’s TUMF and RBBD contributions for this phase, County shall make its best efforts to secure additional funds from the TUMF Program or other Regional funding programs administered by WRCOG or RCTC to contribute the additional funding, and/or identify funds collected from other development in the proposed Lakeview/Nuevo RBBD area to fully fund these improvements.- In addition to the County’s efforts to secure funding for the road widening and bridge improvements from WRCOG and RCTC, applicant will establish a Community Facilities District (CFD) for its then current phase of development.	Significant Impact	Prior to the issuance of 9,551 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings or award of contract	Transportation Department Building & Safety Department	Payment of TUMF and RBBD fees Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		The funds generated by the CFD shall be used to fund the improvements and applicant shall receive corresponding credits against RBBB and TUMF fees that the current phase of development would generate.					
		MM Trans 77: Prior to the issuance of occupancy permits for the 9,811 th dwelling unit, or an equivalent amount of non-residential building permits, applicant shall widen Ramona Expressway from Park Center Boulevard to Bridge Street from 4 lanes to 6 lanes or provide equivalent capacity through 4 lanes with grade separations at intersections, OR <ul style="list-style-type: none">- The County shall have awarded a construction contract, with full funding in place, for this improvement.- In the event that the cost of these improvements exceeds the project’s TUMF and RBBB contributions for this phase, County shall make its best efforts to secure additional funds from the TUMF Program or other Regional funding programs administered by WRCOG or RCTC to contribute the additional funding, and/or identify funds collected from other development in the proposed Lakeview/Nuevo RBBB area to fully fund these improvements.- In addition to the County’s efforts to secure funding for the road widening improvements from WRCOG and RCTC, applicant will establish a Community Facilities District (CFD) for its then current phase of development. The funds generated by the CFD shall be used to fund the improvements and applicant shall receive corresponding credits against RBBB and TUMF fees that the current phase of development would generate.	Significant Impact	Prior to the issuance of 9,811 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings or contract award	Transportation Department Building & Safety Department	Payment of TUMF and RBBB fees Approval of Street Improvement Plans	Less than significant with mitigation
		Signals To the extent that others have not installed the signals prior to the time they are needed for SP 0342, the proponent of SP 342 and all subsequent implementing projects within the Specific Plan shall be responsible for design, construction, and installation of traffic signals at the following off-site intersections or as approved by the Transportation Department. The timing of the off-site signal needs in each phase will be determined based on detailed village-level traffic studies. The need for signals at on-site intersections will be determined based on detailed village-level traffic studies.					
		MM Trans 78: The following signals shall be installed prior to the issuance of the 6,801 st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies: <ul style="list-style-type: none">• Menifee Road (NS) at San Jacinto Road (EW)• Menifee Road (NS) at Mapes Road (EW)• Menifee Road (NS) at Nuevo Road (EW) (relocated)	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		<ul style="list-style-type: none">Reservoir Avenue (NS) at 10th Street (EW) (Modification to add lanes)Park Center Boulevard (NS), or location in vicinity, at Ramona Expressway (EW) – temporary signal to be removed when Park Center is connected to Ramona Parkway at its ultimate location.Yucca Avenue (NS) at 10th Street (EW) (Modification to add lanes)On-site signals as needed to support development					
		MM Trans79: The following signals shall be installed prior to the issuance of the 9,081 st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies: <ul style="list-style-type: none">Foothill Avenue (NS) at Nuevo Road (EW)Antelope Road (NS) at Nuevo Road (EW)On-site signals as needed to support development	Significant Impact	Prior to the issuance of 9,081 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		Intersections If, prior to the recordation of the first tract in Phase 3A or 3B, or the issuance of a building permit for any non-residential uses in Phase 3A or 3B, the County-led improvements along the Ramona Expressway corridor have been constructed and open to traffic, the conditions preceded by ** may be waved at the discretion of the County. <i>The following intersection improvements shall be provided prior to the issuance of the 6,801st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies:</i>					
		MM Trans 80: The City of Perris and the County of Riverside are coordinating with Caltrans on the improvements at the I-215 interchanges ramps. The above geometrics are included in the current Caltrans improvement plan for this intersection and are expected to be completed by this phase. The intersection of I-215 NB Ramps at Ramona Expressway shall be improved to provide the following geometrics: Northbound: One shared left turn and through lane. One right turn lane. Southbound: Not applicable. Eastbound: One left turn lane. Two through lanes. Westbound: Two through lanes. One free flow right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Temporary significant project specific and cumulative impact after mitigation
		MM Trans 81: Improve the intersection of Antelope Road and Ramona Expressway to include the following geometrics:	Significant Impact	Prior to the issuance of 6,801 st Certificate of	Transportation Department Building & Safety	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Northbound: One shared left turn and through lane. One right turn lane. Southbound: Not applicable. Eastbound: Two through lanes. One right turn lane. Westbound: One left turn lane. Two through lanes.		Occupancy or building permit for an equivalent amount of non-residential buildings	Department		
		MM Trans 82: **Improve the intersection of Reservoir Avenue and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One through lane. One free flow right turn lane. Southbound: One left turn lane. One through lane. One right turn lane. Eastbound: One left turn lane. Two through lanes. One right turn lane. Westbound: Two left turn lanes. Two through lanes. One right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 83: **Improve the intersection of QQ Street/Town Center Boulevard and Ramona Expressway to include the following geometrics: Northbound: Two left turn lanes. One through lane. One right turn lane. Southbound: One left turn lane. One through lane. One right turn lane. Eastbound: One left turn lane. Two through lanes. One free flow right turn lane. Westbound: One left turn lanes. Two through lanes. One right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 84: **Improve the intersection of Park Center Boulevard and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One free flow right turn lane. Southbound: Not applicable. Eastbound: Two through lanes. One right turn lane. Westbound: Two left turn lanes. Two through lanes.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 85: **Improve the intersection of Bridge Street and Ramona Expressway to include the following geometrics: Northbound: Not applicable. Southbound: One left turn lane. One right turn lane. Eastbound: One left turn lane. Two through lanes.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Westbound: Two through lanes. One right turn lane.					
		MM Trans 86: **Improve the intersection of Warren Road and Ramona Expressway to include the following geometrics: Northbound: Two left turn lanes. One shared through and right turn lane. Southbound: One shared left turn, through and right turn lane. Eastbound: One left turn lane. Two through lanes. One right turn lane. Westbound: One left turn lane. Two through lanes. One right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Temporary significant impacts
		MM Trans 87: Improve the intersection of Reservoir Avenue and 9th Street to include the following geometrics: Northbound: One through lane. One shared through and right turn lane. Southbound: One left turn lane. Two through lanes. Eastbound: Not applicable. Westbound: One shared left turn and right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 88: Improve the intersection of Reservoir Avenue and 10th Street to include the following geometrics: Northbound: One through lane. Two through lanes. One free flow right turn lane. Southbound: Two left turn lanes. One through lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: Two left turn lanes. Two through lanes. One right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 89: Improve the intersection of Lakeview Avenue and 10th Street to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 90: Improve the intersection of Antelope Road and Nuevo Road to include the following geometrics: Northbound: Not applicable. Southbound: One shared left turn and right turn lane. Eastbound: One left turn lane. Two through lanes. Westbound: One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 91: Improve the intersection of Reservoir Road/Menifee Road and Nuevo Road to include the following geometrics: Northbound: One left turn lane. Two through lanes. One right turn lane. Southbound: One left turn lane. Two through lanes. One free flow right turn lane. Eastbound: Two left turn lanes. One shared through and right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 92: Improve the intersection of Menifee Road and San Jacinto Road to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One through lane. One right turn lane. Eastbound: One left turn lane. One shared through and right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of 6,801 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		<i>The following intersection improvements shall be provided prior to the issuance of the 9,081st residential occupancy permit, or the issuance of an equivalent amount of non-residential building permits, or earlier if determined to be necessary on the basis of village-level traffic studies:</i>					
		MM Trans 93: **Improve the intersection of Antelope Road and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One right turn lane. Southbound: Not applicable. Eastbound: Two through lanes. One shared through and right turn lane.	Significant Impact	Prior to the issuance of 9,081 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Westbound: One left turn lane. Three through lanes.					
		MM Trans 94: **Improve the intersection of Reservoir Avenue and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One through lane. One free flow right turn lane. Southbound: One left turn lane. One through lane. One right turn lane. Eastbound: Two left turn lanes. Three through lanes. One right turn lane. Westbound: Two left turn lanes. Three through lanes. One right turn lane.	Significant Impact	Prior to the issuance of 9,081 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 95: **Improve the intersection of QQ Street/Town Center Boulevard and Ramona Expressway to include the following geometrics: Northbound: Two left turn lanes. One through lane. One right turn lane. Southbound: One left turn lane. One through lane. One right turn lane. Eastbound: Two left turn lanes. Three through lanes. One free flow right turn lane. Westbound: Two left turn lanes. Three through lanes. One right turn lane.	Significant Impact	Prior to the issuance of 9,081 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 96: **Improve the intersection of Park Center Boulevard and Ramona Expressway to include the following geometrics: Northbound: One left turn lane. One free flow right turn lane. Southbound: Not applicable. Eastbound: Three through lanes. One right turn lane. Westbound: Two left turn lanes. Three through lanes.	Significant Impact	Prior to the issuance of 9,081 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 97: **Improve the intersection of Bridge Street and Ramona Expressway to include the following geometrics: Northbound: Not applicable. Southbound: One left turn lane. One right turn lane. Eastbound: One left turn lane. Three through lanes. Westbound: Three through lanes. One right turn lane.	Significant Impact	Prior to the issuance of 9,081 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 98: **Improve the intersection of Bernasconi Road and Ramona Expressway to include the following geometrics:	Significant Impact	Prior to the issuance of 9,081 st Certificate of	Transportation Department Building & Safety	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. Two through lanes. One shared through and right turn lane. Westbound: One left turn lane. Two through lanes. One shared through and right turn lane.		Occupancy or building permit for an equivalent amount of non-residential buildings	Department		
		MM Trans 99: Improve the intersection of Hansen Avenue and 10th Street/SS Boulevard to include the following geometrics: Northbound: One left turn lane. One through lane. One right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. Two through lanes. One right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant Impact	Prior to the issuance of 9,081 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 100: Improve the intersection of Reservoir Avenue and 10th Street to include the following geometrics: Northbound: Two left turn lanes. Two through lanes. One free flow right turn lane. Southbound: Two left turn lanes. Two through lanes. One right turn lane. Eastbound: Two left turn lanes. One through lane. One right turn lane. Westbound: Two left turn lanes. Two through lanes. One right turn lane.	Significant Impact	Prior to the issuance of 9,081 st Certificate of Occupancy or building permit for an equivalent amount of non-residential buildings	Transportation Department Building & Safety Department	Approval of Street Improvement Plans	Less than significant with mitigation
		Roadways internal to the project shall be constructed as needed for development; as determined on the basis of village-level traffic studies and as described below.					
		MM Trans 101: Construct the signalized intersection of SS Boulevard and MM Street to include the following geometrics: Northbound: One left turn lane. One through lane. One right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One right	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		turn lane.					
		MM Trans 102: Construct the signalized intersection of Town Center Boulevard and Retail Access to include the following geometrics: Northbound: One shared through and right turn lane. Southbound: One left turn lane. One through lane. Eastbound: Not applicable. Westbound: One left turn lane. One right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 103: Construct the signalized intersection of SS Boulevard - RR Street and Town Center Boulevard - Park Center Boulevard to include the following geometrics: Northbound: One left turn lane. One through lane. One right turn lane. Southbound: One left turn lane. One through lane. One right turn lane. Eastbound: One left turn lane. Two through lanes. One right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 104: Construct the signalized intersection of Park Center Boulevard and FF Street to include the following geometrics: Northbound: One left turn lane. Two through lanes. One right turn lane. Southbound: One left turn lane. Two through lanes. One right turn lane. Eastbound: One left turn lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 105: Construct the intersection of Park Center Boulevard and VV Street to include the following geometrics: Northbound: One through lane. One shared through and right turn lane. Southbound: One through lane. One shared through and right turn lane. Eastbound: One right turn lane. Stop controlled. Westbound: One right turn lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 106: Construct the intersection of RR Street and DD Street to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Southbound: One shared left turn, through, and right turn lane. Eastbound: One shared left turn, through, and right turn lane. Stop controlled. Westbound: One shared left turn, through, and right turn lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 107: Construct the intersection of EE Street and DD Street to include the following geometrics: Northbound: One shared left turn and through lane. Southbound: One shared through and right turn lane. Eastbound: One shared left turn and right turn lane. Stop controlled. Westbound: Not applicable.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 108: Construct the intersection of EE Street and FF Street to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Stop controlled. Southbound: One shared left turn, through, and right turn lane. Stop controlled. Eastbound: One shared left turn, through, and right turn lane. Stop controlled. Westbound: One shared left turn, through, and right turn lane. Stop controlled.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 109: Construct the intersection of OO Street and MM Street to include the following geometrics: Northbound: One shared left turn, through, and right turn lane. Stop controlled. Southbound: One shared left turn, through, and right turn lane. Stop controlled. Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 110: Construct the intersection of KK Street and MM Street to include the following geometrics:	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		Northbound: One shared left turn, through, and right turn lane. Stop controlled. Southbound: One shared left turn, through, and right turn lane. Stop controlled. Eastbound: One left turn lane. One through lane. One shared through and right turn lane. Westbound: One left turn lane. One through lane. One shared through and right turn lane.					
		MM Trans 111: Construct the signalized intersection of LL Street and MM Street to include the following geometrics: Northbound: One left turn lane. One shared through and right turn lane. Southbound: One left turn lane. One shared through and right turn lane. Eastbound: One left turn lane. One shared through and right turn lane. Westbound: One left turn lane. One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 112: Construct the intersection of FF Street and GG Street to include the following geometrics: Northbound: Not applicable. Southbound: One left turn lane. One right turn lane. Stop controlled. Eastbound: One left turn lane. One through lane. Westbound: One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 113: Construct the intersection of TT Street and GG Street to include the following geometrics: Northbound: Not applicable. Southbound: One shared left turn and right turn lane. Stop controlled. Eastbound: One shared left turn and through lane. Westbound: One shared through and right turn lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 114: Construct the intersection of II Street and JJ Street to include the following geometrics: Northbound: One shared left turn and right turn lane. Stop controlled. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Westbound: One shared left turn and through lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 115: Construct the intersection of TT Street and JJ Street to include the following geometrics: Northbound: One shared left turn and right turn lane. Stop controlled. Southbound: Not applicable. Eastbound: One shared through and right turn lane. Westbound: One shared left turn and through lane.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 116: Construct the intersection of TT Street and UU Street to include the following geometrics: Northbound: One shared left turn and through lane. Southbound: One shared through and right turn lane. Eastbound: One shared left turn and right turn lane. Stop controlled. Westbound: Not applicable.	Significant	Pursuant to Village level traffic study timing	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
		MM Trans 117: All improvements listed for Phases 1A, 1B, 2, 3A, and 3B are requirements for interim conditions only. Full right-of-way and roadway half sections adjacent to the property for the ultimate roadway cross-section per the County’s Road Improvement Standards and Specifications must be provided.	Significant Impact	Prior to approval of Street Improvement Plans	Transportation Department	Approval of Street Improvement Plans	Less than significant with mitigation
	B: Cause an effect upon, or a need for new or altered maintenance of roads	No mitigation required within the County.	Significant	Not Applicable	Not Applicable	Not Applicable	Significantproject-specific impacts without mitigation Significant cumulative impacts
	C: Cause an effect upon circulation during the project’s construction	MM Trans 118: If Option A is implemented to move fill dirt from south of Ramona Expressway to north and to mitigate for the potential significant effect on the circulation system that would result if access to Ramona Expressway from the existing Lakeview/Nuevo community was eliminated, the intersection of Lakeview Avenue and Ramona Expressway shall be maintained during the months that Ramona Expressway is being used in its relocated location to the north. (See Section 5.14, Threshold C, pg. 5.14-178.)	Significant Impact	Prior to the issuance of the Grading permit	Transportation Department Building and Safety Department	Approval of a Traffic Control Plan Issuance of a Grading permit	Less than Significant with mitigation
		MM Trans 119: If Option A is implemented to move fill dirt from south of Ramona Expressway to north, all construction management, staging and equipment parking areas shall be maintained in a location north of Ramona Expressway to avoid construction traffic driving through existing neighborhoods to get to existing signals, or causing traffic hazards by crossing at unsignalized locations.	Significant Impact	Prior to the issuance of the Grading permit	Transportation Department Building and Safety Department	Approval of a Traffic Control Plan Issuance of a Grading permit	Less than Significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Trans 120: If Option B is implemented, at least one lane of Ramona Expressway must remain open at all times during the construction of the over/under crossing. Traffic control plans shall be approved by the County prior to the issuance of encroachment permits for work within the right-of-way.	Significant Impact	Prior to the issuance of the Grading permit	Transportation Department Building and Safety Department	Approval of a Traffic Control Plan Issuance of a Grading permit	Less than Significant with mitigation
		MM Trans 121: If the overcrossing (bridge) approach to Option B is implemented, bridge plans and specifications must include solid railings or other design features that would eliminate the risk of falling dirt and debris.	Significant Impact	Prior to approval of overcrossing plans	Transportation Department	Approval of a Traffic Control Plan and a Bridge Plan	Less than Significant with mitigation
	D: Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	MM Trans 122: Sight distance at the project entrance roadways shall be reviewed with respect to standard County of Riverside sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.	Significant Impact	Prior to the issuance of grading permits	Transportation Department	Approval of Street Improvement and grading Plans	Less than Significant with mitigation
		MM Trans 123: Signing/striping plans shall be provided to the County for review and approval in conjunction with detailed construction plans for the project on-site roads.	Significant Impact	Prior to the issuance of approval of street improvement plans	Transportation Department	Approval of Signing and Striping Plan	Less than Significant with mitigation
UTILITIES	A: Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects	Required regulation (General Plan policies: LU 5.2) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant without mitigation
	B: Have insufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed	Required regulations (SB 610, SB 221, General Plan policies (OS 1.1, OS 2.1, OS2.3, OS 2.4, OS 4.5, LU 5.3)) MM Util 1: To mitigate potential significant impacts to disruption of water supply due to lack of access by Metropolitan Water District’s (MWD) and/or Eastern Municipal Water District’s (EMWD) to existing facilities and rights-of-way within and immediately adjacent to the boundaries of the project, EMWD and MWD shall be allowed to maintain facilities, rights-of-way and access to their existing facilities at all times in order to repair and maintain these facilities. To avoid potential conflicts, preliminary engineering design drawings or improvement plans for any project activity, <u>including but not limited to recreational facilities and storm drain plans</u> , in an area which would impact one or more of these facilities or rights-of-way shall be submitted to EMWD or MWD, as appropriate, for approval to proceed. All submittals shall clearly delineate the respective water facility and rights-of-way.	Significant impact	Prior to the approval of any implementing project	EMWD and/or MWD	Water and Sewer Plans shall show EMWD and MWD easements and right-of-way.	Less than significant with regulatory compliance and mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	C: Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects	Required regulations (General Plan polices (LU 17.2, LU 5.2) and Design Considerations (designed per EMWD standards and Riverside County Health Department) No mitigation required	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant with regulatory compliance and design consideration
	D: Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project’s Projected demand in addition to the provider’s existing commitments	Required regulations (General Plan polices (LU 17.2, LU 5.2) and Design Considerations (designed per EMWD standards and Riverside County Health Department) No mitigation required.	Less than significant	Not Applicable	Not Applicable	Not Applicable	Less than significant without mitigation
	E: Requires or results in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	Required regulation (General Plan policies (S 4.10, OS 2.2, LU 5.2)) and Design Considerations (in accordance with RCFCWCD, SWPPP, WQMP) MM Util 2: To mitigate for potential traffic impacts along Ramona Expressway boring and tunneling techniques shall be used, if feasible, to construct the main storm drain channel which crosses under Ramona Expressway and is located west of Town Center Boulevard . If this construction method is found to be infeasible, MM Util 2a shall be implemented.	Significant impact	Prior to the issuance of a Grading permit for the channel	Transportation Department &/or Riverside County Flood Control District	Approval of Storm Drain Plan specifying boring/tunneling under Ramona Expressway	Less than significant with mitigation
		MM Util 2a: Should crossing or open trenching through the Ramona Expressway be required as a part of the construction of the storm drain channel identified in MM Util 2, temporary traffic control measures including but not limited to, flagmen, temporary median barriers, or realigned roadway segments shall be used to maintain two-way traffic at all times. A traffic control plan shall be submitted for approval to RCFCWCD and County Transportation Department with the construction documents for the channel.	Significant impact	Prior to the issuance of a Grading permit	Transportation Department &/or Riverside County Flood Control District	Approval of Traffic Control Plan	Less than significant with mitigation
		MM Util 3: To avoid potential significant flooding or water quality impacts which would result if the necessary phased storm drain system facilities were not in place, interim/temporary and/or final/permanent facilities shall be constructed to alleviate flooding and water quality impacts associate with each proposed phase of development. At the time of tract map approval, the storm drain system requirements must be identified and submitted to RCFCWCD and the County Planning Department for approval.	Significant impact	Prior to the approval of tentative tract map for each implementing project	Riverside Flood Control District Planning Department	The Storm Drain Plan shall be submitted to Riverside Flood Control District & Planning Department for approval	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
	E: Requires or results in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	MM Util 3a: In the event the applicant widens Ramona Expressway, storm flows discharged from culverts on the north side of Ramona Expressway east of Towne Center Parkway will be spread out by mitigation structures constructed in accordance with Riverside County Flood Control and Water Conservation District standards in an effort to duplicate the existing drainage pattern.	Significant impact	Prior to widening of Ramona Expressway	Riverside Flood Control District Planning Department	The Storm Drain Plan shall be submitted to Riverside Flood Control District & Planning Department for approval	Less than significant with mitigation
	F: Would the project impact electricity requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects	Required regulations (Title 24, SB 1305, General Plan policies (LU 5.2, 5.4), SCE’s policy and extension rules) MM Util 4: Prior to recordation of a final map by the County, the current or subsequent project applicant shall construct, or enter into an agreement and post security, in a form and amount acceptable to the Building and Safety Department, guaranteeing the undergrounding of proposed utility distribution lines in conformance with applicable County standards and the County’s Capital Improvement Policy.	Significant impact	Prior to the approval of the Prior to recordation of Final Map	Building & Safety Department	Posting of Bonds	Less than significant with mitigation
		MM Util 5: Tentative Tract maps shall be conditioned to require that all electrical service lines (excluding transmission lines) serving development within the project will be installed underground. This includes existing service facilities that may have to be relocated temporarily during grading.	Significant impact	Prior to the approval of tentative tract map for each implementing project	Planning Department	Approval of Tentative Tract Map and/or Utility Plan	Less than significant with mitigation
		MM Util 6: The contractor shall temporarily relocate existing overhead facilities, as necessary to maintain service, while grading and installing the new underground system is underway.	Significant impact	Prior to the issuance of a Grading Permit	Building & Safety Department	The Grading plans shall indicate existing and temporary overhead lines necessary to maintain service	Less than significant with mitigation
	G: Would the project impact natural gas requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects	Required regulations (General Plan policies(LU 5.2), SCGC’s policy and extension rules) MM Util 7: Gas service shall remain available to all existing customers during construction of new and replacement gas lines within the project site.	Significant impact	Prior to the issuance of a Grading Permit	Building & Safety Department	Grading plans shall indicate existing gas lines that will assure service is maintained to existing customers	Less than significant with mitigation
		MM Util 8: To assure that SCGC facilities are secure, access is maintained, and grading does not because a hazardous situation, a chain link fence (or as approved by the Planning Department) shall be installed around the existing pressure control facility located on Davis Road. Truck access shall be provided by the developer to the 36-inch line and the pressure control facility to the satisfaction of SCGC. Any grading done within the transmission easement shall require a “permission to grade”	Significant impact	Prior to County acceptance to vacate Davis Road or grading permits in that area, which ever occurs first	The Project Proponent, Transportation Department and Building & Safety	Developer to provide to County "permission to grade" letter from SCGC indicating that all requirements of this mitigation measure are satisfied	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPONSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		letter from SCGC after review of final grading plans and prior to County issuance of a grading permit.					
	H: Is served by a landfill without sufficient capacity to accommodate the project’s solid waste needs.	<p>Required regulations (AB 939, AB 1327, General Plan polices (OS 13.1, AQ 5.1))</p> <p>MM Util 9: The project proponent shall make every effort feasible to recycle, reuse, and/or reduce the amount of construction and demolition materials (i.e., concrete, asphalt, wood, etc.) generated by development of the project that would otherwise be taken to a landfill. This diversion of waste must exceed a 50 percent reduction by weight. The project shall use<u>complete</u> the Riverside County Waste Management Department Construction and Demolition Waste Diversion Program – Form B or<u>and</u> Form C process as evidence to ensure compliance. <u>Form B – Recycling Plan must be submitted and approved by the Riverside County Waste Management Department and provided to the Department of Building and Safety prior to the issuance of building permits. Form C- Reporting Form must be approved by the Riverside County Waste Management Department and submitted to the Department of Building and Safety prior to the issuance of certificate of occupancy/final inspection. This evidence shall be presented by the developer to the Planning/Recycling Division of the Riverside County Waste Management Department in order to clear the project.</u></p>	Significant impact	<p><u>Form B prior to Building Permit Issuance</u></p> <p><u>Form C p</u>Prior to the issuance of Final Inspection</p>	Planning Department/ Recycling Division	Verification of programs shall be submitted	Less than significant with mitigation
		<p>MM Util 10: The Homeowners Association established for the proposed development shall establish green waste recycling through its yard maintenance or waste hauling contracts. Green waste recycling includes such things as grass recycling (where lawn clippings from a mulching-type mower are left on the lawn) and on- or off-site composting. This measure shall be implemented to reduce green waste going to landfills. If such services are not available through the yard maintenance or waste haulers in the area, the HOA shall provide individual homeowners with information about ways to recycle green waste individually and collectively. Homeowners shall be notified of such in the CC & Rs.</p>	Significant impact	Prior to recordation of Final Map	Home Owners Association County Counsel	Verification of programs shall be submitted to County Planning	Less than significant with mitigation

Table 2-A, Impact and Mitigation Summary Matrix

IMPACT CATEGORY	IMPACT/THRESHOLD	MITIGATION MEASURE	LEVEL OF IMPACT	IMPLEMENTATION TIMING	RESPOSIBLE PARTY	MONITORING/ REPORTING METHOD	IMPACT AFTER MITIGATION
		MM Util 11: To assure compliance with the California Solid Waste Reuse and Recycling Act of 1991 (AB 1327), which requires the local jurisdiction to require adequate areas for collecting and loading recyclable materials, prior to issuance of Building Permits for any multi-unit residential, commercial or industrial facilities, clearance from the Riverside County Waste management Department is needed to verify compliance with AB 1327 in terms of installation of recycling access areas at these facilities.	Significant	Prior to the issuance of building permits	Riverside County Waste Management Department	Verification of installation of recycling areas	Less than significant with mitigation

3.0 PROJECT DESCRIPTION

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

3.1 Overview

The project is the proposed development of a 2,800-acre master-planned community in unincorporated Riverside County between the cities of Perris and San Jacinto. The project proposes the development of 11,350 dwelling units, 500,000 square feet of commercial uses concentrated in a Mixed-Use Town Center area located immediately south of the Ramona Expressway, up to four new K–8 schools, over 150 acres of passive and active parks, and nearly 1,000 acres of open space/conservation that is proposed for permanent protection and conservation. (See **Figure 3-1, Conceptual Land Use Diagram.**)

THE VILLAGES OF LAKEVIEW envisions a community comprised of seven geographically distinct villages that will be linked by a series of trails and a well designed street system. The project includes adoption by the County of THE VILLAGES OF LAKEVIEW Specific Plan and other land use approvals (the project) that will provide the zoning and development standards that will govern the future use and build-out of this new community. Each village will be developed in accordance with the land use, zoning, and development intensities that will be established pursuant to the Specific Plan which is proposed for adoption as part of the project. The number of residences allowed within each village could range from 500–3,000 dwelling units, but no more than 11,350 dwelling units in total will be authorized for development within the project area.

3.2 Location

The project is located to the east of and adjacent to the existing community of Lakeview/Nuevo in unincorporated Riverside County. The area west of Lakeview/Nuevo is planned to develop with other new communities which will abut new communities that already exist within the city of Perris. The project is bounded on the east by proposed new development in the city of San Jacinto. The project is located along both sides of the Ramona Expressway which extends east/west through the project area. (See **Figures 2-1, Regional Location and 2-2, Project Location**, in Section 2, Executive Summary.)

3.3 Existing Setting/Land Uses

THE VILLAGES OF LAKEVIEW site is located within a small valley between the Lakeview Mountains and San Jacinto River, and is adjacent to the San Jacinto Wildlife Area within the unincorporated area of Riverside County known as Lakeview/Nuevo. Existing land uses on site include the McAnally chicken ranch which will be demolished and removed, the Metropolitan Water District (MWD) Colorado River aqueduct and basin which will continue to be owned by MWD and will remain, a thoroughbred farm which will be removed, an abandoned RV park which will be demolished, a portion of the Lakeview Mountains which will be retained in open space, and vacant or farm land upon which the project will be constructed. See **Figure 3-2, Existing and Surrounding Land Uses**. The location and acreages for the MWD aqueduct and basin are clearly shown on **Figure 3-1, Conceptual Land Use Diagram**. The aqueduct contains approximately 95 acres; Planning Area 38 is the MWD basin which is 41 acres. Both these MWD facilities will remain undeveloped and act as open space for the project, with potential

development of trails and landscaping within the aqueduct property. A majority of the existing land on site, except for what is mentioned above, is vacant and undeveloped. At the time that the NOP was circulated, all of the existing land uses and facilities identified above were present at the project location as were less than ten residences, some located on Davis Road and some scattered agriculturally related residences associated with the chicken ranch and thoroughbred farm.

Features located adjacent to the project site include the Lakeview Mountains, Bernasconi Hills, the San Jacinto River, Mystic Lake, the San Jacinto Wildlife Area, and agricultural land, including the Nutrilite facility, which is located directly west of the project site, and will continue to run operations adjacent to the project. Also immediately adjacent to the project site, is the closed Lakeview Burn Dump. The County Solid Waste Management department closed this facility in 1976, and it has recently been cleared under CEQA for final remediation (Mitigated Negative Declaration Environmental Assessment No. 41223 adopted July 29, 2008). A drainage channel which is part of the project will traverse this off-site area.

3.4 Project-Proposed Land Use Entitlements

THE VILLAGES OF LAKEVIEW project encompasses various land use entitlements being sought by the project proponent, Nuevo Development Company, LLC Corporation, from the lead agency, the County of Riverside, to implement the proposed project. In order to implement the proposed project, the following land use entitlement applications have been submitted to the County: General Plan Amendment Nos. 720 and 721, Specific Plan No. 342, Change of Zone No. 07055, and a Development Agreement 73, as described below.

General Plan Amendment No. 720: Implementation and development of THE VILLAGES OF LAKEVIEW requires an amendment to the County's General Plan to change the land use designations for the project site, and to reflect circulation improvements proposed by THE VILLAGES OF LAKEVIEW project. The following amendment to the County's Land Use Element has been submitted:

- *Land Use Element Amendment*

The proposed project will require a General Plan Amendment to change the land use designations in the Lakeview Area Plan and establish a Community Development Specific Plan. The Land Use Element Amendment consists of three components. The first component required is a Technical Correction needed to rectify errors related to mapping which resulted in inaccuracies related to areas within the Lakeview Mountains, and those in the lowlands. **Figure 3-3, Existing RCIP Land Use Designations Showing Updated Toe-of-Slope** illustrates where the actual toe-of-slope exists and how it does not match the underlying land use designations. **Figure 3-4, Post Technically-Updated RCIP Land Use Designations** shows the correction proposed by this component of the project General Plan Amendment.

As described in the *RCIP General Plan Foundation Component Amendment Request and Required and Optional Findings for The Villages of Lakeview* (Foundation Amendment Request), which was prepared in May 2006 and is included in Appendix B (CD #3) of this DEIR, the second component of the General Plan Amendment will be a Foundation Amendment. In the 2006 Foundation Amendment Request, it was identified that the underlying designations generally within the Rural and Rural Community Foundations would be changed to the Open Space and Community Development Foundations. Of the approximately 820 acres of conversion requested in this component of the General Plan Amendment, over 700 acres will be changed to Open Space and over 120 acres to Community Development. However, General Plan Policy LU 1.11 explains that “each adopted Specific Plan is identified as a “Community Development” Specific Plan, a “Rural Community” Specific Plan, or a “Rural” Specific Plan.” therefore, the Riverside County General Plan does not permit split foundations for one specific plan. Thus, Specific Plan No. 342 will be a “Community Development” Specific Plan with approximately 820 acres of newly-designated Open Space land, in addition to areas that are currently designated as Open Space in the General Plan. **Figure 3-5, Post Foundation Amendment Land Use Designations** can be compared to **Figure 3-3** to see the locations where land uses are proposed to be changed from the existing General Plan Foundations.

The third component will be an Agricultural Foundation Change, utilizing the County’s seven (7) percent conversion allowed every 2.5 years, which is currently allowed under the General Plan. This Agriculture Foundation Change would generally convert 102 acres of Agriculture Foundation to Community Development Foundation. See Appendix B (CD #3) for the detailed findings related to the Foundation Amendments which were presented to the County Board of Supervisors in June 2006. Section 5.9, Land Use and Planning of this DEIR also analyses the effects of the project’s proposed General Plan Amendment.

In summary, the General Plan Land Use Element Amendment proposes to convert Rural, Rural Community, Open Space, and Agriculture Foundations to the Community Development Foundation. In the end, THE VILLAGES OF LAKEVIEW Specific Plan will be left with approximately 2,800 acres (the entire project site) of land within the Community Development Foundation. After the project is implemented per THE VILLAGES OF LAKEVIEW Specific Plan, approximately 48 percent will be residential, commercial, and civic land uses; and 52 percent will remain in various forms of open space (conservation, parks, trails, earthen drainage channels, landscape setbacks, terrace slopes, and open space).

General Plan Amendment No. 721: Implementation and development of THE VILLAGES OF LAKEVIEW requires an amendment to the County’s General Plan to reflect circulation improvements proposed by THE VILLAGES OF LAKEVIEW project. The following amendment to the County’s Circulation Element has been submitted:

- *Circulation Element Amendment*

THE VILLAGES OF LAKEVIEW also proposes to modify the Circulation Element of the Riverside County General Plan. The project will include upgrading and downgrading numerous existing and proposed roadway classifications shown on the current Circulation Element for the Lakeview/Nuevo Area Plan and RCIP General Plan Circulation Element Map, **Figure 3-6, RCIP General Plan Circulation Element. Figure 3-7, Proposed Project Circulation Plan**, shows that several key changes are proposed between the County Circulation Element and the project including, but not limited to: the elimination of 9th Street/Yucca Avenue as a through street from the project boundary easterly, the rerouting of 10th Street/Wolfskill Avenue as a Major roadway east of Hansen Avenue. (The existing alignment of Wolfskill will remain a local street east of Hansen and will not be upgraded.) Hansen Avenue will be reclassified from a Major roadway (118’ right-of-way) to a Collector Street, and Bridge Street, 3rd Street, 5th Street, and 6th Street will be eliminated on the project site and will not have direct access to Ramona Expressway as access to Ramona will be shifted to Town Center and Park Center Boulevards exclusively in this vicinity. A list of the detailed proposed modifications to standard County roadway cross sections is shown in THE VILLAGES OF LAKEVIEW Specific Plan, Table 3, Street Section Comparison Between the County of Riverside and Specific Plan.

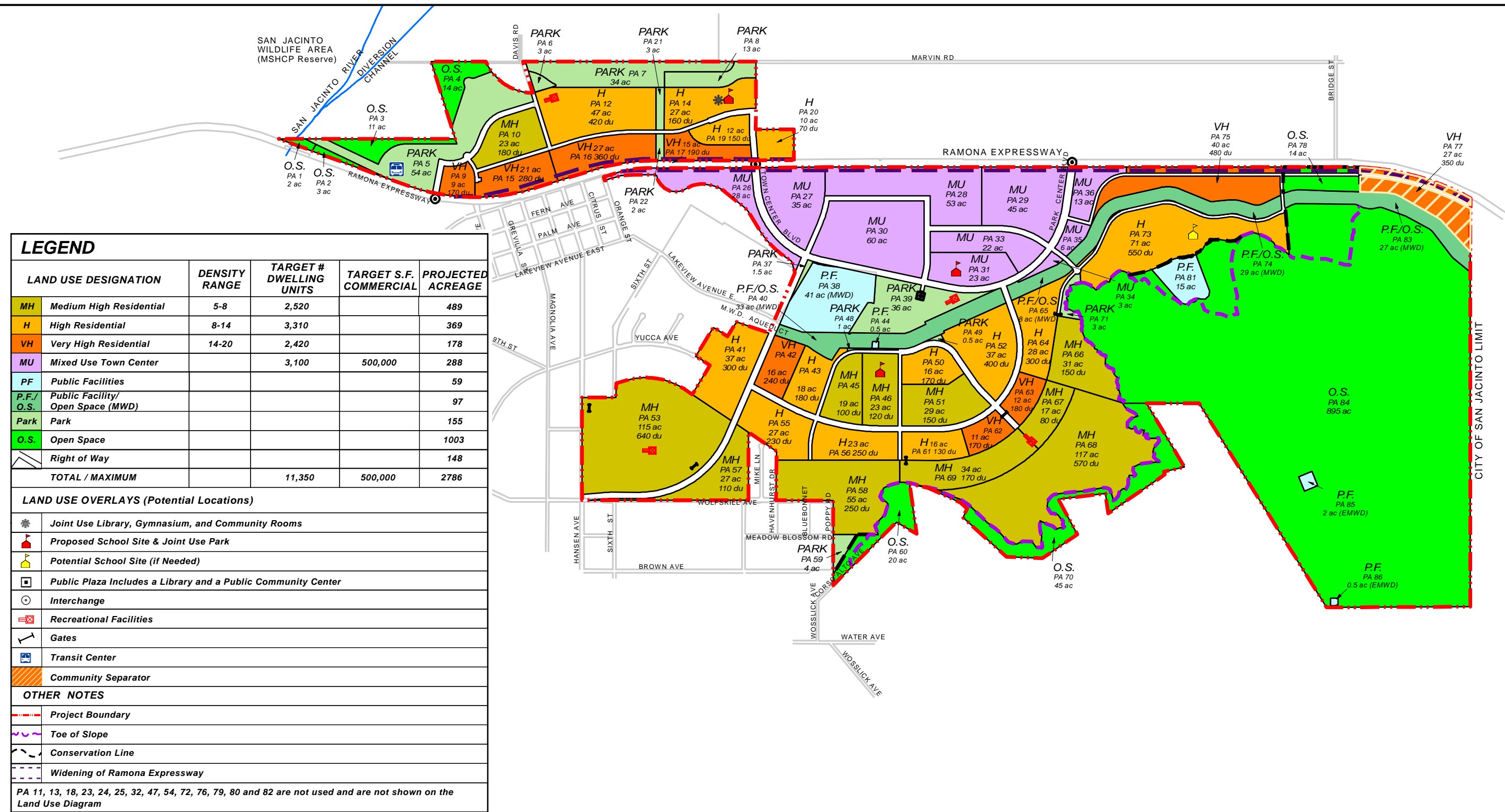
Currently, the project area has one RCIP General Plan-designated Regional Trail located north/south through the Lakeview Mountains along the eastern project boundary (**Figure 3-8, RCIP Trails and Bikeways**). The project proposes a General Plan Amendment to the Circulation Element Trails and Bikeways System to include a 10-12’ Multi-Purpose Community Trail ~~the Regional Trail designation~~ for the trails proposed within the project boundary. The Lakeview Mountains conservation open space has many dirt roads which are currently used as trails; these will be retained, ~~and one will be designated as Regional to address the RCIP required trail.~~ A 10-12’ Multi-Purpose Community Trail (Restricted Use) ~~The Aqueduct Regional Trail~~ will run the length of the MWD aqueduct property east of Central Park and then connect, via a connection between Planning Areas 22 and 26, with ~~the River Regional Trail~~ a 10-12’ Multi-Purpose Community Trail in the Greenbelt. Other trails proposed by the project connecting various components of the project to the existing surrounding trails are not proposed for Regional Trail status. A view of all the proposed trails within the project area is shown on **Figure 3-9, Project Trails Plan**.

Specific Plan No. 342: As authorized by Government Code Section 65450 et seq., the project proposes the adoption of a specific plan for the project site that will establish unique and uniform development of THE VILLAGES OF LAKEVIEW. THE VILLAGES OF LAKEVIEW Specific Plan will describe the location, density, and intensity of development, provide development standards, and discuss the funding and implementation of infrastructure needed for the proposed project. THE

VILLAGES OF LAKEVIEW Specific Plan will be adopted by resolution, while the zoning ordinance text and map associated with the Specific Plan will be adopted by ordinance. It will describe the overall framework for development of the project site, describe each of the seven villages and the land uses proposed therein, and describe and depict the various planning areas within each village and the development standards for the various land uses. THE VILLAGES OF LAKEVIEW Specific Plan will also establish the maximum number of dwelling units that could be constructed within THE VILLAGES OF LAKEVIEW (11,350 dwelling units), the minimum and maximum square feet of commercial development (250,000 to 500,000 square-feet), and the various types of open spaces (e.g., active open space, community parks, conservation areas, trails, etc.). THE VILLAGES OF LAKEVIEW Specific Plan No. 342 is hereby incorporated by reference and summarized below.

Development Agreement No. 73: ~~The Development Agreement will include items dealing with the provision of public improvements, requirements to dedicate land for parks, open space, conservation, and transportation, including development fees. The Development Agreement will be processed concurrently with the Specific Plan and addressed in the EIR. It is anticipated the Development Agreement will include but not be limited to provisions related to the construction of public improvements, requirements to dedicate land for parks, open space, conservation, and transportation, as well as the potential payment of and/or credit for Development Agreement fees and other development related fees.~~

Change of Zone No. 07055: The Change of Zone proposes to change the zoning classifications of the subject site from Light Agricultural – 10-acre minimum (A-1-10), Heavy Agricultural – 10-acre minimum (A-2-10), Light Agricultural with Poultry (A-P), Rural Commercial (C-R), Manufacturing – Service Commercial (M-SC), One-Family Dwelling (R-1), Residential Agricultural (R-A), Residential Agricultural – 1-acre minimum (R-A-1), Residential Agricultural – 10-acre minimum (R-A-10), Residential Agricultural – 2 1/2-acre minimum (R-A-21/2), and Rural Residential (R-R) to Specific Plan No. 342 (SP), and to adopt a zoning ordinance specially written for this project.



Source: SP No. 342

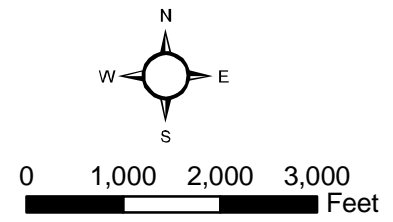
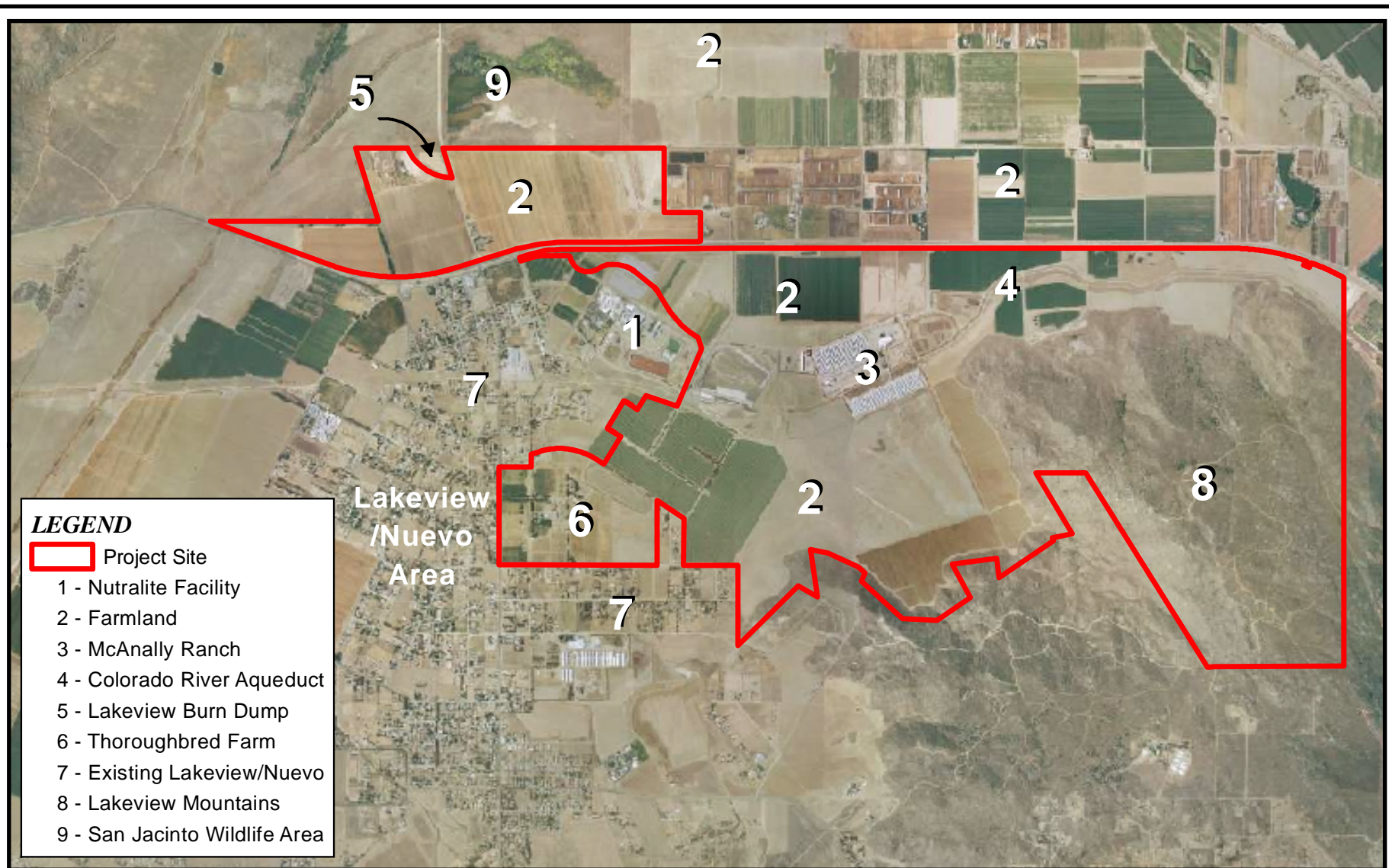


Figure 3-1

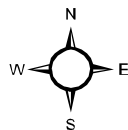
Conceptual Land Use Diagram

The Villages of Lakeview EIR No. 471



Sources: Air Photo USA, Apr. 2007;
SP No. 342.

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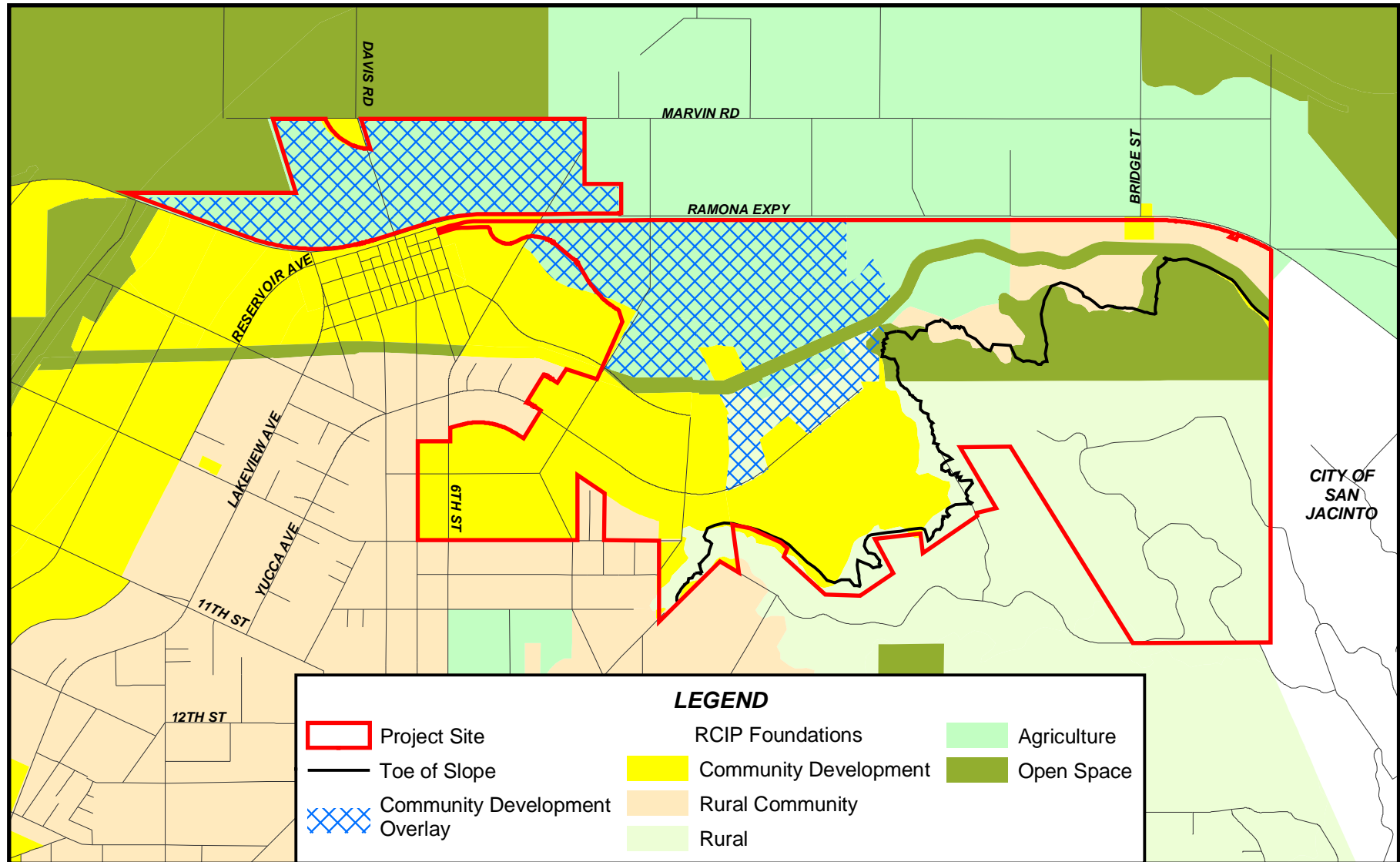


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Figure 3-2

Existing and Surrounding Land Uses

The Villages of Lakeview EIR No. 471

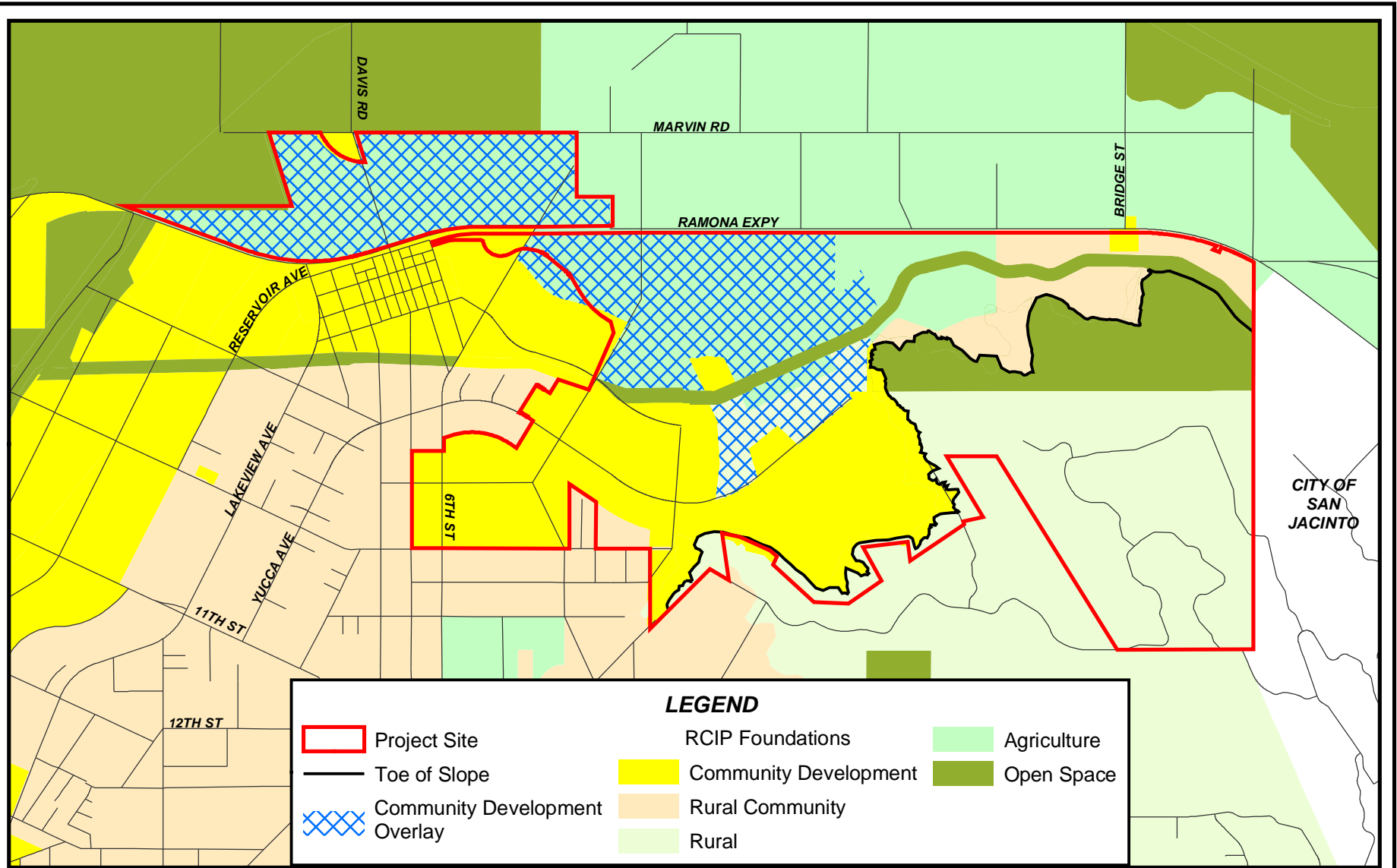


Source: Riverside County-RCIP,
Oct., 2003.

Figure 3-3

Existing RCIP Land Use Designations Showing Updated Toe-of-Slope

The Villages of Lakeview EIR No. 471



Source: Riverside County-RCIP,
Oct., 2003.

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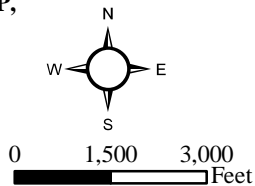
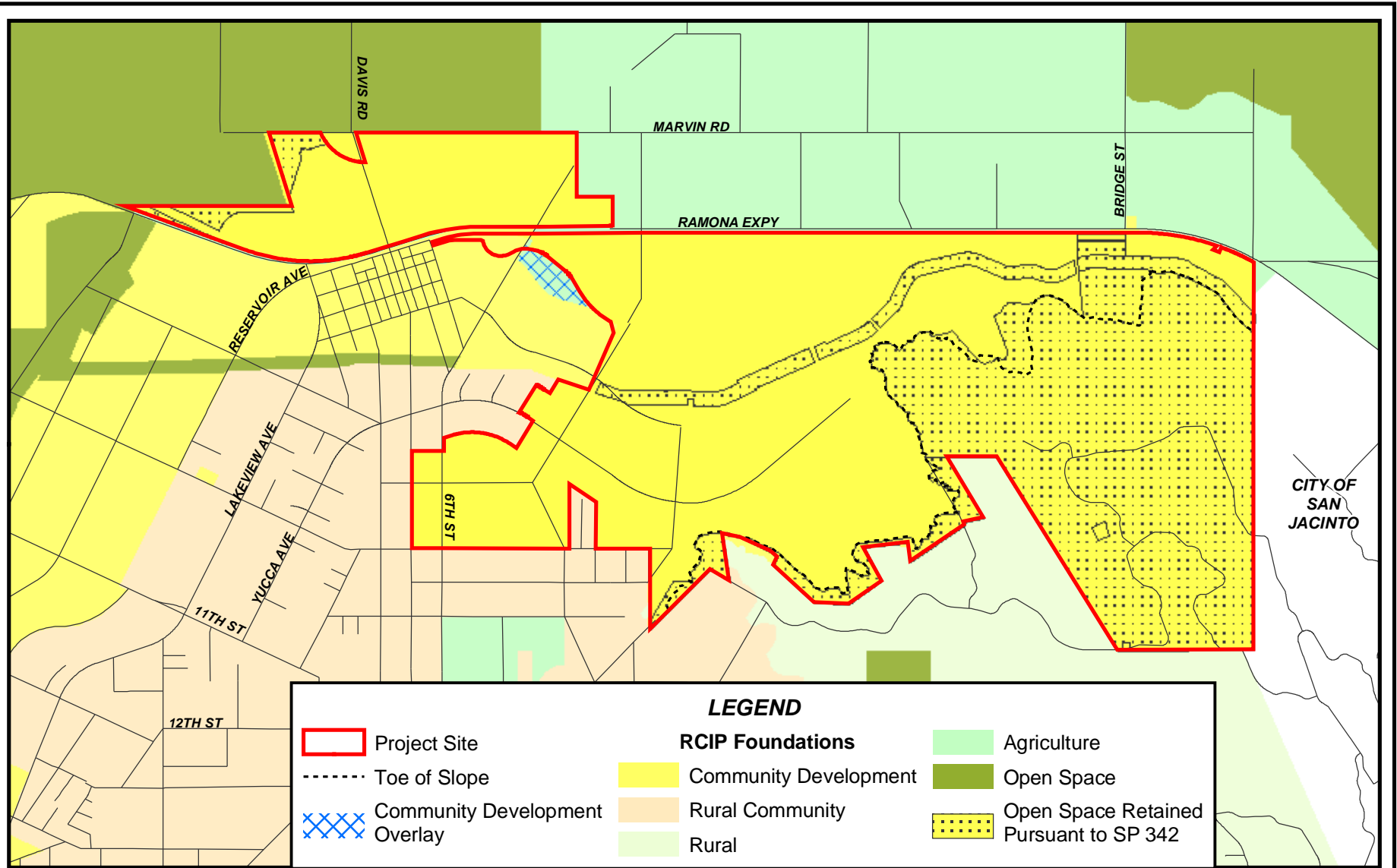


Figure 3-4

Post Technically-Updated RCIP Land Use Designations

The Villages of Lakeview EIR No. 471



Source: Riverside County-RCIP,
Oct., 2003.

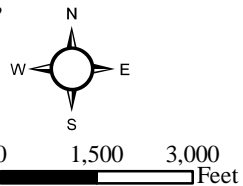
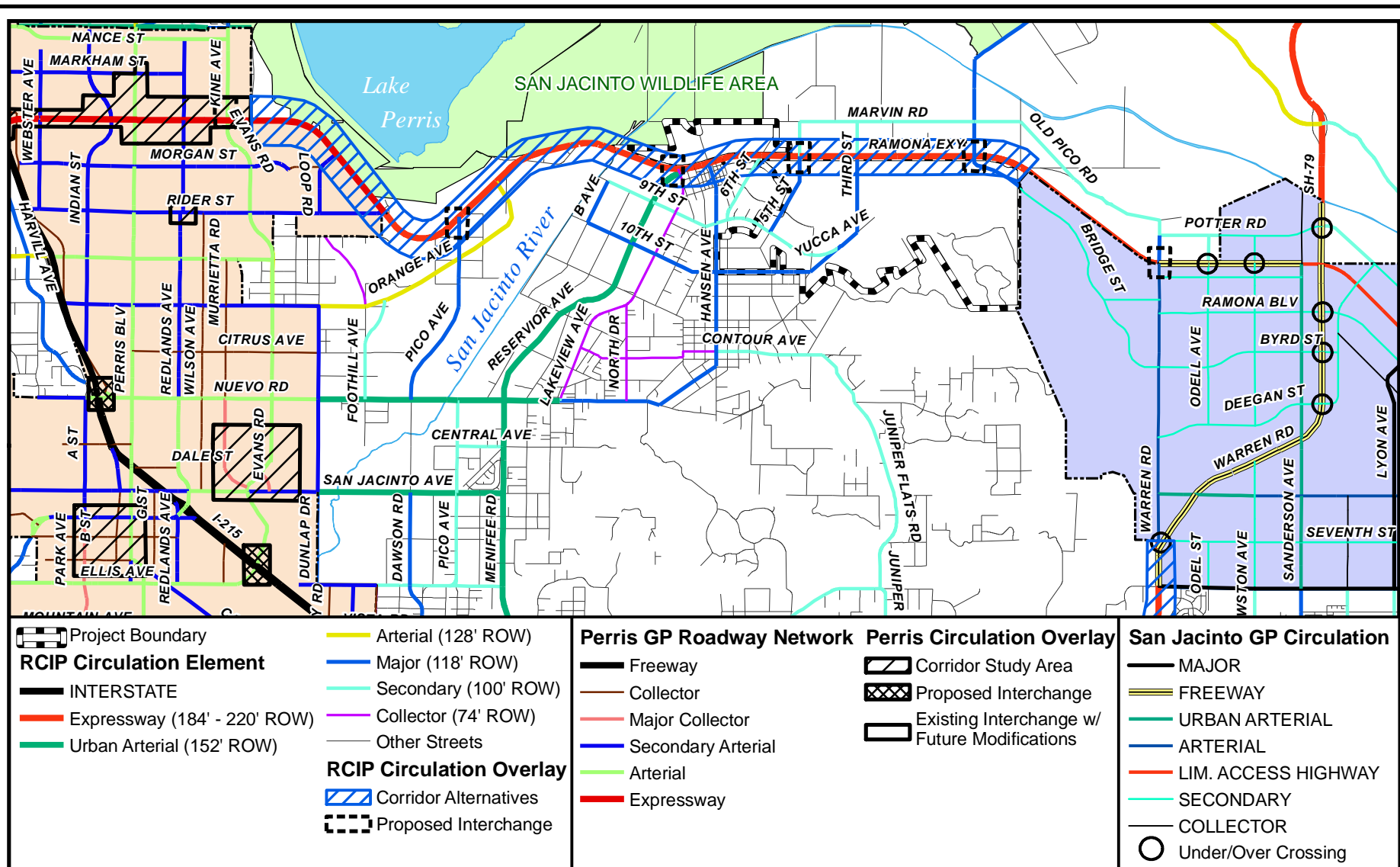


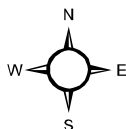
Figure 3-5

Post General Plan Amendment Foundation Designations

The Villages of Lakeview EIR No. 471



Sources: RCIP Lakeview/Nuevo Area Plan, Oct. 2003;
San Jacinto GP, Jan. 2006; City of Perris GP,

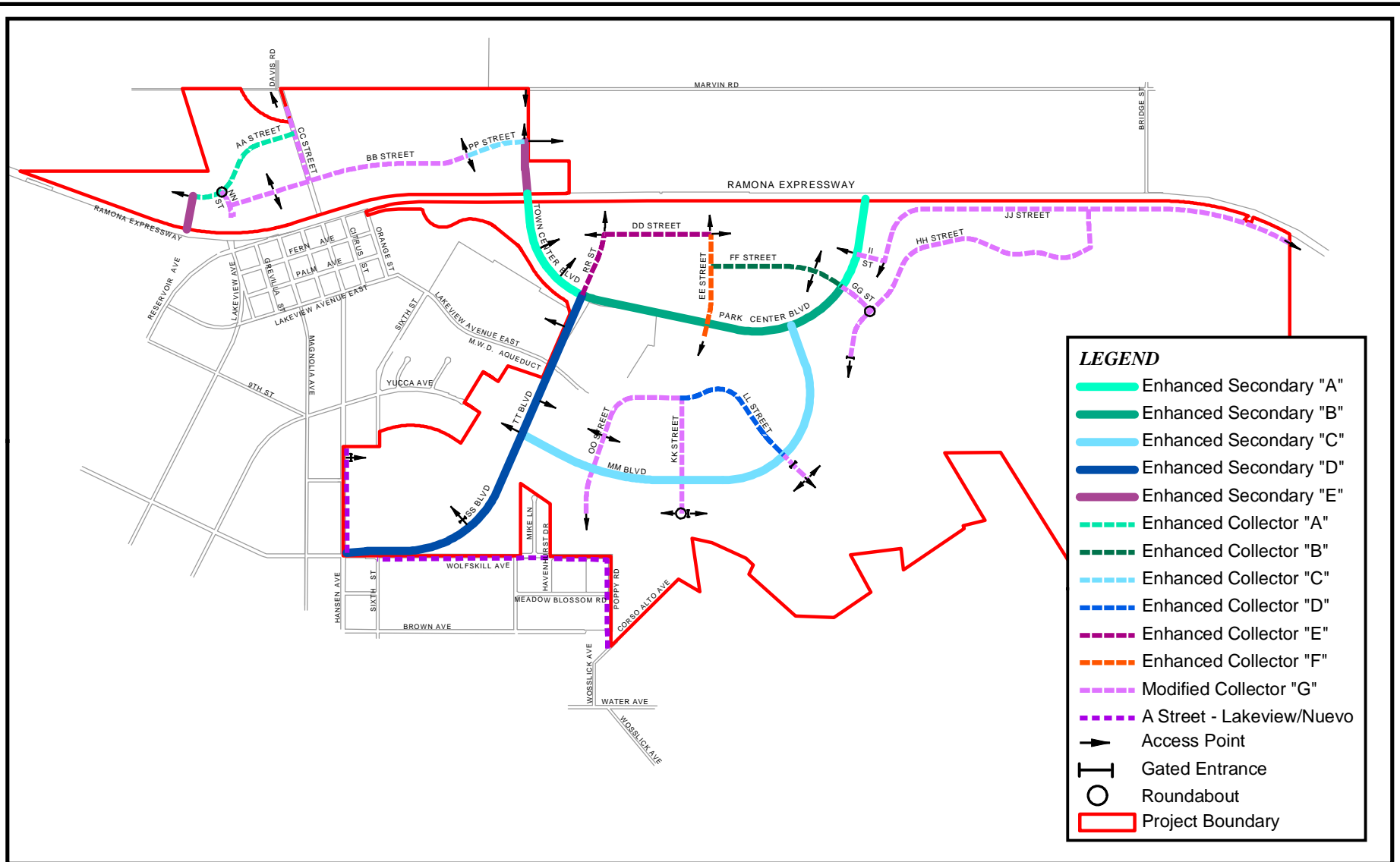


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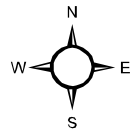
Figure 3-6

General Plan Circulation Elements

The Villages of Lakeview EIR No. 471



Source: SP No. 342

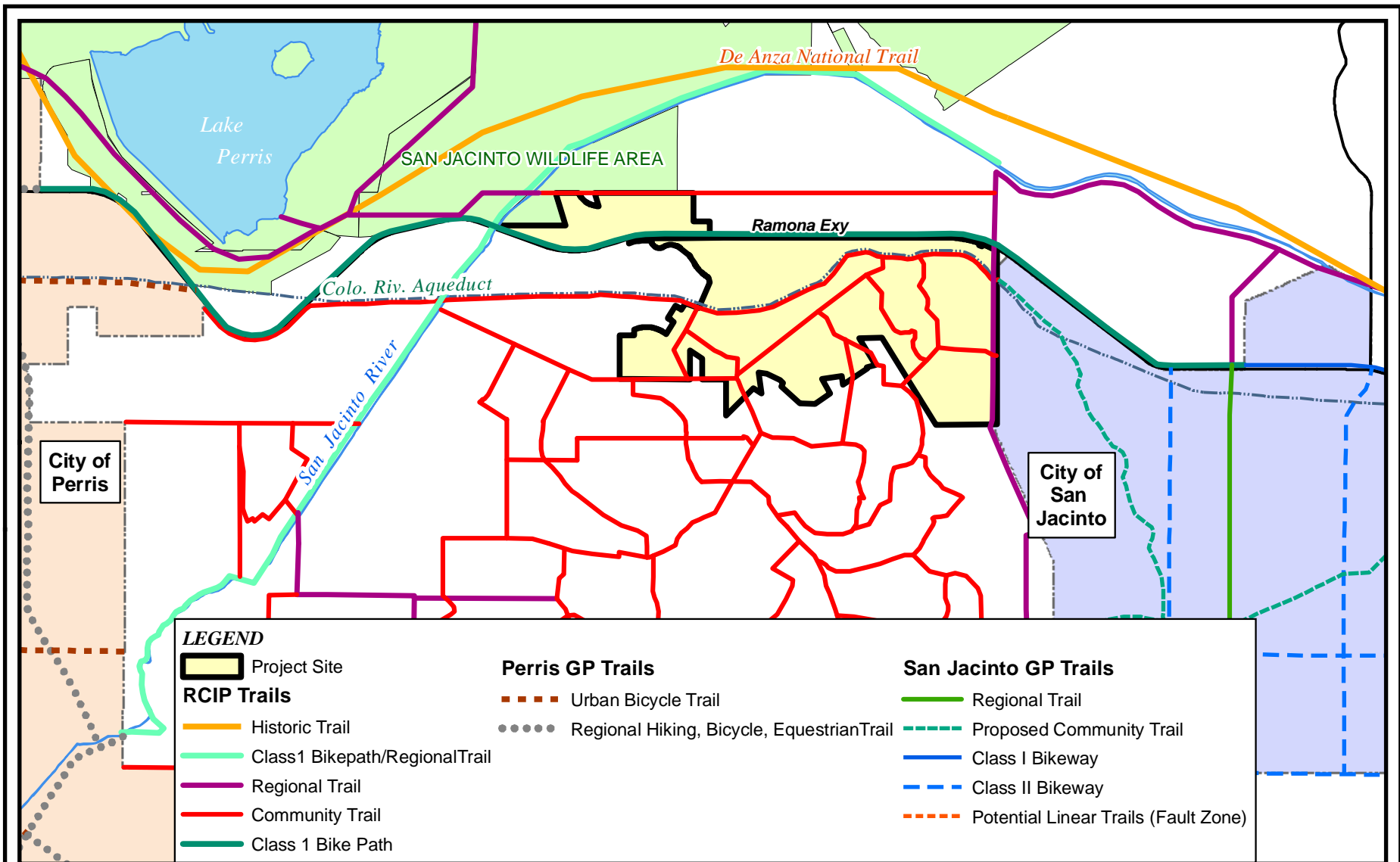


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Figure 3-7

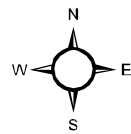
Proposed Project Vehicle Circulation Plan

The Villages of Lakeview EIR No. 471



Sources: RCIP Lakeview/Nuevo Area Plan, 2003; Perris General Plan, 2005; San Jacinto General Plan, 2006.

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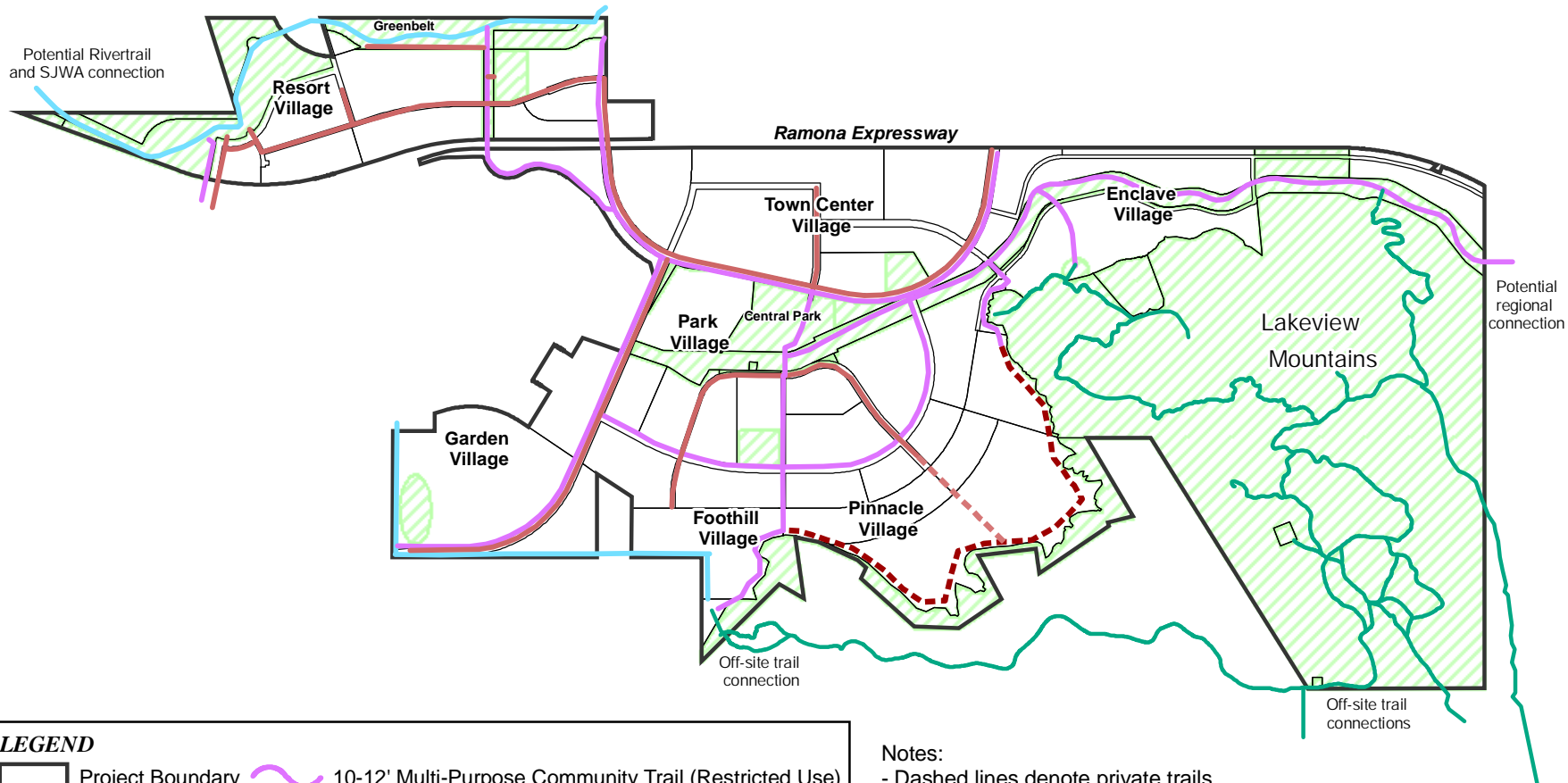


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Figure 3-8

Designated Trails and Bikeways

The Villages of Lakeview EIR No. 471



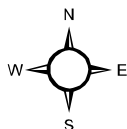
LEGEND

- | | | | |
|--|------------------|--|---|
| | Project Boundary | | 10-12' Multi-Purpose Community Trail (Restricted Use) |
| | Open Space | | 10-12' Multi-Purpose Community Trail |
| | | | 8' Paseo |
| | | | Urban Wildlife Edge Trail |
| | | | Hillside Trail (existing) |

Notes:

- Dashed lines denote private trails.
- A trail through MWD property is subject to a license agreement between MWD and the County Economic Development Agency (CSA).

Source: SP No. 342



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Figure 3-9

Project Trails Plan

The Villages of Lakeview EIR No. 471

The vision of THE VILLAGES OF LAKEVIEW Specific Plan is founded on four cornerstones—environmental stewardship, healthy living, lifelong learning, and community involvement. The cornerstones offer sustainability; the community offers choice: choices in how to live, how to get around, and how to interact with people and nature.

The Specific Plan for THE VILLAGES OF LAKEVIEW has been created with **environmental stewardship** in mind through sensitivity to existing environmental resources and surrounding conditions encompassing the San Jacinto Wildlife Area (SJWA) and San Jacinto River (River); and adjacent cities and communities including the Lakeview/Nuevo community and the city of San Jacinto. Specifically, the project includes: designated conservation areas adjacent to the River and encompassing the Lakeview Mountains, a 500-foot wide passive regional park which serves as a setback to residential development from the SJWA, a wildlife corridor to connect the Lakeview Mountains to the future connections to corridor land north of Ramona Expressway, a drainage and water quality system that includes “natural” unlined channels and a regional water quality basin to assure that the runoff into the River is not polluted, policies and programs for the preservation of existing trees and provision of community facilities such as a library and equestrian park to benefit the existing community of Lakeview/Nuevo, and trails that connect THE VILLAGES OF LAKEVIEW with existing and proposed trails that unite existing communities and future communities with the River and other natural areas.

A focus of the project is to provide for **healthy living** through the development of a walkable community, based on smart growth principals, as described in detail below under *Project Objectives*. In addition to the physical design of the community which includes mixed uses for easy pedestrian and bicycle access, energy efficiency and so forth, the project also includes programs such as health clinics at the schools and educational programs promoting healthy lifestyle choices.

The provision of a library and educational programming promotes **lifelong learning** opportunities within THE VILLAGES OF LAKEVIEW. The community facilities and ongoing programs also offer direct ways for the future residents to engage in **community involvement**.

The walkable community is organized into villages that vary in character, theme, and lifestyle; including a mixed-use town center. Within the healthy community core lies the Central Park—a mix of community facilities potentially including a public community center, library, sports park, and recreation center. These four cornerstones support a “green” community that is based on the Smart Growth Principles described Section 3.5, Project Objectives. A green community includes everything from recycling to reducing vehicle miles traveled; use of recycled water to conservation of open space. THE VILLAGES OF LAKEVIEW plan includes a Green Design component in the Specific Plan, which calls out individual aspects of the project related to green design.

The project analyzed within this DEIR document is depicted on **Figure 3-1, Conceptual Land Use Diagram**. The project provides a mix of residential and commercial uses; a wide range of housing opportunities; schools as the center of neighborhoods; an array of parks and open space; and miles of trails.

Village Organization

THE VILLAGES OF LAKEVIEW Specific Plan has been organized into seven (7) villages and an additional open space area within the Lakeview Mountains, as illustrated in **Figure 3-10, Village Organization Plan**. These villages will be differentiated by their distinct physical boundaries, land use, landscape treatment and theme, and general lifestyle. These seven (7) villages do not represent village “phasing.” The Conceptual Phasing Plan for the project is shown on **Figure 3-11, Conceptual Phasing Plan**.

Each village was created organically by responding to the land and its setting, existing adjacent uses, and the need for transitions, the opportunity to fill many marketplace segments, the requirement of new development to shoulder the economic burden, and the desire to create diverse yet cohesive villages. Below is a brief summary of the villages. Additionally, each village is illustrated individually within THE VILLAGES OF LAKEVIEW Specific Plan, Exhibits C.1.19a through C.8.19h:

- *Resort Village*

The Resort Village is the only village located north of Ramona Expressway. The Resort Village includes approximately 353 gross acres, a target of 1,980 dwelling units, with an overall density of 5.6 dwelling units per acre. The Planning Area includes a variety of residential densities, a 500-foot wide Greenbelt, which serves as a buffer to the San Jacinto Wildlife Area, open space, and proposed K–8 school and joint-use park site. The Resort Village will be separated from the San Jacinto Wildlife Area (SJWA) by wildlife-detering fencing but will maintain public access to the adjacent SJWA. The Resort Village is a walkable village where residents are able to easily interact with each other and use the adjacent parks and open space. The Greenbelt and recreation center will be the main amenity of the village, as shown in Exhibit C.1.19A – Resort Village, of THE VILLAGES OF LAKEVIEW Specific Plan.

- *Town Center Village*

The Town Center Village lies directly southeast of the Resort Village and includes approximately 328 gross acres, including rights-of-way, a target of 3,100 dwelling units, with an overall density of 9.5 dwelling units per acre. The Town Center Village will provide for mixed-use development to include a proposed K–8 school and joint-use park, and both residential and commercial uses within the village. The Town Center Village will include job-creating uses and a commercial core for the community, as shown in Exhibit C.2.19B – Town Center Village, of THE VILLAGES OF LAKEVIEW Specific Plan.

- *Park Village*

The Park Village lies south of the Town Center Village and includes approximately 347 gross acres, a target of 1,660 residential dwelling units with an overall density of 4.8 dwelling units per acre. The MWD Aqueduct Property runs from west to east through the Park Village. A proposed K–8 school and joint-use park, and residential uses are

proposed south of the MWD Aqueduct Property. A proposed recreation facility and additional small neighborhood parks are proposed to be located north of the MWD Aqueduct Property. A ~~potential~~ public community center, library, and private community recreation facility are proposed within the 36-acre Central Park of this village. The Central Park is planned within this village as a central gathering place for THE VILLAGES OF LAKEVIEW residents, making it the civic core of the community. The Central Park will include such uses as a public community center, library, park, and service commercial, as shown in Exhibit C.3.19C – Park Village, of THE VILLAGES OF LAKEVIEW Specific Plan.

- *Garden Village*

The Garden Village is proposed to be gated, located in the southwestern corner of the project area, and includes approximately 120 gross acres, a maximum of 640 dwelling units, and an overall density of 5.3 dwelling units per acre. Residential densities of medium high are proposed in this village along with the Heritage Park which will be outside the gates and accessible to the Lakeview/Nuevo community. ~~An equestrian trail~~ A 10-12' Multi-Purpose Community Trail, which will allow equestrian uses, along the south and west edges of this Village, will help transition between the existing community and THE VILLAGES OF LAKEVIEW, as shown in Exhibit C.4.19d – Garden Village, of THE VILLAGES OF LAKEVIEW Specific Plan and will be consistent with the County of Riverside Lakeview/Nuevo Design Guidelines.

- *Foothill Village*

The Foothill Village includes approximately 171 gross acres, a target of 840 dwelling units, and an overall density of 4.9 dwelling units per acre. Residential densities range from medium high to high. The Foothill Village also provides for an equestrian trailhead park and approximately 20 gross acres of open space. ~~The equestrian trail~~ 10-12' Multi-Purpose Community Trail, which allows equestrian uses, along the south and west edges of this Village will continue the trail adjacent to the Garden Village. The Foothill Village lies south of the Park Village and north of existing rural development, as shown in Exhibit C.5.19E – Foothill Village, of THE VILLAGES OF LAKEVIEW Specific Plan.

- *Enclave Village*

The Enclave Village includes 191 gross acres, a target of 1,380 dwelling units, and an overall density of 7.2 dwelling units per acre. It is located east of the Town Center Village and south of the Ramona Expressway. Residential densities range from high to very high. The ~~1,000~~ 1,500-foot-wide wildlife corridor traverses this village (PA 78). A potential K–8 school and joint-use park site would be located south of the MWD Aqueduct Property, if determined necessary. The Enclave Village borders San Jacinto's city limit to the east. Planning Area 77, within this village, is the easternmost Planning Area. Due to its location, it will serve as the area where the required "Community Separator" will be located. The Community Separator may include a monument, landscaping, and/or land uses that provide a break between developed communities. Planning Area 77 is the only place within the project site where composting of green

waste generated on site will be an allowable use, with a Conditional Use Permit, as will a tree nursery. The general organization of the village is shown in Exhibit C.6.19F – Enclave Village, of THE VILLAGES OF LAKEVIEW Specific Plan.

- *Pinnacle Village*

The Pinnacle Village includes approximately 337 gross acres, 1,750 dwelling units, and an overall density of 5.2 dwelling units per acre. Residential densities proposed in the Pinnacle Village range from medium high to very high. The village is nestled in a corner adjacent to the Lakeview Mountains and will be developed on terraces that step-down from the toe of the mountains. The Pinnacle Village also includes 8.4 gross acres of the MWD Aqueduct Property, as shown in Exhibit C.7.19G – Pinnacle Village, of THE VILLAGES OF LAKEVIEW Specific Plan.

- *Open Space/Lakeview Mountains*

Open space, the water tank sites, and a conservation area just south of the Enclave Village account for approximately 939 gross acres. The Lakeview Mountains border the city of San Jacinto limit to the east. The creation of a wildlife corridor from this area through the Enclave Village will help wildlife to move from the Lakeview Mountains to the San Jacinto River. See Exhibit C.8.19H – Lakeview Mountains, in THE VILLAGES OF LAKEVIEW Specific Plan

Land Uses

Each of the above-described villages includes a variety of land uses. The proposed land uses within THE VILLAGES OF LAKEVIEW are as follows:

- *Residential*

Residential densities range from 5.0 dwelling units per acre to 20 dwelling units per acre. Below are the three density ranges currently targeted:

Medium-High Density Residential (5–8 du/ac)

Product types (residences) would typically consist of conventional and alley-loaded single-family detached homes, z-lot products, and single-family homes with tandem garages.

High Density Residential (8–14 du/ac)

Product types would typically consist of detached single-family court and cluster products and attached triplexes.

Very High Density Residential (14–20 du/ac)

Product types would typically consist of attached alley-loaded and court products as well as condominiums.

These varying residential densities provide a wide range of housing styles, sizes, lifestyles, and values. In addition, permitted in all residential land uses are *live/work units* and *home occupations*, both of which reinforce a reduction in vehicle miles traveled. Residential Planning Areas account for approximately 1,044 gross acres and a target of 8,250 dwelling units.

As a part of the residential development for the project, 250 affordable senior housing units will be constructed. The exact location of these rental units has not been determined.

- *Mixed-Use Development*

The Mixed-Use land use designation allows for development including a combination of retail/commercial, office, and/or residential uses for THE VILLAGES OF LAKEVIEW residents, existing community residents, and visitors. These uses may be combined with civic, public, and recreational uses.

The Mixed-Use land use designation stands in contrast to traditional planning and zoning which separates residential, commercial, business parks, and public/institutional uses into distinct areas or zones. By integrating uses within one mixed-use area, a high level of activity is generated. Housing with retail, work places, medical and civic facilities, and recreational uses encourage pedestrian mobility and makes public spaces more lively and accessible to nearby residents, all of which reinforce smart growth principals.

There are 10 mixed-use planning areas within the Specific Plan. These areas total approximately 288 gross acres with target of 3,100 dwelling units and a range of 250,000 to 500,000 square feet of non-residential uses such as commercial/retail/office space. These mixed uses occur primarily along the project's southerly frontage along Ramona Expressway. Live/work units are also encouraged in the mixed-use planning areas.

- *Public Facilities*

The Public Facilities land use category shown on **Figure 3-1** includes existing facilities and land held for facilities by both Metropolitan Water District (MWD) and EMWD. The existing MWD Basin which will continue to be owned and operated by MWD is located in PA 38. Existing Eastern Municipal Water District (EMWD) water infrastructure located within THE VILLAGES OF LAKEVIEW site will remain. Planning Area 85 is an EMWD reservoir site; PAs 86 and 44 are EMWD booster stations.¹ Three proposed tanks (two for potable water and one for recycled water) will be constructed in PA 81. The two

¹ Letter received by Adam Rush, Riverside County Planning Department, dated August 14, 2006 from Joseph B. Lewis, Director of Engineering Services at EMWD.

5-million gallon (MG) water tanks are proposed to serve the 1,720-foot pressure zone. Although not a part of the project site, APN No. 425-120-012 is an existing EMWD raw water pump station located adjacent to PA 77 and Ramona Expressway.¹ (See Section B.5.d of THE VILLAGES OF LAKEVIEW Specific Plan for a detailed description of the existing EMWD water facilities.)

- *MWD Aqueduct Property*

This public facility accounts for approximately 95 gross acres. A ~~regional trail~~ 10-12' Multi-Purpose Community Trail and landscaping are proposed uses along the aqueduct property.

- *Parks*

Parks and trails will provide a unifying “green” amenity for the community. Every Village includes parks totaling approximately 136 gross acres of active public parks and 22 acres of private recreational facilities, both on and off site, if the project builds out to 11,350 units. These parks will offer residents of the project and residents of surrounding communities a variety of recreational opportunities. A Central Park (PA 39) is planned within the Park Village with a mix of civic uses, sports fields and small commercial service uses. Water quality features, detention basins, and public facilities are proposed in some of the parks. This does not include the over 100-acre Greenbelt area located in the Resort Village or the other open space and conservation areas located in the Lakeview Mountains which provide passive park features such as trails. See a detailed table of park acreages in Section 5.13, Recreation, herein.

- *Open Space*

Open space in the Specific Plan amounts to over 1,000 gross acres. Proposed uses of these planning areas include conservation areas, trails, fuel modification zones, and debris basins.

- *Roads*

The project includes the dedication of approximately 147 acres of internal and adjacent roadways, in a wide variety of cross sections. On-site traffic will be conveyed by a circulation system which ranges in right-of-way widths from 56 to 156 feet, as shown in THE VILLAGES OF LAKEVIEW Specific Plan Exhibits B.2.7A through B.2.7H. These cross sections do not include the future widening of Ramona Expressway which will ultimately be located within a 220-foot right-of-way.

- *Land Use Overlays*

THE VILLAGES OF LAKEVIEW Specific Plan allows for public facility and recreational uses such as libraries, and K–8 schools with joint-use parks to be represented as land use overlay symbols on the **Conceptual Land Use Diagram, Figure 3-1**. Potential locations

are indicated, and the necessary public facility and recreational uses are permitted uses within the respective land use designations under THE VILLAGES OF LAKEVIEW Specific Plan Section B.11, Specific Plan Administration. Thus, the “underlying” land use designation covers the entire area, allowing for the land use overlay to move without necessitating a change in the land use designation. By using this “overlay” designation, maximum flexibility in siting of public and recreational facilities can be maintained.

The following are the Land Use Overlays established by the Specific Plan:

- K-8 Schools with joint-use parks, one with a joint-use library, and joint-use gymnasium and/or community room.
- Public Plaza including library and public community center.
- Gates
- Interchange (grade separation)
- Recreational Facilities
- Transit Center
- Community Separator

Additional On-site Improvements

- *Infrastructure*

The project will also provide the upgrade of regional infrastructure including: upgrades and widening of the existing road network; new roads and signals; new and expanded sanitary sewer service; new flood control facilities, which will remove existing residences from the flood plain; increased fire protection with the installation of new water storage tanks and a fire station; and the water quality basins to improve the quality of stormwater runoff, thus enhancing the San Jacinto River and Wildlife Area. All of these improvements are discussed in detail in the Specific Plan.

- *Grading*

THE VILLAGES OF LAKEVIEW includes existing topography that ranges from steep hilly areas that are part of the Lakeview Mountains, to sloping alluvial fan areas at the foothills and further north towards Ramona Expressway. The hilly areas in the southeasterly and central portions of the project are being proposed as conservation areas with no proposed grading. (See THE VILLAGES OF LAKEVIEW Specific Plan Exhibit B.7.17B, Slope Analysis and DEIR **Figure 5.8-1, USGS Topography**.) The project grading plan proposes to develop a profile similar to the existing topography, leaving the southerly hills in their natural state, and gradually transitioning into foothill-type grading (terraces), with the more substantial slopes and grades to the south and flatter areas further north. The project is estimated to move approximately 17 million cubic yards of dirt, that will be balanced (cut to fill) on the site. Although cut and filled areas will exist throughout the project, the majority of cut will occur on the portion of the site located south of Ramona Expressway and the primary fill areas are located within the Resort and Mixed-Use Villages. (See THE VILLAGES OF LAKEVIEW Specific Plan Exhibit B.7.17C, Cut and Fill Plan.) A description of the anticipated grading that is going to be completed on the

project site is located within Chapter 7 of THE VILLAGES OF LAKEVIEW Specific Plan; and is illustrated on Exhibit B.7.17A, Conceptual Grading Plan, within the Specific Plan document.

- *Landscaping*

The project will incorporate a California-appropriate, drought-tolerant landscaping program, including the creation of a demonstration garden to encourage homeowners to use drought-tolerant landscaping in their yards. It will also include the use of recycled water. The project includes a tank site for the recycled system to help pressurize and stabilize the system for use in all areas of this project. (See THE VILLAGES OF LAKEVIEW Specific Plan Section B.12, Lakeview Green Design Program.)

Landscaping will define the overall character and theme of the project, while emphasizing village continuity. Landscaping for the project includes: Project Entry Treatments, Village and Neighborhood Entries, Gated Entries, and Parks and Open Space Systems. Individual villages will be distinguished by varied planting themes that will serve to complement and reinforce the overall community concept while maintaining a character unique to each village. Arterials and major collectors shall be planted with trees unique to the roadway and will also serve as a visual connection between villages. Large non-functional turf areas shall be minimized and other landscape material shall be used where possible. Chapter 4 of the Specific Plan describes in detail the conceptual landscape plan, the street tree plan, and the entries. These plans are also shown on Exhibits B.4.13a through 13c of the Specific Plan. A description of the open space, conservation, and recreational facilities are described in Chapter 8 of the Specific Plan. Chapter 8 explains all proposed parks and the different park and recreational facility types, including trails, as shown in **Figure 3-12, Conceptual Open Space and Parks Plan**, **Figure 3-13, Conceptual Park Plan**, and **Figure 3-9, Project Trails Plan** (above).

A unique feature of the project is the planting of trees in excess of what would be expected in a standard new community. The Landscaping Plan Development Standards in THE VILLAGES OF LAKEVIEW Specific Plan (Section B.4.b.3) requires that the project landscaping include trees. Project Objective A.3.d.2 of the Specific Plan calls for “a community of trees on site.” Given the climate, shade is needed and will encourage people to walk. It has been calculated based on the size of the project and potential landscaped areas, that as many as 50,000 trees will ultimately grace the project site. See also THE VILLAGES OF LAKEVIEW Specific Plan Sections B.4 and D.9 for detailed information regarding the landscape guidelines and standards for the project.

Another feature of the landscaping which will be mandated for THE VILLAGES OF LAKEVIEW is in response to the *Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP). The MSHCP prohibits certain types of invasive plant species from use in locations where urbanized uses will abut conservation areas, so the Specific Plan prohibits the majority of these plants from use within the project. THE VILLAGES OF LAKEVIEW Specific Plan Appendix C, Plants that are Prohibited, lists all such plants.

- *Circulation*

The circulation plan for THE VILLAGES OF LAKEVIEW provides improvement standards intended to promote efficient and safe movement of people within the project area. In addition, it establishes policies and programs which will ensure that all components of the transportation system meet the future transportation needs for the County. The circulation improvements include vehicular circulation, transit facilities, bicycle facilities, pedestrian circulation, and ~~equestrian~~ trails. All of these improvements are described and shown in detail in Chapter 2 of THE VILLAGES OF LAKEVIEW Specific Plan. The project proposed roadway circulation system and trails are shown on **Figures 3-7 and 3-9**, respectively, above.

Off-site Improvements

- *Infrastructure*

In addition to the on-site infrastructure proposed for the project, THE VILLAGES OF LAKEVIEW Specific Plan indicates that off-site infrastructure is also needed to develop the project. The Resort Village portion of Phase 1 of the project requires some off-site infrastructure to be installed prior to occupancy. Other off-site infrastructure is needed in the future for other phases of the project. **Figure 3-14, Off-site Infrastructure Analyzed in the EIR** shows the off-site water, sewer and storm drain infrastructure which is addressed in the DEIR. This DEIR addresses these off-site improvements shown in **Figure 3-14** at a project-specific level of analysis so that Phase I–Resort Village may move forward without further CEQA review for off-site infrastructure.

Additional off-site infrastructure necessary to serve the entire site has been evaluated at a programmatic level in the EIR prepared for the *Eastern Municipal Water District Lakeview/Nuevo Area-Wide Master Plan for Water, Sewer, Recycled Water* (EMWD Master Plan, SCH #2007101043), certified January 21, 2009. The identified facilities are expected to be built by other project developers within the EMWD Master Plan area or by EMWD. The timing of when these facilities will be built is not certain and would be speculative to assume. Therefore, should additional off-site infrastructure be needed by THE VILLAGES OF LAKEVIEW before it has either been built or cleared under project-specific CEQA review for other development projects within the EMWD Master Plan area, then additional evaluation of potential environmental impacts will be needed on a case by case basis, depending on what improvements are needed.

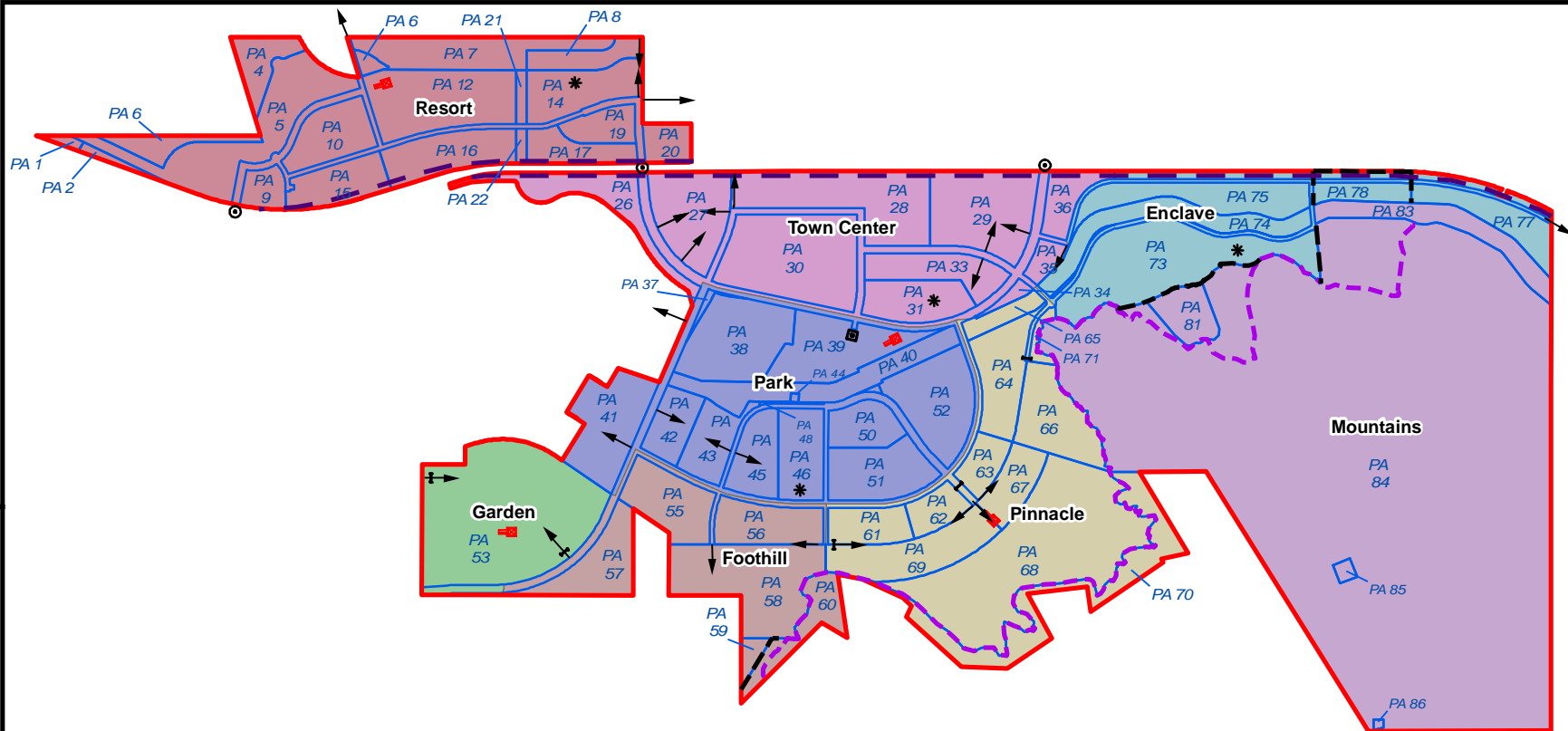
- *Trails*

The county is creating an “Adopt-a-Road” program which includes off-site trails. These trails will be funded through and are part of the Community Facilities Fee Program. The project proponent has agreed to construct a portion of the trail system identified as needed within the existing Lakeview/Nuevo community through the County’s Adopt-a-Road program. The funding commitment will include 4,800 lineal feet of Double-Sided Multi-Purpose Trail along existing road frontage within existing road right of way. ~~The exact location of these improvements has not been determined, but they will be consistent with the County of Riverside Lakeview/Nuevo Design Guidelines. See Final~~

Environmental Impact Report for The Villages of Lakeview, Volume 1, Section 1.0, Introduction, for additional information and analysis regarding these off-site trails.

Specific Plan Phasing

The project is anticipated to be developed over an approximate twenty-year period depending on economic cycles. The rate of development will be determined by the local and regional market demand. **Figure 3-11, Conceptual Phasing Plan**, illustrates the proposed phasing of the project. Generally speaking, phasing moves from west to east.

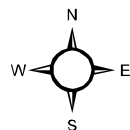


LEGEND

- | | | | |
|--------------------|-----------------------|--|--------------------------|
| Project Boundary | Mountains = 939 ac. | Joint Use Library, Gymnasium and Community Rooms | Gates |
| Land Use Plan | Park = 347 ac. | Public Plaza | Toe of Slope |
| Enclave = 191 ac. | Pinnacle = 337 ac. | Recreational Facilities | Conservation Line |
| Foothill = 171 ac. | Resort = 353 ac. | Interchange | Widening of Ramona Expy. |
| Garden = 120 ac. | Town Center = 328 ac. | | Traffic Flow |

Source: Specific Plan 342

ALBERT A.
WEBB
ASSOCIATES

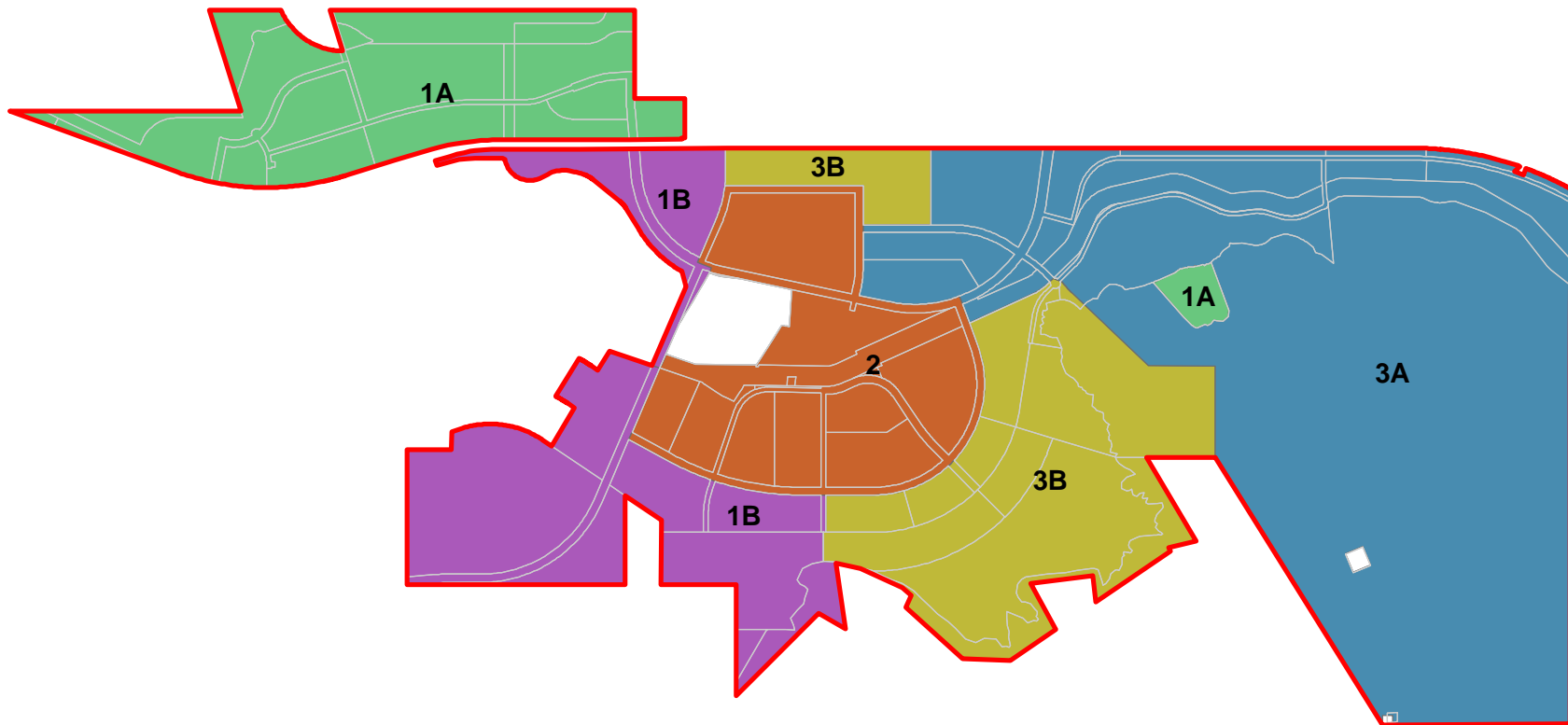


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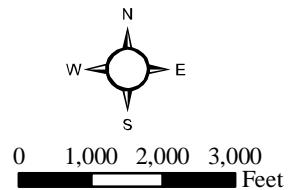
Figure 3-10

Village Organization Plan

The Villages of Lakeview EIR No. 471



Source: SP No. 342



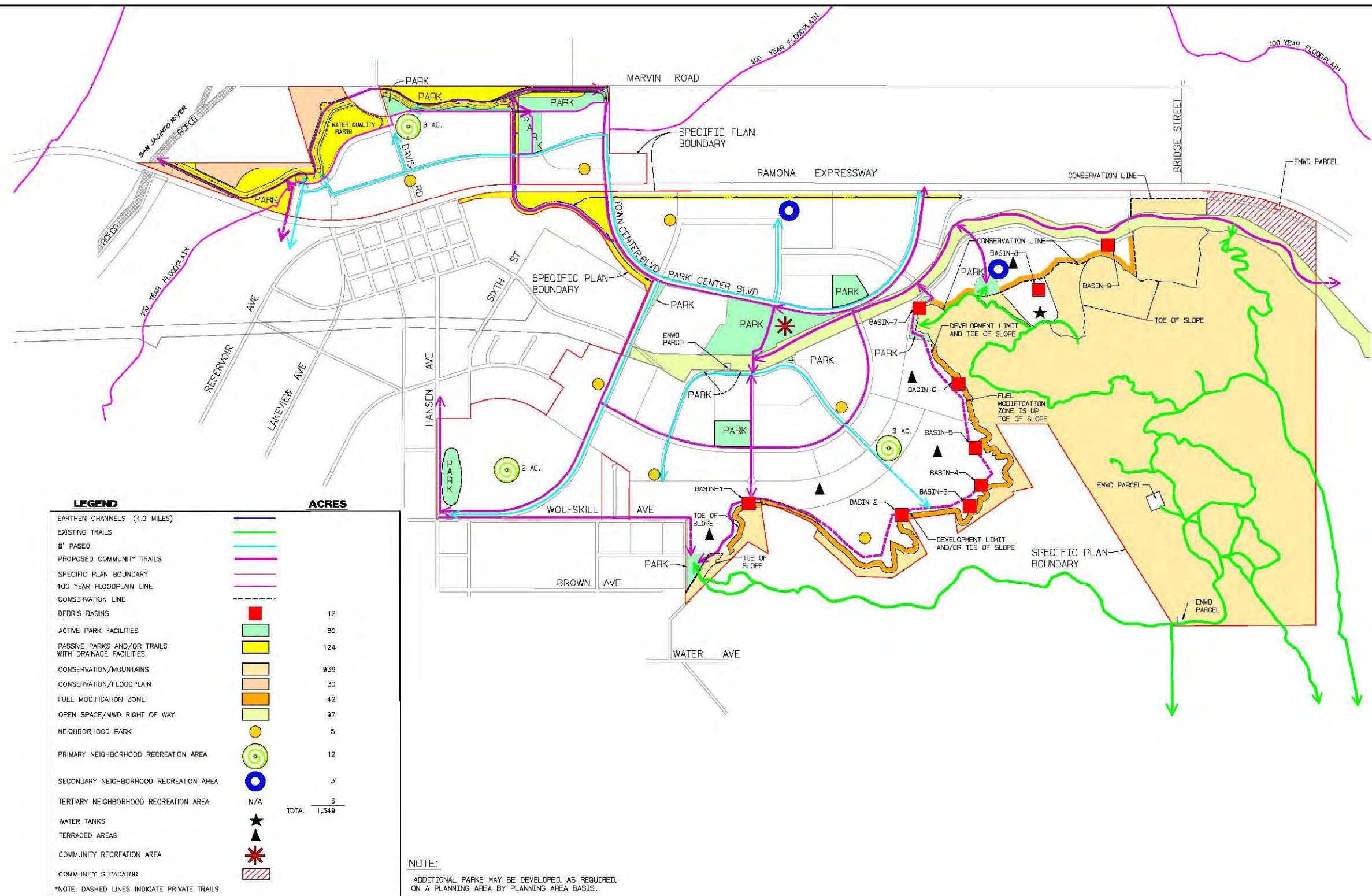
LEGEND

	Project Boundary		Phase 2
	Phase 1A		Phase 3A
	Phase 1B		Phase 3B

Figure 3-11

Conceptual Phasing Plan

The Villages of Lakeview EIR No. 471



Source: SP No. 342

ALBERT A.
WEBB
ASSOCIATES

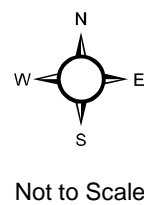
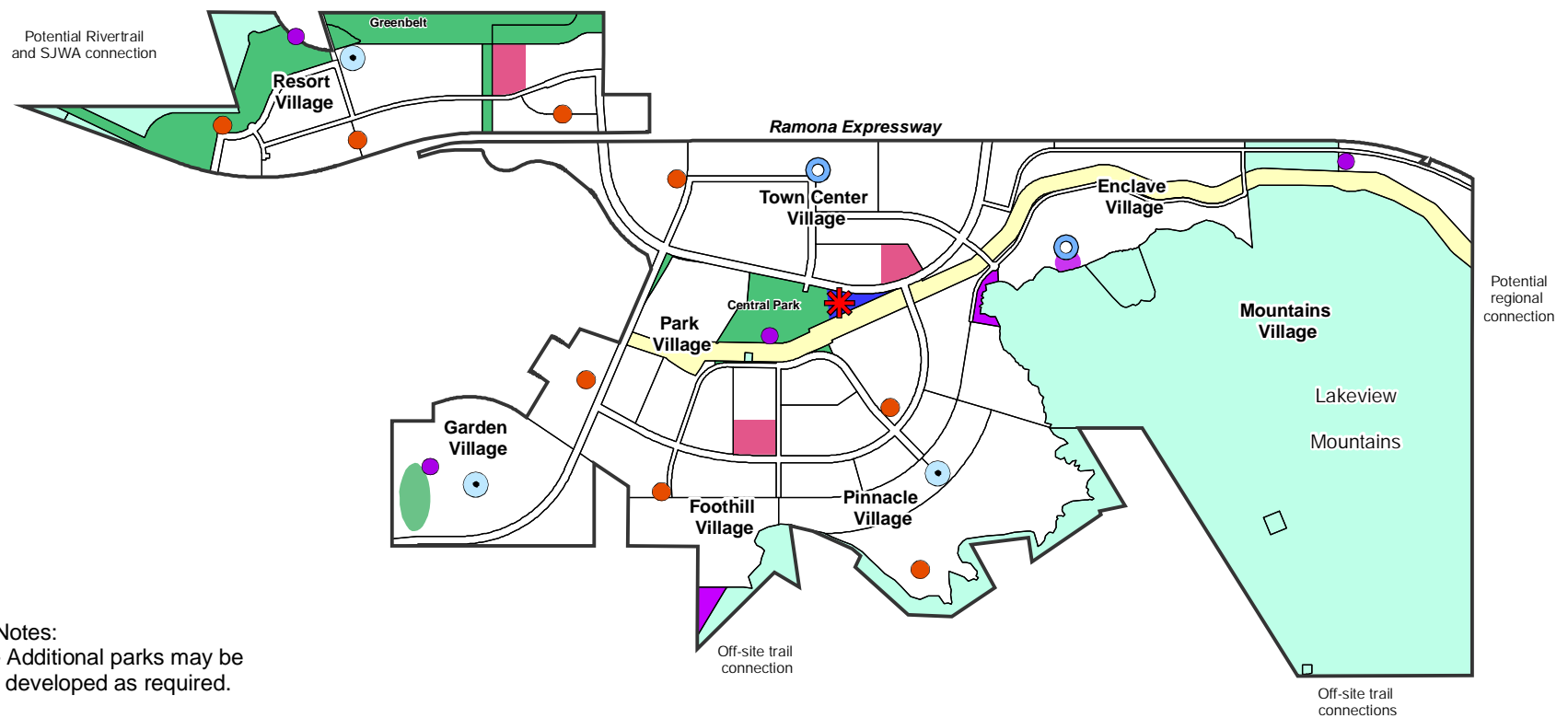


Figure 3-12

Conceptual Open Space and Parks Plan

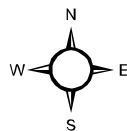
The Villages of Lakeview EIR No. 471



LEGEND

	Project Boundary		Open Space and/or Conservation
	Community Recreation Area		Trail Corridor/MWD Aqueduct
	Primary Neighborhood Recreation Area		Public Park
	Secondary Neighborhood Recreation Area		Joint Use School Park
	Neighborhood Park (1/2 ac. +/-)		Private Park
	Interpretive Sign		Trailhead/View Park

Source: SP No. 342

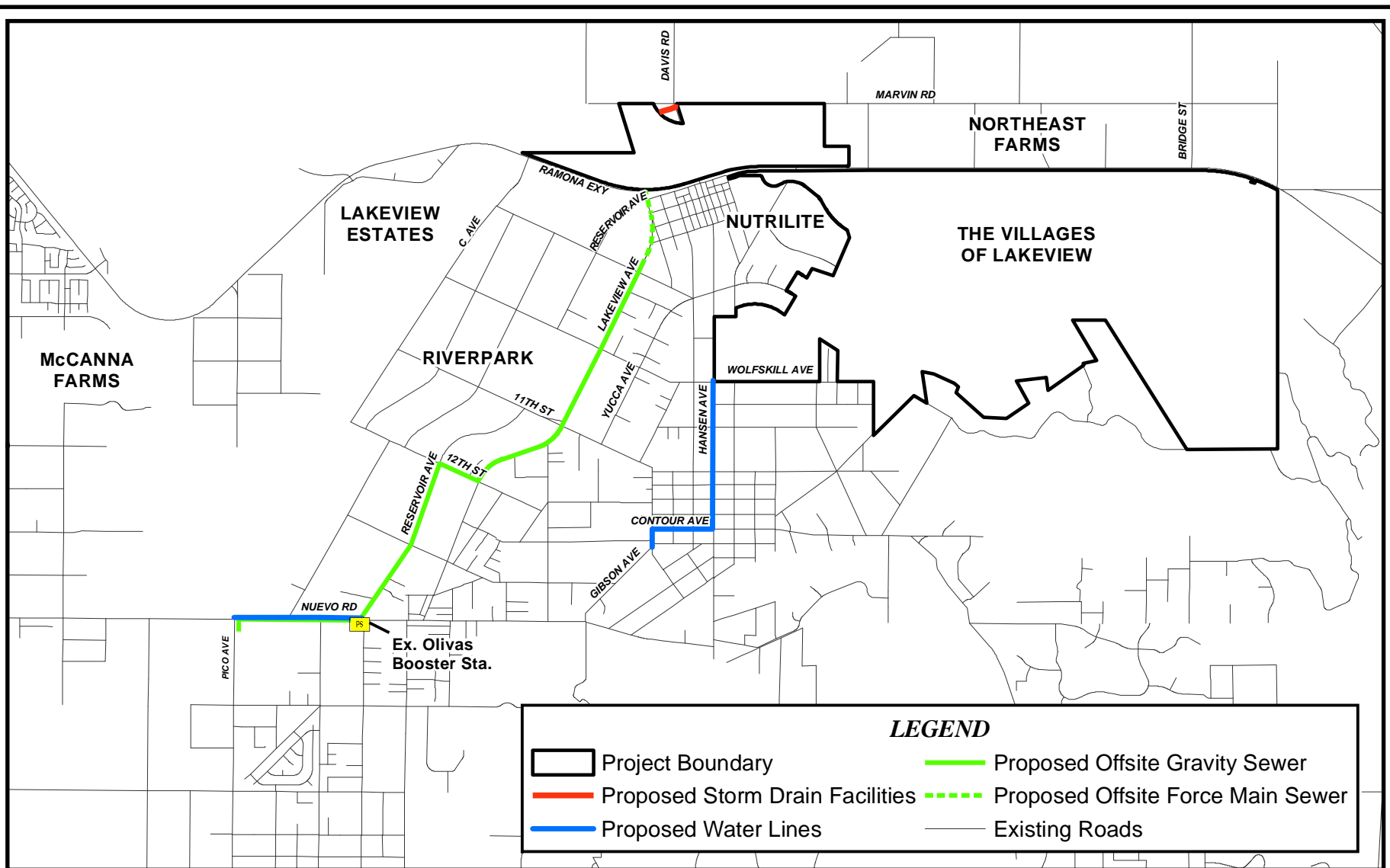


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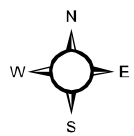
Figure 3-13

Conceptual Parks Plan

The Villages of Lakeview EIR No. 471



Sources: SP No. 342; The Villages of Lakeview General Biological Report Exhibit 4; Mystic Paavo Cultural Resources Study



0 2,000 4,000 6,000 Feet

Figure 3-14

Offsite Infrastructure Analyzed in EIR

The Villages of Lakeview EIR No. 471

3.5 Project Objectives

A clear statement of project objectives allows for the analysis of reasonable alternatives to the proposed project. The overall intent of THE VILLAGES OF LAKEVIEW is to provide high quality residential and commercial uses to serve existing and future residents of the Lakeview/Nuevo area of Riverside County.

The planning and development objectives for THE VILLAGES OF LAKEVIEW project are based upon Smart Growth Principles², which are endorsed by the Smart Growth Network. The Smart Growth Network is a network of private, public, and non-governmental partner organizations seeking to improve development practices. This network was formed in response to increasing community concerns about the need for new growth that would boost the economy, protect the environment and public health, and enhance community vitality. Partners within the Smart Growth Network include The United States Environmental Protection Agency, the National Resources Defense Council, the American Planning Association, The Trust for Public Land, and the Environmental Law Institute, among many others.

Smart Growth is the driving force behind the planning of THE VILLAGES OF LAKEVIEW. The following are the ten Smart Growth principles, which are intended to be met at a varying degree. Each Smart Growth Principle is cited below, followed by the project Objective(s), with the Expected Outcomes of the Objectives explained. For consistency of referencing, the numbering/lettering of the Principles and Objectives matches that of THE VILLAGES OF LAKEVIEW Specific Plan.

a. Principle: Provide a mix of land uses

1. Objective: To build upon the 2003 RCIP by leveraging the unusually large size of the property and fortuitous location adjacent to a Community and Environmental Transportation Acceptability Process (CETAP) major transportation corridor and develop a mixed-use community within a logical build-out timeframe where residents can live, play, shop, learn, and to the extent possible, work

Expected Outcome: A large property under a single ownership adjacent to a major transportation corridor – this extraordinary opportunity deserves an extraordinary community to be proposed. Of the 2,786 acres, the proposed community is approximately 10% mixed use, 38% residential, and 52% open space (conservation, parks, trails, earthen drainage channels, landscape setbacks, terrace slopes and open space), with the mixed-use Town Center Village centrally located creating easy access from the surrounding residential villages.

² Smart Growth Principles referenced from a Smart Growth Network publication, www.epa.gov/smartgrowth.

2. Objective: To leverage the shape and setting of the site and create a range of villages that support a variety of lifestyles within a mixed-use framework

Expected Outcome: The shape and setting affords the ability to create a range of villages. Land use within each village responds to: the land and its setting; existing adjacent uses and the need for buffers; the opportunity to meet housing needs at many life stages; the economic reality that new development must pay its own way; and the desire to create diverse, yet cohesive villages within a mixed-use framework. The planning process led to the identification of a maximum of 11,350 dwelling units and 500,000 square feet of commercial uses within seven villages.

b. Principle: Take advantage of compact building design

1. Objective: To maximize land use efficiency and conserve land on-site as envisioned in the MSHCP and CETAP programs

Expected Outcome: THE VILLAGES OF LAKEVIEW will employ compact building design to create a reduced development footprint so it could make significant contributions to conservation efforts through the Multiple Species Habitat Conservation Plan (MSHCP) and transportation efforts through CETAP, specifically Mid-County Parkway which is proposed along the Ramona Expressway alignment within this section. In doing so, THE VILLAGES OF LAKEVIEW is implementing the General Plan Population Growth Vision: *“New growth patterns no longer reflect a pattern of random sprawl. Rather, they follow a framework of transportation and open space corridors, with concentrations of development that fit into that framework. In other words, important open space and transportation corridors define growth areas.”* THE VILLAGES OF LAKEVIEW fits because it concentrates development along Ramona Expressway, contributes significant right-of-way to the Ramona Expressway corridor, and avoids habitat so it can make a significant contribution to the MSHCP.

2. Objective: To conserve a contiguous 900+ acre block of the Lakeview Mountains, to implement a portion of the MSHCP Proposed Constrained Linkage 20, and to avoid sensitive species/habitats and significant cultural resources

Expected Outcome: By utilizing compact building design at the community level, neighborhood level, and house level, more than half of the land will be open space of some sort, including significant buffers to the San Jacinto Wildlife Area, Lakeview Mountains, and existing community of Lakeview/Nuevo. Consequently, almost 1,000 acres of various habitats will be conserved and significant cultural resources are being avoided with buffers being provided.

c. Principle: Create a range of housing opportunities and choices

1. Objective: To leverage the single ownership and create a master plan, i.e. not conventional tract housing because “*one size does not fit all*”, that provides a variety of housing opportunities available to a variety of income levels and supports Riverside County efforts to provide a fair share of regional housing

Expected Outcome: Given the existing context – which includes the existing rural community and a large number of proposed ½-acre and 7,200-square foot lots – THE VILLAGES OF LAKEVIEW is planned to stretch the range of housing opportunities in the marketplace even further. It is a multigenerational community that creates housing opportunities at many life stages. Villages vary in character in order to support lifestyle choices: from entry level to luxury, for young families to active adult, in refined to informal settings. The village concept respects the existing community because it supports rural Lakeview/Nuevo as another choice, another village. Residents will be able to call the Lakeview/Nuevo community “home”, even though their housing needs change over time.

2. Objective: To offer a “green” housing choice and support reduced energy consumption within the houses built

Expected Outcome: A broad collection of practices, standards, measures, methods, procedures, techniques, and approaches will be provided. This broad collection is known as “Lakeview Green Design.” Among many things, it will offer potential homeowners the opportunity to choose a “green” home, which includes an energy conservation component.

d. Principle: Create walkable communities

1. Objective: To inspire healthy living and accommodate a pedestrian-friendly lifestyle

Expected Outcome: THE VILLAGES OF LAKEVIEW is walkable, with sidewalks separated from streets and trail connections at every edge, a 32-mile network of bicycle lanes, trails and paseos shall be provided to enable every possible experience: walking, hiking, biking, or equestrian; on-street or off-street; up the mountain or through the open space; from short loops on flat terrain to large loops providing up to 1,200’ inclines.

2. Objective: To grow a community of trees on-site and use potable water efficiently

Expected Outcome: Given the climate, shade is needed to encourage people to walk. As such, the project will be a community of trees—as many as

50,000 are possible. Recycled water shall be utilized to the extent possible. To stabilize the system, the project will provide a site for a recycled water tank. Drought tolerant landscaping will be used and turf will be used wisely. The 4-mile drainage channel system will be earthen, not lined with concrete, and eight miles of roadside swale will be vegetated, rather than concrete curb-and-gutter; in an effort to promote infiltration and groundwater recharge. A demonstration garden shall be incorporated into the Central Park or Greenbelt as a public outreach effort to inform and educate the community on California-appropriate landscape practices, including smart irrigation systems and point irrigation systems.

e. Principle: Foster distinctive, attractive communities with a strong sense of place

1. Objective: To develop an attractive community with a strong sense of place in the Lakeview/Nuevo area of Riverside County

Expected Outcome: Given the Riverside County location, the character of THE VILLAGES OF LAKEVIEW will be inspired by the evocative imagery that brought the first settlers to the area—images of early southern California such as shaded arcades, tree-lined drives, and architecture graced by the beauty of the natural environment as its backdrop. Within the community core is the Central Park—the social center of the community. With a library, public community center, sports park, other recreation facilities, and schools flanking either side, Central Park’s public plaza will be a bustling place. Through the use of these facilities, social infrastructure can be used to jump-start community involvement.

2. Objective: To inspire life-long learning

Expected Outcome: The concept of life-long learning will be promoted and provided throughout the community which goes hand-in-hand with the extra facilities provided, such as extra classrooms for pre-school, community rooms for after-school programs and weekend health clinics, and the public community center which could provide evening and weekend classes for on-going training.

f. Principle: Preserve open space, farmland, natural beauty, and critical environmental areas

1. Objective: To avoid, conserve, enhance and/or protect critical environmental areas both on site and adjacent to the project

Expected Outcome: The planning effort for THE VILLAGES OF LAKEVIEW reacted to the site’s existing natural setting. As a result, development of the proposed project enables: avoidance of direct impacts to a vernal pool and other wetlands; expansion of the San Jacinto River floodplain volume; a

minimum 500' buffer to the San Jacinto Wildlife Area to be established; natural storm water treatment systems to be built; quality of stormwater runoff to be enhanced; and almost 1,000 acres of various habitats to be conserved.

2. Objective: To inspire environmental stewardship

Expected Outcome: An environmental stewardship program will be provided. Its goal is to educate homeowners on the benefits of the environment and inspire them to protect it. Throughout the community, interpretive elements may be provided including signs and sample demonstrations.

g. Principle: Strengthen and direct development towards existing communities

1. Objective: To strengthen the existing Lakeview/Nuevo community by providing a library and public community center

Expected Outcome: The project will provide access to the general public to community facilities such as schools, libraries and a public community center; parks and open spaces; and retail shopping and employment opportunities. In addition, some existing residents will benefit from the installation of flood control facilities and a sanitary sewer system.

2. Objective: To protect the existing rural lifestyle adjacent to the site by supporting the Lakeview/Nuevo Design Guidelines

Expected Outcome: The land plan will provide buffers between rural and suburban uses, equestrian trails, and an equestrian park opportunity. Circulation will be designed to direct anticipated traffic to Ramona Expressway and off existing rural roads. The project supports the Lakeview/Nuevo Design Guidelines, a document that further protects the existing rural community.

h. Principle: Provide a variety of transportation choices

1. Objective: To provide residents with a hierarchy of transportation choices

Expected Outcome: While light rail does not directly connect to this project, THE VILLAGES OF LAKEVIEW will be a walkable community that is built for walking/hiking/biking first, mass transit second, and accommodate the automobile third. THE VILLAGES OF LAKEVIEW will coordinate transportation with local and regional agencies where possible in order to maximize integration of the project with local transportation planning and implementation efforts. These efforts include the possibility of extending the Riverside Transit Agency's Bus Rapid Transit System into the area and bus

connections to proposed Metrolink stations along the Perris Valley Line, which could provide residents access to Perris, March Air Reserve Base, University of California Riverside, and Riverside, Los Angeles and Orange counties. Bus stops within the community have been tentatively identified.

2. Objective: To encourage residents to use their cars less

Expected Outcome: The mixed-use Town Center Village will be designed to discourage the use of cars. The 32-mile network of bicycle lanes, trails and paseos leads to destinations such as the library, schools, parks, open space, and bus stops. THE VILLAGES OF LAKEVIEW shall provide an appropriately located Transit Center, which includes a bus stop and a park-and-ride lot to facilitate carpooling and/or use of public transportation. Future potential live/work units could encourage working from home. As a whole, these choices encourage residents to use their cars less.

- i. Principle: Make development decisions predictable, fair, and cost effective

1. Objective: To make development decisions predictable, fair, and cost effective for new development since economic reality causes new development to pay its own way

Expected Outcome: The Master Developer will participate in on-going regional planning efforts. These efforts will include the creation of new funding programs, such as a Community Facilities Fee Program and a Road & Bridge Benefit District. By planning a region for the long term, decisions will be predictable to present and future generations, fair to existing and proposed communities, and cost effective for new development.

- j. Principle: Encourage community and stakeholder collaboration in development decisions

1. Objective: To inspire community involvement through collaboration before, during, and after development

Expected Outcome: An on-going outreach program has been established and will continue to encourage collaboration with the local community of Lakeview/Nuevo, environmental community, Native American tribes, and education community. It is a program that has been and will be accessible and forthright to all stakeholders. Dozens of meetings have occurred and dozens more will occur. Fruits of the effort are evident. In 2004, Native American monitors representing multiple tribes participated in the archaeological testing fieldwork. In addition, this program is intended to assist with the, social infrastructure needed to jump-start community involvement.

3.6 Discretionary Actions for Which the DEIR will be Used

The following public entities and/or agencies may use the DEIR when considering the project or issuing permits:

Riverside County Planning Director/Department

- Implementation of the project through the approval of land use proposals including, but not limited to, divisions of land and plot plans.

Riverside County Planning Commission

- Recommendation to the Riverside County Board of Supervisors for Certification of the Final Environmental Impact Report for THE VILLAGES OF LAKEVIEW.
- Recommendation to the Riverside County Board of Supervisors regarding approval of Specific Plan No. 342, which includes the land use plan, development standards, design guidelines, and designation of planning areas associated with the development of the project.
- Recommendation to the Riverside County Board of Supervisors regarding approval of Change of Zone No. 07055 proposes a textual change to the project site's adopted specific plan zoning to bring it into conformance with the proposed revised land use plan.
- Implementation of the project through the approval of land use proposals including, but not limited to, parcel maps, subdivisions, plot plans, and use permits.
- Recommendation to the Riverside County Board of Supervisors regarding approval of General Plan Amendment No. 720 and circulation General Plan Amendment No. 721 which proposed amendments to the Land Use and Circulations of the General Plan associated with the development of the project.

Riverside County Board of Supervisors

- Adoption, by ordinance, of Change of Zone No. 07055 which proposes a textual change to the project site's adopted SP (Specific Plan) zoning to bring it into conformance with the proposed revised land use plan and the actual zoning map of the site which will also be adopted.
- Adoption of General Plan Amendment No. 720 and circulation General Plan Amendment No. 721 which proposed amendments to the Land Use and Circulations of the General Plan associated with the development of the project.
- Adoption of Specific Plan No. 342 which includes the land use plan, design guidelines, and designation of planning areas associated with the development of project.
- Certification of the Final Environmental Impact Report.
- Adoption of the Development Agreement 73 which ~~includes provisions of public improvements, requirements to dedicate land for parks and open space, and development fees.~~ will include but not be limited to provisions related to the construction of public improvements, requirements to dedicate land for parks, open space, conservation, and

transportation, as well as the potential payment of and/or credit for Development Agreement fees and other development related fees.

- Implementation of the project through the approval of land use proposals including, but not limited to, tract maps, parcel maps, tract maps, subdivisions, plot plans, and use permits.

Regional Water Quality Control Board

- Issuance of a Notice of Intent prior to construction operations related to National Pollutant Discharge Elimination System (NPDES) Construction Permit.
- Issuance of a water quality certification pursuant to Section 401 of the Clean Water Act in connection with issuance of a Section 404 Clean Water Act permit.

Riverside County Flood Control and Water Conservation District

- Approval of hydrology/storm water drainage system.
- Issuance of Encroachment permits and approval of facilities related to area drainage plan(s) and master drainage plan(s).

Metropolitan Water District

- Issuance of encroachment permits related to street crossings and trail improvements of the Aqueduct alignment.

U.S. Army Corps of Engineers

- Issuance of Section 404 permits under the Clean Water Act.

California Department of Fish and Game

- Issuance of permits under Section 1600 of the Fish and Game Code related to streambed alterations.

Eastern Municipal Water District

- Approval and construction of infrastructure (water and sewer) improvements.

Riverside County Department of Environmental Health

- Approval of water plans and specifications.
- Approval of sewer plans and specifications.
- Certification of septic tank system removals.
- Issuance of well abandonment permits.

Riverside County Transportation Department

- Issuance of Encroachment Permits.

4.0 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT AND NOP COMMENT LETTERS

The California Environmental Quality Act (CEQA) provides that an DEIR shall focus on all potentially significant effects created by the project onto the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. Effects dismissed in an Initial Study as insignificant and unlikely to occur need not be discussed further in the DEIR unless information inconsistent with the finding in the Initial Study is subsequently received.

4.1 EFFECTS FOUND NOT TO BE SIGNIFICANT DURING PREPARATION OF THE NOP

Section 21100 (c) of the Public Resources Code states that an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore, not discussed in detail in the EIR. Section 15128 of the State CEQA Guidelines adds, “Such a statement may be contained in an attached copy of an Initial Study.”

Please refer to the Initial Study for documentation of which potentially significant effects are not included in this DEIR. The Initial Study prepared for THE VILLAGES OF LAKEVIEW project (Appendix A) concluded that the proposed project would not result in significant impacts to the following issue areas or portions of those issue areas, as described below:

- **Aesthetics**

Lighting Impacts

In 1988, the County of Riverside adopted Ordinance No. 655 regulating light pollution. Ordinance No. 655 establishes standards to limit light leakage in order to reduce interference with nighttime astrological observation and research conducted at the Mount Palomar Observatory. In 2003, Ordinance No. 655 was updated and established two zones based on radial distance from the Mount Palomar Observatory, which is located in northern San Diego County. Zone A is defined as a circular area within a 15-mile radius of the observatory. Zone B includes the area between the 15-mile radius of Zone A and a circle with a 45-mile radius centered on the observatory. THE VILLAGES OF LAKEVIEW project site is located within 45 miles from the Mount Palomar Observatory and therefore, within Zone B of Mount Palomar Nighttime Lighting Policy.

At the time the Initial Study was prepared, it was thought that the project site was outside (beyond 30 miles) the jurisdiction of the Ordinance No. 655 boundary with regard to Mt. Palomar Observatory and therefore, the Initial Study did not identify this as an issue to be addressed in the DEIR. However, it was later discovered that the Zone B radius from the observatory had been extended from 30 miles to 45 miles and now includes the project site. Therefore, analysis in the DEIR will address potential significant effects of the project related the nighttime use of the Mt. Palomar Observatory.

- **Geology/Soils**

Surface Fault Rupture Impacts

Given the project's location in southern California, and the common occurrence of earthquake faults in the region, the project may experience strong seismic ground shaking from a local or regional earthquake of large magnitude. According to the Riverside County General Plan the project site is not located within either an Alquist-Priolo Earthquake Fault Zone or a County Fault Hazard Zone. According to a preliminary geotechnical investigation conducted by Leighton and Associates, Inc. in the project area, the dominant structural feature within this region is the active San Andreas transform system that consists of several northwest-trending, right-lateral, strike-slip faults. Northeast of the site is the northwest-dipping, active San Andreas fault. The San Jacinto Fault is located approximately 3 miles northeast of the site near the base of the San Jacinto Mountains. The northeast-dipping Casa Loma fault is approximately 2 miles east of the site at the base of the Badlands. Due to the distance of these faults, the risk of surface rupture of an earthquake fault is not expected to be a significant impact from development of the project site. Therefore, risk of rupture from earthquake faults will not be discussed further in the forthcoming DEIR.

Liquefaction Impacts

According to the Lakeview/Nuevo Area Plan, the project site is located on sediments with deep groundwater and low to moderate liquefaction susceptibility. A portion of the project site is located on sediments with a low to moderate susceptibility of liquefaction although no groundwater data has been collected in these areas. However, a Preliminary Geotechnical Investigation performed by Leighton and Associates, Inc. within the project area, determined that the potential for liquefaction and associated adverse effects within the site are low. Although the on-site sediments have been identified as susceptible to liquefaction, the likelihood of the groundwater returning to historic shallow depths is very low. Therefore, impacts are considered less than significant and this topic will not be discussed further in the forthcoming DEIR.

Ground Shaking Impacts

Given the project's location in southern California, and the common occurrence of earthquake faults in the region, the project may experience strong seismic ground shaking from a local or regional earthquake of large magnitude. However, the project will follow engineering and design parameters in accordance with the most recent edition of the California Building Codes (CBC) and/or the Structural Engineers Association of California parameters, as required in standard County conditions of approval. Meeting CBC codes will address issues such as how houses are constructed, how deep foundations have to be, how close to hillsides the houses can be, etc. Therefore, ground shaking events are expected to cause less than significant impacts to the project, as required in standard County conditions of approval and will not be addressed further in the forthcoming DEIR.

Other Geologic Hazards

Other geologic hazards include items such as volcanic activity, mudflows, and seiche. There are no active volcanoes in southern California, therefore this issue will not be discussed in this DEIR.

Mudflows occur when a moving mass of soil is made fluid by rain or melting snow. This occurs when vegetation is insufficient to hold soils in place. The steeper slopes on the project site are located in the Lakeview Mountains. The project proposes to retain these slopes in the existing vegetation as a part of the Conservation Areas required for biological resources, therefore mudflows are unlikely.

The closest water bodies capable of generating a seiche (a standing wave in an enclosed or partially enclosed body of water), are Lake Perris and Mystic Lake, both of which are located approximately two miles from the closest portion of the project site, respectively. Any seiche generated by seismic activity would be unlikely to reach the project area.

Wind Erosion Impacts

The project site is not located within the boundaries of Riverside County's Agricultural Dust Control Areas, as established by Ordinance No. 484. The Ordinance prohibits the disturbance of land without sufficient protection to prevent the soil from being eroded by wind, and blown onto a public road(s) or other public or private property.

The project site is located within an area with a Moderate Wind Erodibility Rating, as outlined in the Wind Erosion Susceptibility Map of the Safety Element of the RCIP General Plan. All grading on the project site will be regulated by existing regulations, such as the NPDES construction storm water permit, to use Best Management Practices (BMPs) to prevent wind erosion. Examples of BMPs incorporated on the site could be frequent watering and use of soil stabilizers. Use of these BMPs will reduce to less than significant any wind erosion and/or blowsand impacts caused by project implementation. Therefore, wind erosion and blowsand will not be addressed further in the forthcoming DEIR.

- **Hazards/Hazardous Materials**

Airport Impacts

The proposed project site is not located within an airport influence area. The closest airports to the project site are the March Air Reserve Base (approximately 6.5 miles west of the project site) and the Hemet-Ryan Airport (approximately 6–7 miles south of the project site), both located in Riverside County, to the northwest and southwest, respectively. The proposed project is not located within the March Air Reserve Base Influence Area or the Hemet-Ryan Influence Area as outlined in the Lakeview/Nuevo Area Plan. Given the distance from each of these airports, the proposed project would not be subject to Airport Land Use Commission review. The project site is not within two miles of a public airport or private airstrip and is not located under the flight path of planes traveling to/from airports further from the site.

Based on this information, the project will have no impacts relative to airports and will not be addressed in the forthcoming DEIR.

- **Mineral Resources**

Local and State Valuable Mineral Resource Impacts

The project site may contain a known mineral resource but is not located within an area that has been classified or designated as a mineral resource area by the State Board of Mining and Geology. According to the RCIP General Plan, there are no mines or mineral resource areas located near the project site. There are no known active mines on or near the project site. Therefore, no impacts are expected by the project to mineral resources and this topic will not be discussed further in the forthcoming DEIR.

The project site is not located within an area of locally-important mineral resource recovery delineated in the RCIP General Plan. The project site is not located within an area that has been classified or designated as a mineral resource area by the RCIP General Plan. Therefore, no impacts are expected by the project to mineral resources and this topic will not be discussed further in the forthcoming DEIR.

Located Near Existing Mining Impacts

The project site will not be an incompatible land use to a state-classified or designated area or existing surface mine. According to the RCIP General Plan, there are no mines or mineral resource areas located near the project site. Therefore, no impacts are expected by the project to mineral resources and this topic will not be discussed further in the forthcoming DEIR.

Existing Mine or Quarry Impacts

The project site is not located in an area of proposed or existing quarries or mines but may contain abandoned mines. Any abandoned mines located within the developable footprint of the proposed project will be filled/developed over and would not expose people or property in the project area to these hazards. Less than significant impacts are expected regarding mineral resource hazards and this topic will not be discussed further in the forthcoming DEIR.

- **Noise**

Airport Noise Impacts

The proposed project site is not located within an airport land use plan or within two miles of a public airport that would adversely impact people residing or working in the project area. The nearest airport is the March Air Reserve Base located approximately 6.5 miles to the northwest. Therefore, the project will not expose people residing or working in the project area to excessive noise levels from airplanes, and this topic will not be addressed further in the forthcoming DEIR.

The project site is not located within the vicinity of a private airstrip and therefore would not expose people residing or working in the project area to excessive noise levels. Therefore, the project site will not expose people residing or working in the project area to excessive noise levels from a private airstrip.

Railroad Noise Impacts

There are no rail lines located in the project area. Therefore, railroad noise is considered to not impact the project site and will not be discussed further in the forthcoming DEIR.

Other Noise Impacts

There are no other unique noise sources in the project area that would impact the proposed project.

- **Population/Housing**

Displacement Impacts

The proposed project development will not displace substantial numbers of existing housing which would require the construction of replacement housing. The proposed project is primarily located on unoccupied property. Impacts are considered less than significant and will not be addressed further in the forthcoming DEIR.

Creating Housing Demand Impacts

The proposed project will result in the construction of over 11,000 additional residential dwelling units within the Lakeview/Nuevo area. Rather than creating a demand for additional housing, the project will be creating additional homes in the area. This issue will not be addressed in the forthcoming DEIR.

County Redevelopment Area Impacts

The project site is partially located adjacent to a Riverside County Redevelopment Project Area known as Area 5-1968, Lakeview Community Sub-Area. The Lakeview Community Sub-Area is comprised of about 100 acres, located at the Ramona Expressway and Hansen Avenue. The project area primarily contains commercial uses fronting on Ramona Expressway, but also includes a few residential uses and some agriculturally-based industry. Vacant and underutilized properties are scattered among developed properties. The Redevelopment Agency public improvement objectives for this sub-area include street reconstruction, traffic signals, school facilities, streetlights, library, and flood control improvements. In addition, the Redevelopment Agency will be taking part in programs to upgrade and increase the number of housing units for low- and moderate-income families in the vicinity. The redevelopment project will have a positive impact on the Lakeview area.

Development of THE VILLAGES OF LAKEVIEW Specific Plan located adjacent to the Lakeview Community Sub-Area is planned as light industrial and residential uses and is consistent with the types of development encouraged by the redevelopment plan as well as with the RCIP General Plan. Therefore, there are no adverse impacts from the project on the Redevelopment Area and the forthcoming DEIR will not address this issue.

- **Transportation/Traffic**

Parking Impacts

The proposed specific plan will include parking standards in accordance with County requirements for residential, commercial, and industrial development, therefore, no adverse impacts on parking are anticipated. This issue will not be addressed in the forthcoming DEIR.

Air Traffic Impacts

The closest airport is March Air Reserve Base which is located more than 6.5 miles from the site and the site is not located beneath the flight pattern. The proposed project does not involve air traffic or local airports and therefore, air traffic will not be addressed in the forthcoming DEIR.

Waterborne and Rail Traffic Impacts

The proposed project site development will not alter waterborne, rail, or air traffic, therefore, no impacts will result to waterborne, rail, or air traffic, and these issues will not be addressed in the forthcoming DEIR.

Hazardous Road Design Impacts

The proposed project development involves the conversion of rural residential and agricultural land uses to a planned community with a mix of residential, commercial, and light industrial land uses. The specific plan will include a circulation system for the new roads that are proposed to be constructed as part of the project. Roads will be designed to satisfy County standards. The roads in the project vicinity are generally straight and do not have design feature hazards such as curves such that the project would substantially increase these hazards. Therefore, although the DEIR will analyze the project's impact on circulation and identify proposed circulation system improvements, the specific issue of existing hazardous design features will not be addressed in the forthcoming DEIR.

Emergency Access Impacts

Development of the proposed project site will improve emergency access by completing improved road segments in the project area. The project site will be developed per County codes, standard conditions of approval, and permits related to emergency access. This issue will not be addressed in the forthcoming DEIR.

- **Utilities**

Solid Waste Impacts

The County of Riverside General Plan policies regarding solid waste management for new developments seek to ensure adequate capacity exists in a sanitary disposal site within a reasonable distance and that on-site collection occurs at least once a week for residential developments. In addition, state law (AB 939) required the County's waste management plan to include a 50 percent reduction in solid waste by January 1, 2000. The project will comply with all regulatory requirements regarding solid waste. When the Initial Study was prepared, it was identified that this issue would not be addressed in the forthcoming DEIR. However, a comment letter received from County Solid Waste Management Department identifies items which must be addressed in the DEIR related to solid waste, so this issue will be discussed.

4.2 NOP COMMENT LETTERS

The public review period for the NOP/Initial Study began on July 21, 2006 and ended on August 21, 2006. The following is a list of all those entities which commented on the NOP/Initial Study and a brief summary of the issues raised. These letters can be found in their entirety in Appendix A; they are numbered 1 through 48 and are presented consecutively in chronological order by date. The letters in Appendix A are annotated in the margin with the primary location(s) in the DEIR where the comment/issue is addressed. An issue/comment may be addressed in several areas of the document, so only the primary locations are annotated.

Public Agencies and Organizations

- **State Clearinghouse** 7/21/06 – Standard cover letter to state agencies; documented receipt of the NOP and the public review period. No issues to be addressed in DEIR. (*Letter No. 1*)
- **South Coast Air Quality Management District (SCAQMD)** 7/27/06 – SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the DEIR. (*Letter No. 3*)
- **Val Verde Unified School District** 7/31/06 – The District wants it's students health and welfare to be kept in mind, to be kept apprised of traffic flow changes near its schools, and identifies fees required. The project site is not located within the Val Verde Unified School District so fees will not be paid to that district. The District will be kept apprised of these issues through continued inclusion in the CEQA process. (*Letter No. 4*)
- **U.S. Army Corps of Engineers (ACOE)** 8/1/06 – The ACOE's comments are regarding potential requirements of a U.S. Army Corps of Engineer's Section 404 permit which is required for the discharge of dredged or fill material into, including any redeposit of dredged material within, "waters of the United States" and adjacent wetlands pursuant to Section 404 of the Clean Water Act of 1972. (*Letter No. 5*)
- **Natural Resources Conservation Service (NRCS)** 8/8/06 – The letter requests analysis and additional information in the DEIR regarding agriculture, soils, flood plain, scenic highways,

trails, bikeways, Mystic Lake/Lakeview Mountains Corridor, storm water runoff/water quality, and protection of San Jacinto Wildlife area. (*Letter No. 9*)

- **Native American Heritage Commission (NAHC)** 8/8/06 – This letter recommended contacting the appropriate California Historic Resources Information Center (IC) to conduct a record search of the property and all appropriate follow-up work related to cultural resources, if recommended by the IC. (*Letter No. 10*)
- **Southern California Association of Governments (SCAG)** 8/10/06 – This letter identifies the project as “regionally significant” and states current state law which requires that the DEIR address how the proposed project is consistent/inconsistent with general and regional plans. It also requests the DEIR state how the proposed project will or will not support regional plans and list each applicable policy. (*Letter No. 16*)
- **Eastern Municipal Water District (EMWD)** – This letter states that the DEIR must address potential impacts to their existing facilities and rights-of-way within the boundaries of the project. EMWD also requests that any potential impacts to these facilities or rights-of-way be identified and analyzed in the DEIR. (*Letter No. 18*)
- **Riverside County Flood Control and Water Conservation District** 8/14/06 – This letter requests that the DEIR should evaluate any potential impacts to the Master Drainage Plan (MDP) facilities. (*Letter No. 19*)
- **California Department of Parks and Recreation** 8/15/06 – This letter request that analysis be done on the demand on Lake Perris Drive and the Bernasconi Drive entrances and the Lake Perris State Recreation Area as a whole. Also, the department requests that the DEIR explore pedestrian and bicycle connection points to the Lake Perris State Recreation Area. (*Letter No. 20*)
- **Department of Public Health** 8/16/06 – This letter requests that a noise study be prepared to address requirements for determining and mitigating traffic noise impacts to residential structures. (*Letter No. 22*)
- **Department of Toxic Substances (DTSC)** 8/17/06 – This letter requests that the DEIR identify and determine whether current or historic uses at the project site may have resulted in any release of hazardous materials, and that a Phase I Assessment be completed for the project site. (*Letter No. 27*)
- **U.S. Fish and Wildlife Service (USFWS)/California Department of Fish and Game (CDFG)** 8/21/06 – This letter requests that the DEIR should include a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, and specifies measures to offset such impacts. Also, a discussion of impacts associated with increased lighting, noise, human activity, changes in drainage patterns, changes in water volume, velocity and quality, soil erosion, and/or sedimentation in streams and water courses on or near the project site, with mitigation measures proposed to alleviate such impacts. (*Letter No. 40*)
- **City of San Jacinto** 8/21/06 – This letter mentions that the City agrees that analyses are needed of all thresholds listed in the initial study, with emphasis on hydrology and water quality, land use/planning, and traffic/transportation. (*Letter No. 41*)

- **Department of the Air Force** 9/11/06 – This letter states that the project does not occupy any area impacted by current aircraft noise, flight paths, or any zones related to localized aircraft. (*Letter No. 45*)
- **Riverside County Waste Management Department** 9/13/06 – This letter requests that the DEIR include the projected amount of waste generated by the project, using an appropriate waste generation factor for construction activities and the project's types of land uses. The department is concerned about the quantity of construction and demolition waste that could be generated by the project and how the waste will be disposed. Because of this, the Department recommends mitigation measures. (*Letter No. 46*)

Native American Tribes

- **Pechanga Indian Reservation** 8/25/06 – This letter requests that Pechanga be involved with any project monitoring regarding cultural resources and proposes several mitigation measures be used in the DEIR. (*Letter No. 43*)

Nonprofit Organizations

- **Friends of Northern San Jacinto Valley** 7/24/06 – This group requests that notices be available at the Nuview Library. The County's distribution list has been updated to include the Nuview Library. (*Letter No. 2*)
- **Center for Biological Diversity** 8/5/06 – The Center requested that the DEIR consider direct and cumulative impacts to sensitive habitats including impacts associated with the establishment of fuel modification zones, un-permitted recreational activities, the introduction of non-native plants, the introduction of pets, lighting, noise, and the loss and disruption of essential habitat due to edge effects. They requested that the DEIR identify and evaluate impacts to species and ecosystems from invasive exotic species. The document must also consider direct and cumulative impacts to air quality, traffic, water quality and supply. The Center requests that the DEIR must also consider a range of alternatives, adequately describe the environmental baseline, and growth-inducing impacts. (*Letter No. 6*)
- **Friends of Northern San Jacinto Valley** 8/7/06 – The organization commented on the location and time of the Public Scoping Meeting and requested analysis for Greenhouse Gas reduction, an expansion of the project description, and additional analysis all of the DEIR sections. (*Letter No. 7*)
- **San Jacinto Valley Wetlands Foundation** 8/9/06 – This letter expresses concern with development near the San Jacinto Wildlife Area—especially about any development north of Ramona Expressway. (*Letter No. 13*)
- **California Waterfowl Association** 8/18/06 – This Association requests that the DEIR address the impacts to resident and migratory wildlife, as well as the loss and/or modification of their habitats through direct and indirect impacts. In addition, the Association strongly recommends that THE VILLAGES OF LAKEVIEW DEIR include a project alternative analysis which calls for no urban development north of the Ramona Expressway with those lands being instead dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 36*)

- **Sierra Club, Moreno Valley Group, San Geronio Chapter** 8/18/06 – This letter requests: 1) that the DEIR explain what impacts to the SJWA were mitigated by the HANS process, 2) provide an analysis of where the population will find employment, 3) describe the impacts to highways 215, 60, and 91, and 4) describe impacts to Ramona Expressway, and if no improvements are done to the road, address lighting issues and overall cumulative effects as a result of project development. (*Letter No. 38*)
- **San Bernardino Valley Audubon Society** 8/19/06 – This letter expresses opposition to the project because of the potential effects to wildlife currently present in the area. The letter also requests an explanation of the edge effects of the project, and address light pollution and cumulative impacts. Requests alternative with no development north of Ramona Expressway. (*Letter No. 39*)

Other Interested Parties

- **Michael McKibben, Ph.D.** 8/7/06 – This letter requested analysis of Alquist-Priolo Earthquake Fault Zones, Liquefaction Potential Zones, and ground shaking. (*Letter No. 8*)
- **Christina Greutink** 8/9/06 – This letter expresses dislike in the project development and requests analysis of the impacts from domestic pets, noise, and vehicle emissions, the potential effect of off-road vehicles, and limitations on hunting, all of which will affect the San Jacinto Wildlife Area. (*Letter No. 11*)
- **Mike Eberhard** 8/9/06 – The letter expressed concern about high-density development near the San Jacinto Wildlife Area. (*Letter No. 12*)
- **Curt Perry** 8/10/06 – This letter expresses concern about effects from development to the San Jacinto Wildlife Area. No specific environmental issues were raised. (*Letter No. 14*)
- **HCP National (Bill Dyer)** 8/10/06 – This letter expresses concern about effects from development to the San Jacinto Wildlife Area and on hunting activities. (*Letter No. 15*)
- **Joseph Fass** 8/11/06 – This letter expresses concern with development near the San Jacinto Wildlife Area and with keeping the natural state of the land as open space. (*Letter No. 17*)
- **San Jacinto Partners (Brian D. Gallagher)** 8/15/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 21*)
- **Wildon Associates (Ronald Beck)** 8/16/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 23*)

- **San Jacinto Partners (Matt Reno, Reno Contractors)** 8/16/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 24*)
- **Wildon Associates (Thomas K. Olson)** 8/16/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 25*)
- **Joseph A. Fass** 8/16/06 – This letter expresses opposition to the project. (*Letter No. 26*)
- **Wildon Associates (Walter Fegley)** 8/17/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 28*)
- **Wildon Associates (Lawrence Andrews)** 8/17/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 29*)
- **Wildon Associates (Stan Perry)** 8/17/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 30*)
- **Wildon Associates (Gary L. Barringer)** 8/17/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 31*)

- **Wildon Associates (Mike Lewis)** 8/17/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 32*)
- **Wildon Associates (Joseph Fass)** 8/17/06 – Letter N. 33 expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. Letter No. 34 identifies additional items that should be addressed in the DEIR such as lighting issues, historic resources, hazards and hazardous materials, airports, population and housing, transportation and traffic, and utilities. (*Letter Nos. 33 and 34*)
- **Tom Paulek** 8/18/06 – This letter requests that the DEIR alternative analysis should therefore examine a specific project alternative calling for no urban development north of the Ramona Expressway. Also that the cumulative impact analysis for TVOL project therefore needs to be comprehensive and provide a reasoned analysis of the full extent of foreseeable impacts to be visited upon the SJWA, and any impacts to the hydrology of the San Jacinto River. (*Letter No. 35*)
- **James Threadgill** 8/18/06 – This letter expresses opposition to the project due to negative impacts from a loss of habitat, an effect on migratory birds, and the previous investment of public dollars, and requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 37*)
- **Jan R. Gable** 8/22/06 – This letter expresses concern with the impacts to the San Jacinto Wildlife Area from project development, health dangers to nearby residents, and school children from the San Jacinto Wildlife Area, and from potential alterations within the 100-year flood plain. This letter also requests that the DEIR include a project alternative analysis calling for no urban development north of the Ramona Expressway with those lands being dedicated in perpetuity to agriculture and/or wildlife conservation. (*Letter No. 42*)
- **Terry and Robert Prince** 9/9/06 and 9/15/06 – Letter No. 44 expresses opposition to the project and expresses a desire to preserve open space. Letter No. 45 was an additional email wanting a large buffer around the SJWA to be considered to provide protection and expressed a need to save and protect the SJWA with a sufficient water supply. (*Letter Nos. 44 and 47*)
- **Kaye Hampton** 9/21/06 – This letter expresses disapproval of project development and requests information about the water supply, the loss of agriculture land, potential fire hazards, and traffic. (*Letter No. 48*)

5.0 ENVIRONMENTAL IMPACT ANALYSIS

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

5.1 AESTHETICS

The focus of the following analysis is related to the potential impacts associated with the loss or damage to any unique features of the site, the obstruction of any prominent vistas or views, and the issue of whether the project will be an aesthetically offensive site open to public view, as determined in the Initial Study prepared for the proposed project (see Appendix A (CD #1)). At the time the Initial Study was prepared, it was thought that the project site was outside the jurisdiction of the Ordinance No. 655 boundary with regard to Mt. Palomar Observatory. However, it was later discovered that the Zone B radius from the observatory had been extended from 30 miles to 45 miles and it now includes the project site. Therefore, this analysis will also address the nighttime use of the Mt. Palomar Observatory.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- County of Riverside, *County of Riverside General Plan, Multipurpose Open Space Element*, October 7, 2003. (Available at <http://www.rctlma.org/genplan/content/gp/chapter05.html>)
- County of Riverside, *County of Riverside General Plan, Lakeview/Nuevo Area Plan*, October 2003. (Available at <http://www.rctlma.org/genplan/content/ap2/inap.html>)
- County of Riverside, *Mount Palomar Observatory, Ordinance No. 655*, 1988. (Available at <http://www.clerkoftheboard.co.riverside.ca.us/ords/600/655.htm>)
- Caltrans, *California Scenic Highway Program*, April 20, 2006. (Available at http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm)

Setting

The project is nestled within a small valley between the Lakeview Mountains and San Jacinto River, and is adjacent to the San Jacinto Wildlife Area. Located in an unincorporated area of Riverside County known as the Lakeview/Nuevo community, the project is situated approximately six miles east of the city of Perris and directly west of the San Jacinto city limits. Existing land uses on site include a chicken ranch, Metropolitan Water District (MWD) aqueduct and basin, a thoroughbred farm, an abandoned RV park, and additional farmland. The Ramona Expressway extends east/west through the project, separating the project into two pieces, with a smaller portion north of Ramona Expressway, and the majority of the project area south of Ramona Expressway.

The Ramona Expressway is a County Eligible Scenic Highway in the Lakeview/Nuevo Area Plan. California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The state laws governing the Scenic Highway Program

are found in the Streets and Highways Code, Sections 260 through 263. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. County highways that have outstanding scenic qualities are considered eligible and do not require legislation. To receive official designation, the county must follow the same process required for official designation of state scenic highways. The status of a proposed state scenic highway changes from eligible to officially designated when the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a Scenic Highway.

When a city or county nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. Scenic corridors consist of land that is visible from the highway right of way, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. The city or county must also adopt ordinances, zoning and/or planning policies to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. They should be written in sufficient detail to avoid broad discretionary interpretation and demonstrate a concise strategy to effectively maintain the scenic character of the corridor. These ordinances and/or policies make up the Corridor Protection Program.

The Ramona Expressway serves as a major entrance to Lake Perris, one of the County's most important recreation areas. Views afforded travelers on the Ramona Expressway, and local residents living adjacent to the project site, include the Lakeview Mountains, Bernasconi Hills, the San Jacinto River, the Mystic Lake corridor, the San Jacinto Wildlife area, and agricultural land, according to the Lakeview/Nuevo Area Plan (**Figure 5.1-1, Scenic Resources/Physical Features**). The Ramona Expressway provides a link to the Pines-to-Palms Highway (Highway 74), which is a State Designated Scenic Highway located south of the Lakeview Mountains and the project area. Long-range views from the highway and project vicinity include Mt. San Jacinto and Mt. San Gorgonio. The proposed project will be located on both sides of the Ramona Expressway and may affect the aesthetic value of this corridor, or may affect views currently afforded people from public roads or trails adjacent to the site.

There is a possibility that the Ramona Expressway will be realigned in the vicinity of the proposed project. This possible realignment is northerly of the existing alignment, and is called the Mid County Parkway Project. The Mid County Parkway is a proposed 32-mile transportation corridor that will relieve traffic congestion for east-west travel in western Riverside County between the San Jacinto and Corona areas and help address future transportation needs through 2035.

The proposed corridor was identified as a part of the Riverside County Integrated Project transportation element, called the Community and Environmental Transportation Acceptability Process (CETAP), a region-wide transportation and environmental planning project undertaken over several years by the Riverside County Transportation Commission (RCTC) and the County of Riverside. The Project determined that a corridor in the vicinity of Cajalco Road in the west and Ramona Expressway in the east would significantly reduce congestion, improve traffic flow,

and reduce travel times on I-215, SR 91, SR 74, and SR 60. Currently, an environmental document, an EIR/EIS, is being prepared to analyze all environmental impacts, including aesthetic impacts from the Mid County Parkway Project. For this reason, the following discussions and analysis will be based on the existing alignment of Ramona Expressway.

In 1988, the County of Riverside adopted Ordinance No. 655 regulating light pollution, and in 2003 Ordinance No. 655 was amended to establish standards to limit light leakage in order to reduce interference with nighttime astrological observation and research conducted at the Mount Palomar Observatory. Ordinance No. 655 established two zones based on radial distance from the Mount Palomar Observatory, which is located in northern San Diego County. Zone A is defined as a circular area within a 15-mile radius of the observatory. Zone B includes the area between the 15-mile radius of Zone A and a circle with a 45-mile radius centered on the observatory. THE VILLAGES OF LAKEVIEW project site is located within Zone B of Mount Palomar Nighttime Lighting Policy. See **Figure 5.1-2, Mt. Palomar Nighttime Lighting Zones**.

Specific scenic resources located on the proposed project site vary dramatically throughout the project boundary. Pursuant to CEQA, scenic resources include, but are not limited to, trees, rock outcroppings and unique or landmark features, and scenic vistas or views open to the public. Each area of the site is described below with respect to its on-site scenic resources. The locations from which the referenced photographs were taken are shown on **Figure 5.1.3, Photograph Key Map**.

The project area located north of the Ramona Expressway is characterized by flat, open terrain. Scenic views from this area are afforded to the San Jacinto River, Bernasconi Hills, and San Jacinto Wildlife area, with which this area shares a mutual boundary. Views looking north/northwest across this area are shown in **Figure 5.1-4, Northerly View from Magnolia Ave./Reservoir Ave. (Photo 13 Panorama)**. From some portions of this northern project area and during some times of year, Mystic Lake is also visible. A windrow of Eucalyptus trees is located in the western half this portion of the site and five houses were formerly located along the east side of Davis Road which included ornamental landscaping and large trees, but no other unique scenic features exist within the boundaries of the site located north of Ramona Expressway.

South of and immediately adjacent to the Ramona Expressway, existing uses that are not considered scenic resources include such uses as the Nutrilite manufacturing facility, a chicken ranch, some existing commercial uses, and the Metropolitan Water District (MWD) aqueduct and basin. This area includes some agricultural land which is flat and open, so views of adjacent mountains from the public roads are maintained. **Figure 5.1-5, Southerly View from Near Ramona Expressway/3rd Street (Photo 17 Panorama)** looks across this area toward the Lakeview Mountains. **Figure 5.1-6, Easterly View from Northwest Corner of MWD Basin (Photo 4)** shows the condition of the existing windrow of trees which helps screen the MWD Basin. The windrow is not in good condition and no unique scenic features exist within this area.

Land south of the MWD aqueduct and north of the Lakeview Mountains at the eastern end of the project site contains open fields and foothills. This eastern area of the project site is characterized by generally flat, open terrain rising into two small “canyons” which rise up into the foothills of

the Lakeview Mountains. Views of the Lakeview Mountains are immediate and to the south. Northerly vistas from the upper elevations of this area include Mystic Lake, Bernasconi Hills, and the San Bernardino Mountains in the distance. No unique scenic features exist within this portion of the project site (**Figure 5.1-7, Northerly View from Eastern Foothills of the Project Site (Photo 19 Panorama)**). The foreground setting and long-range views from this location will be preserved by a ~~4,000~~-1,500-foot wide wildlife corridor to be located between the Lakeview Mountains and Ramona Expressway west of Bridge Street.

The southeastern portion of the project is composed of the Lakeview Mountains. The mountains are an important unique local scenic resource dotted with picturesque rock outcroppings. Slopes of the Lakeview Mountains are over 25 percent. This zone is proposed to be preserved as a part of the project. Existing trails traverse this area and views are afforded of the surrounding region. As this area will be preserved and trails retained with public access, the views will be maintained (**Figure 5.1-8, Northerly View from Lakeview Mountains (Photo 20)**).

The remainder of the project located south of the MWD aqueduct abuts the Lakeview Mountains to the southeast and the local rural communities of Lakeview/Nuevo to the south and west. It includes a portion of the chicken ranch, agricultural fields, and a thoroughbred farm. The mature trees, pastures and white fencing of the thoroughbred farm provides foreground views of a rural pastoral nature from existing Hansen Avenue and the western end of Wolfskill Avenue adjacent to the project site (**Figure 5.1-9, Thoroughbred Farm from Hansen Avenue (Photo 8 Panorama)**). The mature trees, however, block some long-distance views of mountains in the vicinity. The thoroughbred farm may be considered a scenic resource to the local Lakeview/Nuevo community, however, it is not a natural resource but rather a business that could be closed down with or without development of the proposed project. The mature trees may be considered a unique local scenic resource. THE VILLAGES OF LAKEVIEW Specific Plan proposes preservation, if possible, of many of these mature trees through incorporation into a future park. Otherwise, no unique scenic features exist within this project area.

Scenic views of Mystic Lake and the Lakeview Mountains exist from the public roads south of the project area. **Figures 5.1-10, Views North and East from Wolfskill Avenue and Poppy Road (Photos 11 Panorama and 18)**, show the extent of these public views of scenic resources. Public views exist between homes located on Mike Lane, as shown in **Figure 5.1-11, Northeasterly View from Mike Lane (Photo 12 Panorama)**.

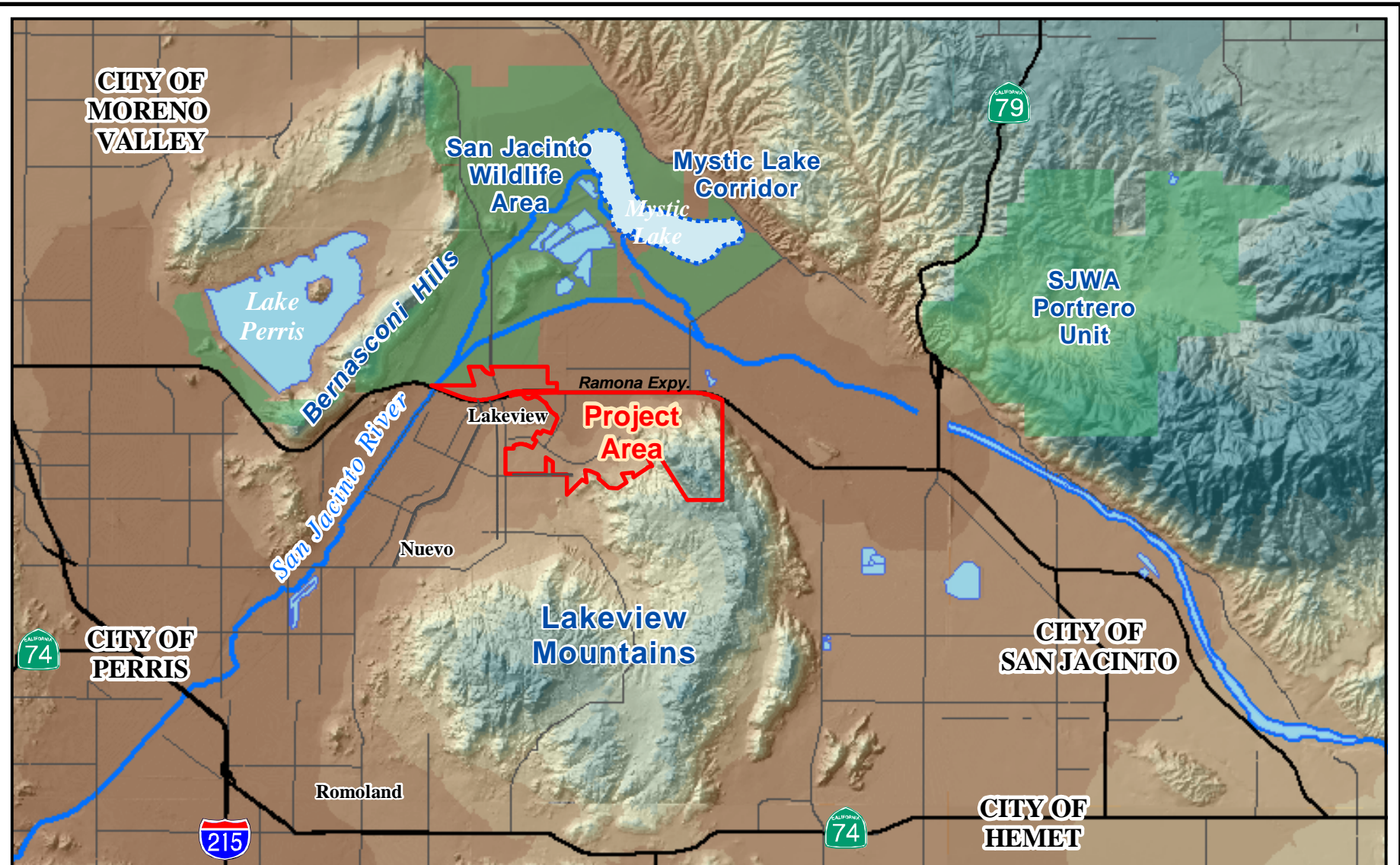
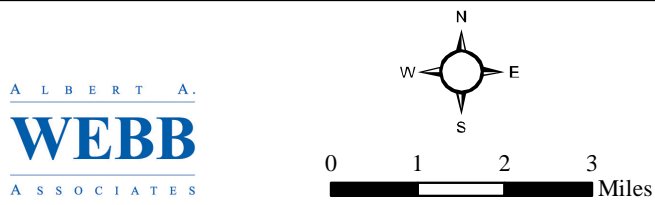


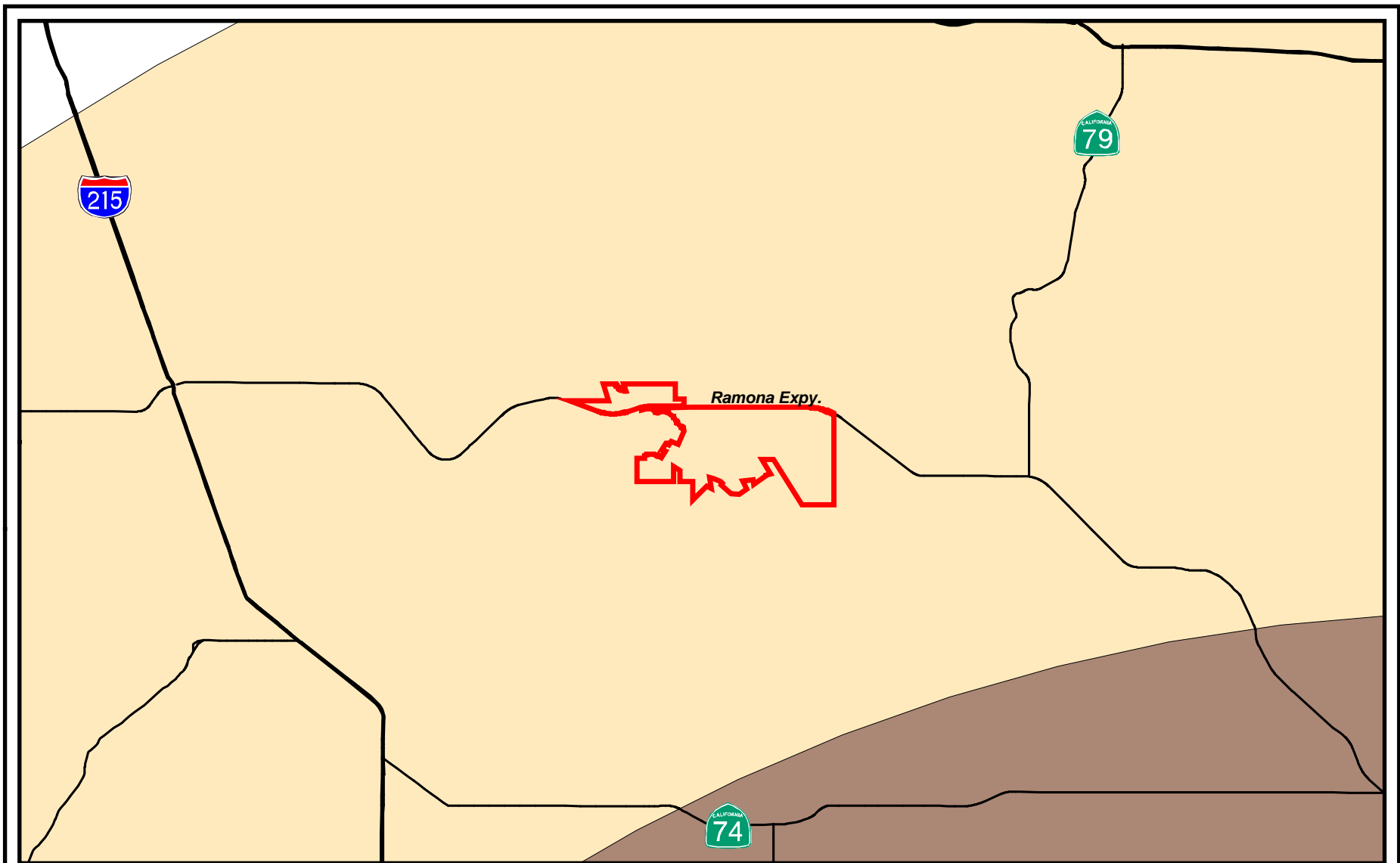
Figure 5.1-1

Scenic Resources/Physical Features

The Villages of Lakeview EIR No. 471

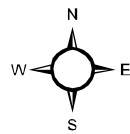


ALBERT A.
WEBB
ASSOCIATES



Source: County of Riverside GIS, 2003.

ALBERT A.
WEBB
ASSOCIATES



0 1 2 3
Miles

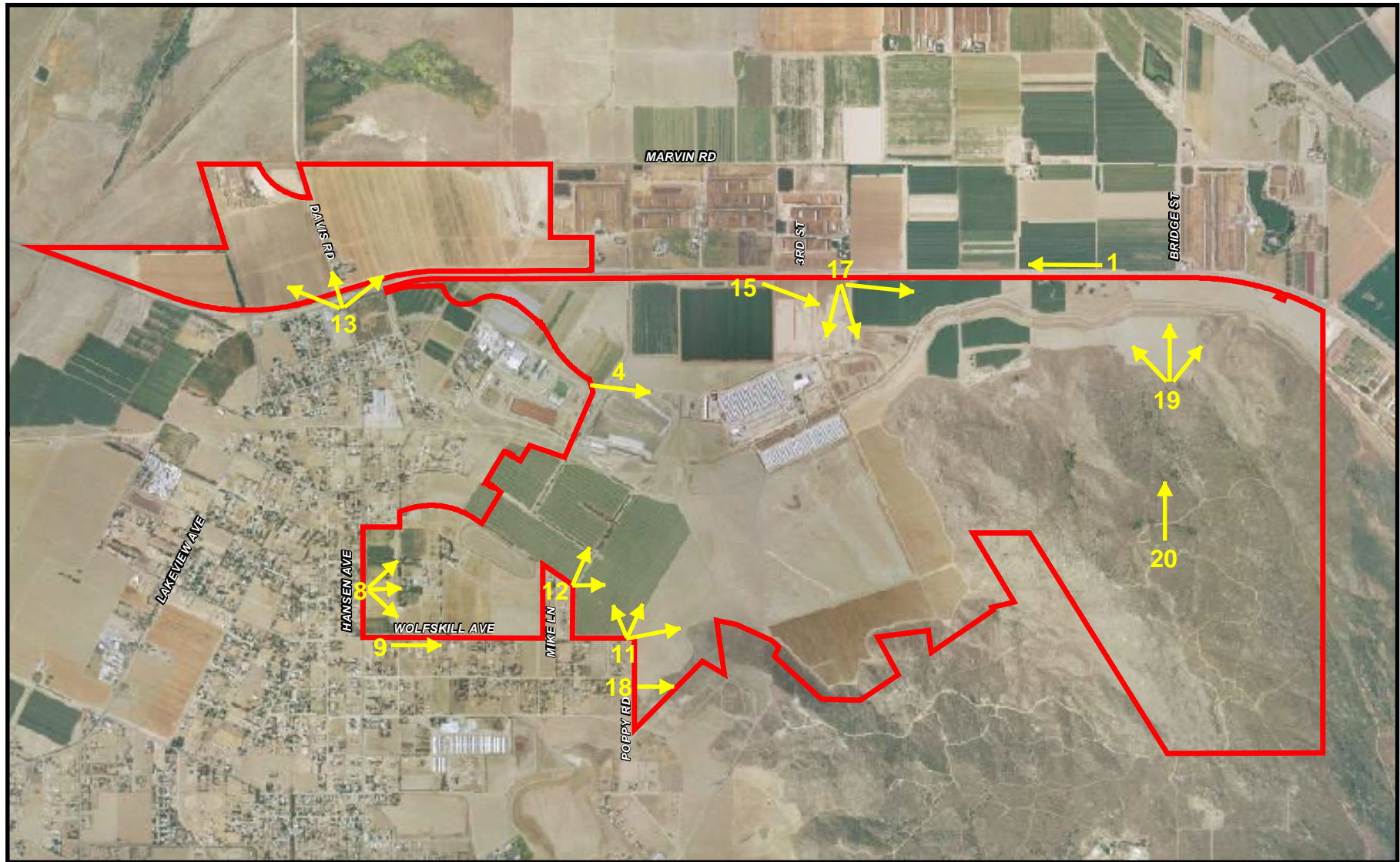
LEGEND

- Project Boundary
- Zone A (30 miles)
- Zone B (45 miles)

Figure 5.1-2

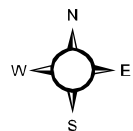
Mt. Palomar Nighttime Lighting Zones

The Villages of Lakeview EIR No. 471



Sources: AirPhoto USA, April 2007;
AA Webb Assoc. 2006.

A L B E R T A .
WEBB
A S S O C I A T E S



0 1,000 2,000 3,000
Feet

Figure 5.1-3

Photograph Key Map

The Villages of Lakeview EIR No. 471



Source: AA Webb Assoc., May 2006.

Figure 5.1-4



Northerly View from Magnolia Ave./
Reservoir Ave. (Photo 13, Panorama)

The Villages of Lakeview EIR No. 471



Source: AA Webb Assoc., May 2006.

Figure 5.1-5

Southerly View from Near Ramona Expressway/
3rd Street (Photo 17 Panorama)

The Villages of Lakeview EIR No. 471

A L B E R T A .
WEBB
A S S O C I A T E S



Source: AA Webb Assoc., May 2006.

Figure 5.1-6

Easterly View from Northwest Corner
of MWD Basin (Photo 4)

The Villages of Lakeview EIR No. 471



Source: AA Webb Assoc., May 2006.

Figure 5.1-7

Northerly View from Eastern Foothills of the Project Site
(Photo 19 Panorama)

The Villages of Lakeview EIR No. 471





Source: AA Webb Assoc., May 2006.

Figure 5.1-8

Northerly View from Lakeview Mountains
(Photo 20)

The Villages of Lakeview EIR No. 471

A L B E R T A.
WEBB
A S S O C I A T E S



Source: AA Webb Assoc., May 2006.

Figure 5.1-9

Thoroughbred Farm from Hansen Avenue
(Photo 8 Panorama)

The Villages of Lakeview EIR No. 471



Photo 18



Photo 11



Source: AA Webb Assoc., May 2006.

Figure 5.1-10

Views North and East from Wolfskill Avenue and
Poppy Road (Photos 11 Panorama and 18)

The Villages of Lakeview EIR No. 471



Source: AA Webb Assoc., May, 2006.

Figure 5.1-11

Northeasterly View from Mike Lane
(Photo 12 Panorama)

The Villages of Lakeview EIR No. 471

Thresholds of Significance

Riverside County has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the Riverside County’s “Environmental Assessment Form: Initial Study” which is part of the Notice of Preparation for the subject project (see Appendix A of this document (CD #1), indicates that aesthetics impacts may be considered potentially significant if the project would:

- A. Have a substantial effect upon a scenic highway corridor within which it is located.
- B. Substantially damage scenic resources on site, including, but not limited to, trees, rock outcroppings and unique or landmark features.
- C. Obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view.
- D. Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655.

Related Regulations

State

The California Scenic Highways program was established in 1963 to “preserve and protect scenic highway corridors from change which would diminish and aesthetic value of lands adjacent to highways.” The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. No State designated or eligible scenic highways exist within the project site.

Local

General Plan Requirements

The proposed project is located within The County of Riverside General Plan Lakeview/Nuevo Area Plan (Area Plan). The General Plan and the Area Plan identify Designated and Eligible Scenic Highways and provide policies related to their protection. Since the Ramona Expressway is a County Eligible Scenic Highway located adjacent to the project site, the project is subject to the following General Plan and Area Plan policies:

- LU 13.1 Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.
- LU 13.2 Incorporate riding, hiking, and bicycle trails and other compatible public recreational facilities within scenic corridors.
- LU 13.3 Ensure that the design and appearance of new landscaping, structures, equipment, signs, or grading within Designated and Eligible State and County Scenic Highway Corridors are compatible with the surrounding scenic setting or environment.

- LU 13.4 Maintain at least a 50-foot setback from the edge of the right-of-way for new development adjacent to Designated and Eligible State and County Scenic Highways.
- LU 13.5 Require new or relocated electric or communication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground.
- LU 13.6 Prohibit off-site outdoor advertising displays that are visible from Designated and Eligible State and County Scenic Highways.
- LU 13.7 Require that the size, height, and type of on-premise signs visible from Designated and Eligible State and County Scenic Highways be the minimum necessary for identification. The design, materials, color, and location of the signs shall blend with the environment, utilizing natural materials where possible.
- LU 13.8 Avoid the blocking of public views by solid walls.
- LNAP 7.1 Adhere to the lighting requirements specified in County Ordinance N. 655 for standards that are intended to limit light leakage and spillage that may interfere with operations of the Mount Palomar Observatory.
- LNAP 10.1 Protect the scenic highways in the Lakeview/Nuevo planning area from change that would diminish the aesthetic value of the views of the Bernasconi Hills, the San Jacinto River, the Mystic Lake corridor and the San Jacinto Wildlife Area in accordance with the Scenic Highways section of the General Plan Land Use, Multipurpose Open Space, and Circulation Elements.

In addition, the Area Plan refers to applicable policies in the Multipurpose Open Space Element of the General Plan. The following General Plan policies apply:

- OS 21.1* Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County.
- OS 22.1* Design developments within designated scenic highway corridors to balance objectives of maintaining scenic resources with accommodating compatible land uses.
- OS 22.3* Encourage joint efforts among federal, state, and county agencies, and citizen groups to ensure compatible development within scenic corridors.
- OS 22.4* Impose conditions on development within scenic highway corridors requiring dedication of scenic easements consistent with the Scenic Highways Plan, when it is necessary to preserve unique or special visual features.
- OS 22.5* Utilize contour grading and slope rounding to gradually transition graded road slopes into a natural configuration consistent with the topography of the areas within scenic highway corridors.

Appendix N (CD #4) of this DEIR includes a table which summarizes how the project is related to the above General Plan Policies.

County Ordinances

In 1988, amended in 2003, the County of Riverside adopted Ordinance No. 655 regulating light pollution. Ordinance No. 655 establishes standards to limit light leakage in order to reduce interference with nighttime astrological observation and research conducted at the Mount Palomar Observatory. Ordinance No. 655 established two zones based on radial distance from the Mount Palomar Observatory, which is located in northern San Diego County. Zone A is defined as a circular area within a 15-mile radius of the observatory. Zone B includes the area between the 15-mile radius of Zone A and a circle with a 45-mile radius centered on the observatory. THE VILLAGES OF LAKEVIEW project site is located within Zone B of Mount Palomar Nighttime Lighting Policy (**Figure 5.1-2**).

Outdoor lighting within THE VILLAGES OF LAKEVIEW Specific Plan will be required to comply with Riverside County Ordinance No. 655 Zone B requirements. This means that within the proposed project, all Class II lighting (which includes parking lots, walkways, and security) will be fully shielded low-pressure sodium vapor lights (meaning constructed so light rays emitted are projected below the horizontal plane). Class II uses may remain in use throughout the night. Any Class I lighting (including outdoor advertising or other uses where color rendition is important) will be low-pressure sodium or other type under 4050 Lumens or below, partially-shielded, or other type above 4050 Lumens, fully-shielded. Class I lighting must be turned off between 11:00 p.m. and sunrise except for on-premise advertising signs which may remain on while a business is open to the public; on-premise advertising displays which may remain on until midnight; and any commercial, assembly, repair, or industry which may be lighted when actually in use. Class III (decorative) may be low-pressure sodium vapor lighting or another type of lighting provided it does not exceed 4050 Lumens; shall be fully shielded, and shall not be used between 11:00 pm and sunrise.

Project Design Considerations

Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts to scenic resources through the design of the project.

The Lakeview Mountains will be preserved as a result of the design of the proposed THE VILLAGES OF LAKEVIEW Specific Plan Conceptual Land Use Diagram (**Figure 3-1**), which designates this area as permanent open space for habitat conservation. Access to the existing hiking and equestrian trails in the Lakeview Mountains will be provided via trailheads proposed to be located in Planning Areas (PAs) 59, 71, and 73. This will retain prominent scenic vistas and views open to the public from the mountain trails today.

A 30-foot wide ~~equestrian trail with~~ landscaping buffer which includes a Multi-Purpose Community Trail, allowing equestrian uses, will be located along the east side of Hansen Avenue, the south side of Wolfskill Avenue, and the east side of Poppy Road. Some mature trees located within the existing thoroughbred farm will be retained by the proposed project within the park, if possible, which is to be built within Planning Area 53 near Hansen Avenue. The ~~equestrian trail~~ Multi-Purpose Community Trail and landscaping located along the project edges,

and the retention of some trees where the thoroughbred farm currently exists, will provide a local pastoral view, similar to the existing view residents and those driving on public roads have today in the Hansen Avenue/Wolfskill Avenue area.

Environmental Impacts Before Mitigation

***Threshold A:** The proposed project would have a substantial effect upon a scenic highway corridor within which it is located.*

For purposes of Threshold A, a “scenic highway corridor” will be defined as a “Designated and Eligible State and County Scenic Highway,” because General Plan policies LU 13.3 through LU 13.7 refer to aspects of preservation in these terms. Scenic views from the Ramona Expressway, a County Eligible Scenic Highway, include the Bernasconi Hills for westbound traffic, and the Lakeview Mountains for eastbound traffic, primarily. Due to the distance and the flat terrain, several key scenic resources, which are identified in the Area Plan, are not prominently visible from Ramona Expressway. The San Jacinto River, which runs along the northern boundary of the project site approximately one half mile north of Ramona Expressway, is not clearly discernable most months of the year. Mystic Lake, which varies greatly in extent during wet or dry years, is located approximately two miles to the north and the San Jacinto Wildlife Area (SJWA), which abuts the northern project property line, are not very visible due to the lack of elevation difference between the Expressway and these nearby features.

The northern portion of the project area (Resort Village) is located along approximately one and one half miles of the north side of Ramona Expressway. About one mile of it will be developed with various types of residential products in the higher density ranges with structures that are permitted to heights of 45 feet. Additionally, as discussed in Section 5.10, Noise, of this DEIR, development will include sound attenuation walls and landscaping intended to block noise from the highway to future resident’s homes. County General Plan Policy LU 13.4 states that new development adjacent to Designated and Eligible State and County Scenic Highways shall maintain at least a 50-foot setback from the edge of the right-of-way. The right-of-way for Ramona Expressway is proposed to be 210 feet. The additional setback of 50 feet on each side will provide a 310-foot window. In addition, review of **5.1-12, Westward View from Ramona Expressway (Photo 1)** shows that the existing offsite houses and trees (some of which reach 50 feet in height, do not substantially block or diminish views of the Bernasconi Hills from a distance on the expressway of 2.5 to 3 miles. Thus, development north of Ramona Expressway will not have a substantial adverse impact to a County-eligible scenic highway corridor associated with the obstruction of a prominent scenic vista or views of the Bernasconi Hills. As a result, potential adverse impacts to westbound views of the Bernasconi Hills from the eligible scenic highway are considered **less than significant** without any mitigation, regulatory compliance, or design consideration.

Uses proposed along the south side of the Ramona Expressway include mixed use (residential/commercial) within the one-mile stretch between Town Center and Park Center Boulevards, with residential and a ~~4,000~~ 1,500-foot wide wildlife corridor further to the east. Once a driver headed eastbound on Ramona Expressway gets to Park Center Boulevard and further east, the Lakeview Mountains are close enough to be viewed over rooftops, and the ~~4,000~~

1,500-foot wide open space wildlife corridor, located just west of Bridge Street, will provide unobstructed views of the Lakeview Mountains from the expressway. Therefore, the only area where views are potentially impacted significantly is between Town Center and Park Center Boulevards. The project frontage along the south side of Ramona Expressway totals over 3 miles. The total project frontage adjacent to Ramona (both north and south sides) is about 4.5 miles.

Figure 5.1-13, Eastward View from Ramona Expressway (Photo 15) shows the existing view from the highway, eastbound toward the Lakeview Mountains. The telephone poles in the foreground are approximately 52 feet tall; 60-foot poles are buried 7' 9". (Email correspondence dated 8/6/07 from Mick Moran at Power Plus.) These poles slightly exceed the allowable heights of buildings within the proposed project which are up to 45 feet. As review of the photo indicates, the Lakeview Mountains are not visible over the power lines in **Figure 5.1-13**, therefore, additional analysis was performed.

When the future right-of-way is simulated, **Figures 5.1-14, Eastbound Key Map and 5.1-15, Eastbound View from Ramona Expressway – 35' Building 50' from Right-of-Way** support this finding that buildings located at 50 feet behind the right-of-way line may block views. However, within the proposed Mixed-Use Planning Areas south of Ramona Expressway (approximately one mile between Town Center and Park Center), it is likely that parking areas and other large building separations with varying setbacks from the right-of-way line will exist, as well as landscaping which provides pleasant foreground views from the expressway and allows views from the highway to the commercial, so a "wall" effect will not be created by the buildings. Thus, partial views of the Lakeview Mountains may remain. Without sight plans for the development, precise pad elevations and no finalized roadway profile, the simulation in **Figure 5.1-15, Eastbound View from Ramona Expressway – 35' Building 50' from Right-of-Way**, is speculative, but raises a possibility that views of the Lakeview Mountains may be impacted. To assure that foreground views remain pleasant from the expressway adjacent to the Mixed-Use Town Center, **MM Aesthetics 2** requires landscaping along the development edge. Thus, the project will not have a substantial effect upon the Ramona Expressway scenic highway corridor within which it is located because: the Lakeview Mountains are visible from Ramona Expressway from two out of the three miles of project frontage on the south side, the project will adhere to the County's General Plan policy of setting back 50 feet, the Mixed-Use area of the project will have varying types of uses and buildings which will not create a "wall effect," and landscaping along the edge of the development will be required to assure that foreground views will be visually pleasant. Therefore, impacts will be **less than significant with mitigation**.

No residential or commercial development is proposed to occur within the Lakeview Mountains, however, one or two water (recycled water) storage tank(s) will be needed to serve the project site. **Figure 3-1, Conceptual Land Use Diagram**, shows the proposed location of the tank, called out as Public Facilities in Planning Area 81. The tank(s) will be owned and operated by Eastern Municipal Water District. Without the screening as shown in **Figure 5.1-16, Tank Site 3-D Rendering**, potential adverse visual impacts will be **significant without mitigation**. With screening provided by berms, paint color, and tree plantings, the visibility of the tank(s) could be reduced. Therefore, with implementation of **MM Aesthetics 1**, which requires that the tank(s) be screened using landscaping and paint colors that blend in with the surrounding hills, potential

adverse impacts to views from the County-eligible scenic highway will be reduced to **less than significant with mitigation**.

An additional aesthetic impact may result from sound attenuation walls required as mitigation from noise impacts. At this time, as discussed in Section 5.10, the actual height of walls is speculative due to the preliminary nature of road profiles and grading, especially along Ramona Expressway when the Mid County Parkway is built. However, when the finalized information regarding road elevations and pad heights becomes available, a subsequent acoustical study will be performed to assess the necessary height of noise barriers needed to obtain the appropriate noise standard levels for sensitive receptors (residential, schools, nursing homes, etc.) and commercial land uses. It is certain, however, that sound attenuation walls will be required along most of the major streets, including Ramona Expressway. Because Ramona Expressway is an eligible scenic highway, disruption of views from the Expressway are potentially significant.

Therefore, **Figures 5.1-17, Westbound Key Map, 5.1-18, Westbound View from Ramona Expressway – 12' Wall at Right-of-Way and 5.1-19, Eastbound View from Ramona Expressway – 12' Wall at Right-of-Way** were created. A 12-foot high wall was chosen as representative of a sound wall height along Ramona Expressway, although it is premature to calculate wall heights for the project (see Section 5.10). These figures illustrate that views of the Bernasconi Hills and Lakeview Mountain will not be obstructed if a sound wall were located at the future right-of-way line. Impacts from sound walls adjacent to Ramona Expressway are considered **less than significant**.



Source: AA Webb Assoc., May 2006.

Figure 5.1-12

**Westward View from Ramona Expressway
(Photo 1)**

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The Villages of Lakeview EIR No. 471



Source: AA Webb Assoc., May, 2006.

Figure 5.1-13

Eastward View from Ramona Expressway
(Photo 15 Panorama)

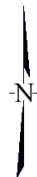
The Villages of Lakeview EIR No. 471

A L B E R T A.
WEBB
A S S O C I A T E S



Sources:
Air Photo USA April 2007

ALBERT A.
WEBB
ASSOCIATES



LEGEND
Location from which Photos Taken

Figure 5.1-14

Eastbound Key Map

The Villages of Lakeview EIR No. 471



Sources: Photo Date - February 16, 2008
 County of Riverside ROW Information
 So Cal Edison Critical Energy Infrastructure Mapping

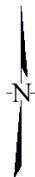
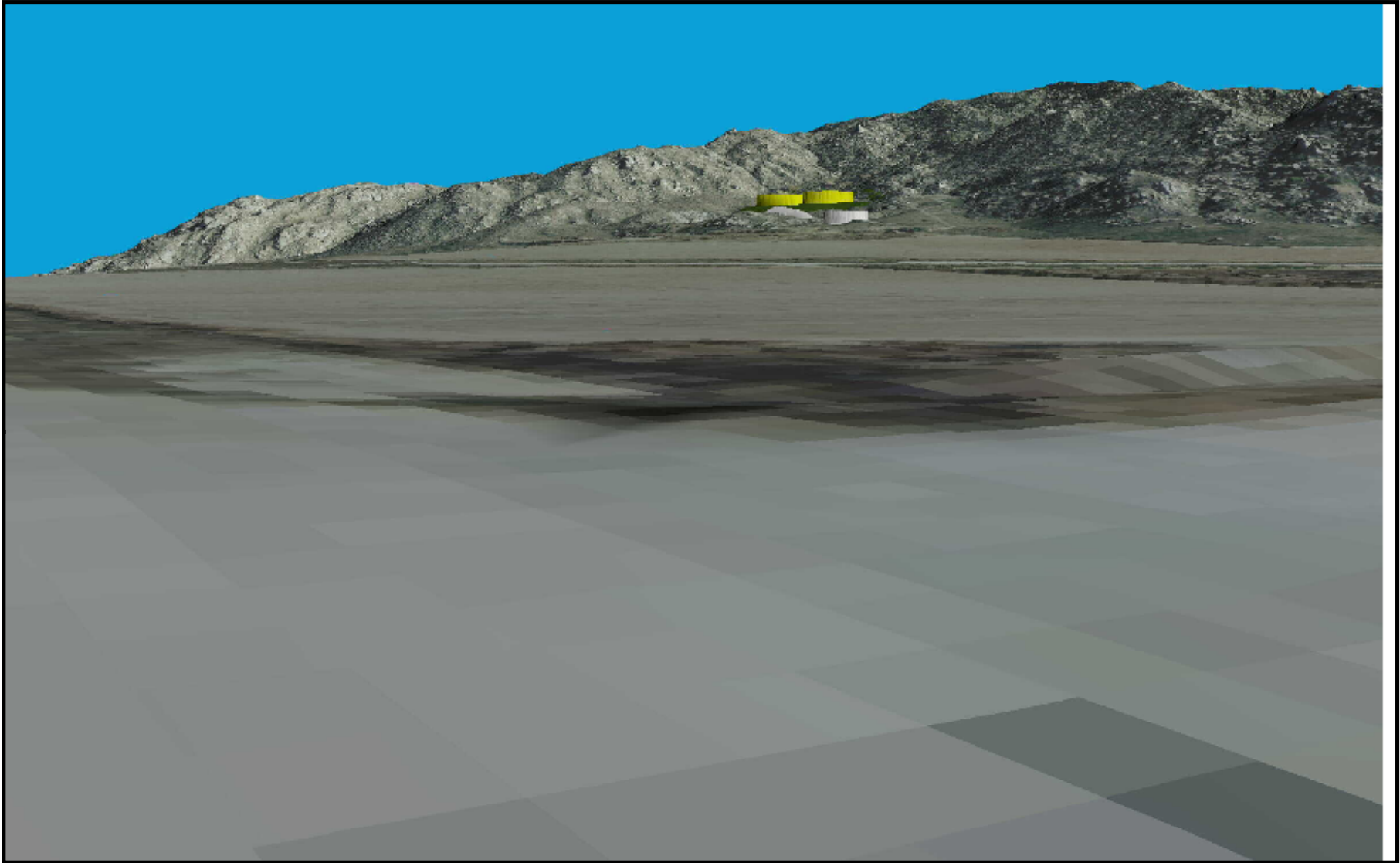


Figure 5.1-15

Eastbound View from Ramona Expressway -
 35' Building 50' from Right-of-Way (R.O.W.)

The Villages of Lakeview EIR No. 471



Source: AA Webb Assoc., 2007.

Figure 5.1-16

Tank Site 3D Rendering

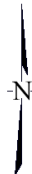
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The Villages of Lakeview EIR No. 471



Sources:
Air Photo USA April 2007

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WEBB
A S S O C I A T E S



LEGEND



Location from which Photos Taken

Figure 5.1-17

Westbound Key Map

The Villages of Lakeview EIR No. 471



Sources: Photo Date - February 16, 2008
 County of Riverside ROW Information
 So Cal Edison Critical Energy Infrastructure Mapping

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Figure 5.1-18

Westbound View from Ramona Expressway -
 12' Wall at Right-of-Way (R.O.W.)

The Villages of Lakeview EIR No. 471



Sources: Photo Date - February 16, 2008
 County of Riverside ROW Information
 So Cal Edison Critical Energy Infrastructure Mapping

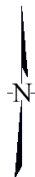


Figure 5.1-19

Eastbound View from Ramona Expressway -
 12' Wall at Right-of-Way (R.O.W.)

The Villages of Lakeview EIR No. 471

Threshold B: *The proposed project would substantially damage scenic resources on site, including, but not limited to, trees, rock outcroppings, and unique or landmark features.*

The only natural, area-wide scenic resources on site are the Lakeview Mountains, which are being placed in a conservation area for long-term preservation. Therefore, no substantial impact to scenic resources on site will occur as a result of the project and potential impacts are **less than significant** without any mitigation, regulatory compliance, or design consideration.

Windrows and mature trees exist in several locations within the project site. Within the western portion of the project site, an eucalyptus windrow exists. This windrow may be retained by the proposed project temporarily. Mature trees also exist around the homes located on Davis Road inside the project boundary, in a windrow adjacent to the MWD basin, and within the existing thoroughbred farm site. Other scatter trees exist on site. Of these, on a localized level, the thoroughbred farm, located near the southwest area of the project site, may be considered a local landmark of the rural community and a scenic resource. This resource is characterized by large trees, pastures and white split-rail fences. (See **Figure 5.1-9, Thoroughbred Farm from Hansen Avenue, (Photo 8)** and **Figure 5.1-20, Wolfskill Avenue Looking East (Photo 9).**) THE VILLAGES OF LAKEVIEW Specific Plan proposes preservation of some of the mature trees within the thoroughbred farm as part of a park. The design of the proposed project should take these resource elements into consideration through the incorporation in the 30-foot wide ~~equestrian-trail~~ landscape buffer including the Multi-Purpose Community Trail, ~~area~~-with trees and fencing similar to those which exist. These trails and landscaping will provide local residents in the Hansen Avenue/Wolfskill Avenue area with similar short-range views as those that presently exist. If future landscape designs for the Multi-Purpose Community Trail-~~equestrian trail~~ and park along Hansen Avenue, and the ~~equestrian-trail~~ Multi-Purpose Community Trail along Wolfskill Avenue and Poppy Road, ignore such strong existing visual themes and local scenic resources, then impacts would be considered **significant without mitigation**. With the implementation of **MM Aesthetics 3**, which requires preservation of exiting mature trees and the use of white split fences, when possible, substantial damage to local scenic resources on site including mature trees and split-rail fences, which exist as a part of the local thoroughbred farm, will be reduced to **less than significant** levels.



Source: AA Webb Assoc., May 2006.

Figure 5.1-20

Wolfskill Avenue Looking East (Photo 9)

The Villages of Lakeview EIR No. 471

Threshold C: *The proposed project would obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view.*

See discussion under Threshold A, above, regarding scenic vistas and views from the Ramona Expressway, which were determined to be potentially significant with mitigation. Impacts associated with the proposed tank(s) within the Lakeview Mountains, are discussed under Threshold A and are considered less than significant with mitigation. Also, as stated previously, the project retains the Lakeview Mountains as open space which will not only preserve views of the mountains from the road, but will also afford views to the public due to the retention of public access to existing trails in the Lakeview Mountains.

Threshold B analysis identified potential impacts and mitigation associated with the loss of local scenic resources in the vicinity of the thoroughbred farm and determined that with mitigation, potential adverse environmental impacts could be reduced to less than significant.

However, views from public roadways in the existing Lakeview Avenue area include the Bernasconi Hills. Residents traveling northbound on the north/south streets in this neighborhood presently see vacant land where proposed development is anticipated north of Ramona Expressway with only the Ramona Expressway intervening. Some views of the Bernasconi Hills are currently impacted by an existing windrow located within the project site north of Ramona Expressway. This is similar to how proposed project development will intervene in the foreground, without impacting long-range views of the Bernasconi Hills, the tops of which will remain visible after project construction. **Figure 5.1-4, Northerly View from Magnolia Ave./Reservoir Ave. (Photo 13 Panorama)**, shows the existing view from the public streets. Due to the distance (over one mile) and flat terrain, no prominent views of Mystic Lake or the San Jacinto Wildlife area are afforded from local public streets, currently. Development north of Ramona Expressway will not block any views from the public streets in the neighboring community.

There is land located between existing Ramona Expressway and the existing homes south of the highway which could be developed or be taken for highway expansion. Either way, public views from the neighboring community could be impacted even without the proposed project. Therefore, no substantial impact to scenic resources associated with the obstruction of a prominent scenic vista or public views from Lakeview Avenue will occur as a result of the project and potential impacts are **less than significant** with design considerations in place and without any mitigation or regulatory compliance.

The proposed project will be a dramatic change from rural agricultural uses to urban residential and commercial uses, however, the development standards and design guidelines within the Specific Plan, the existing Lakeview Nuevo Design Guidelines, and County regulations will ensure that the visual character, types of landscaping and architecture will not create an aesthetically offensive site open to public view. Therefore, no substantial impact to scenic resources associated with creating an aesthetically offensive site open to public view will occur as a result of the project and potential impacts are **less than significant** with design considerations in place, regulatory requirements met, and without any mitigation measures. When taken with the other projects the County is considering along Ramona Expressway,

cumulatively the change from agricultural to urban is significant. This is consistent with RCIP General Plan EIR.

No public spaces/roads are located near the southeast project area, north of the Lakeview Mountains; therefore, no views will be affected by development in this area. No substantial impact to scenic resources associated with the obstruction of a prominent scenic vista or views will occur as a result of the project and potential impacts are **less than significant** without design considerations, mitigation, or regulatory compliance.

Others who may be viewing to or from the Lakeview Mountains are hikers and equestrians who currently use the trails within the Lakeview Mountains or who use open spaces and trails off-site and enjoy view looking back toward the project site. Although views will be changed because development will be built where agricultural fields currently exist, **Figures 5.1-23, 5.1-24 and 5.1-25** show that views to or from Mystic Lake will not be blocked, and views of the Lakeview Mountains from the Bernasconi Hills area near Lake Perris will not be blocked.

Existing views from local streets are located adjacent to the western and southern boundaries of the project site. Due to the location of the existing thoroughbred farm and the large trees planted on that property, long-range views or vistas of scenic resources are limited for those driving along Hansen Avenue. **Figure 5.1-9, Thoroughbred Farm from Hansen Avenue (Photo 8 Panorama)**, shows the short-range nature of views looking east and southeast. Views of the Bernasconi Hills, San Jacinto River, and the San Jacinto Wildlife Preserve are blocked from the public views of neighborhood streets. As the photos in **Figure 5.1-9, Thoroughbred Farm from Hansen Avenue (Photo 8 Panorama)** shows, the view from Hansen Avenue is very limited due to existing trees. Therefore, no substantial impact to scenic resources associated with the obstruction of a prominent scenic vista or views from Hansen Avenue will occur as a result of the project and potential impacts are **less than significant** without design considerations, mitigation or regulatory compliance.

Views from Wolfskill Avenue are similar to those described above adjacent to the thoroughbred farm. A vista of the Lakeview Mountains exists for eastbound travelers on Wolfskill Avenue, as shown on **Figure 5.1-20, Wolfskill Avenue Looking East**. When the northern half of this road is widened by the proposed project and the row of trees removed, a larger (wider) vista of the Lakeview Mountains will be created from this roadway.

Once east of the thoroughbred farm on Wolfskill Avenue, the existing views to the south and southeast open up, as do views from Mike Lane, Bluebonnet Road, and Poppy Road, as shown on **Figures 5.1-11, Northeasterly View from Mike Lane (Photo 12 Panorama)**, and **Figure 5.1-10, Views North and East from Wolfskill Avenue, and Poppy Road (Photos 11 Panorama, and 18)**. The Planning Areas along the western and southern edge of project area are comprised of “Medium High Residential” and “High Density Residential.” These land use designations permit structures to be built to heights of 40 to 45 feet, respectively. Depending on the placement of structures at the permitted heights and with the proposed grade differences shown in **Figures 5.1-21, Edge Condition Cross Sections Index** and **5.1-22, Edge Condition Cross Sections**, it is likely the scenic vista or view currently afforded from Poppy Road or Blossom Road will be obstructed or eliminated as a result of project implementation.

As shown in **Figure 5.1-10**, there is a direct view east from Poppy Road to the Lakeview Mountains. As shown on **Figure 5.1-22, Edge Condition Cross Sections**, based on the Conceptual Grading Plan, a 24-foot high 2:1 up-slope will be located adjacent to the east side of Poppy Road (cross section JJ) which will completely block this view for the northernmost 800 feet of the 1,600-foot project frontage on Poppy Road. The remaining 800 feet along Poppy Road is proposed to be a trailhead park that will be close to existing gradients and will provide access to the Lakeview Mountains where views are preserved. Due to the conceptual nature of the grading plan for the project, the relatively small area affected, and the immediate access which is being preserved to the Lakeview Mountains further up Poppy Road, potential significant adverse impacts to scenic vistas along Poppy Road are considered **less than significant**. If higher slopes are proposed to be constructed in this area during more detailed mapping and design stages of the project, impacts will be **less than significant with mitigation**. Mitigation Measure **MM Aesthetics 4**, which requires grading plans for the portions of Planning areas 57 and 58 which abut Wolfskill or Poppy Road, shall be reviewed by the Building Department to ensure that slopes which are higher than existing roads are no higher or longer than the Conceptual Grading Diagram in Specific Plan indicates, which will assure that future grading and building plans do not cause a significant adverse environmental effect to scenic vistas along Poppy Road.

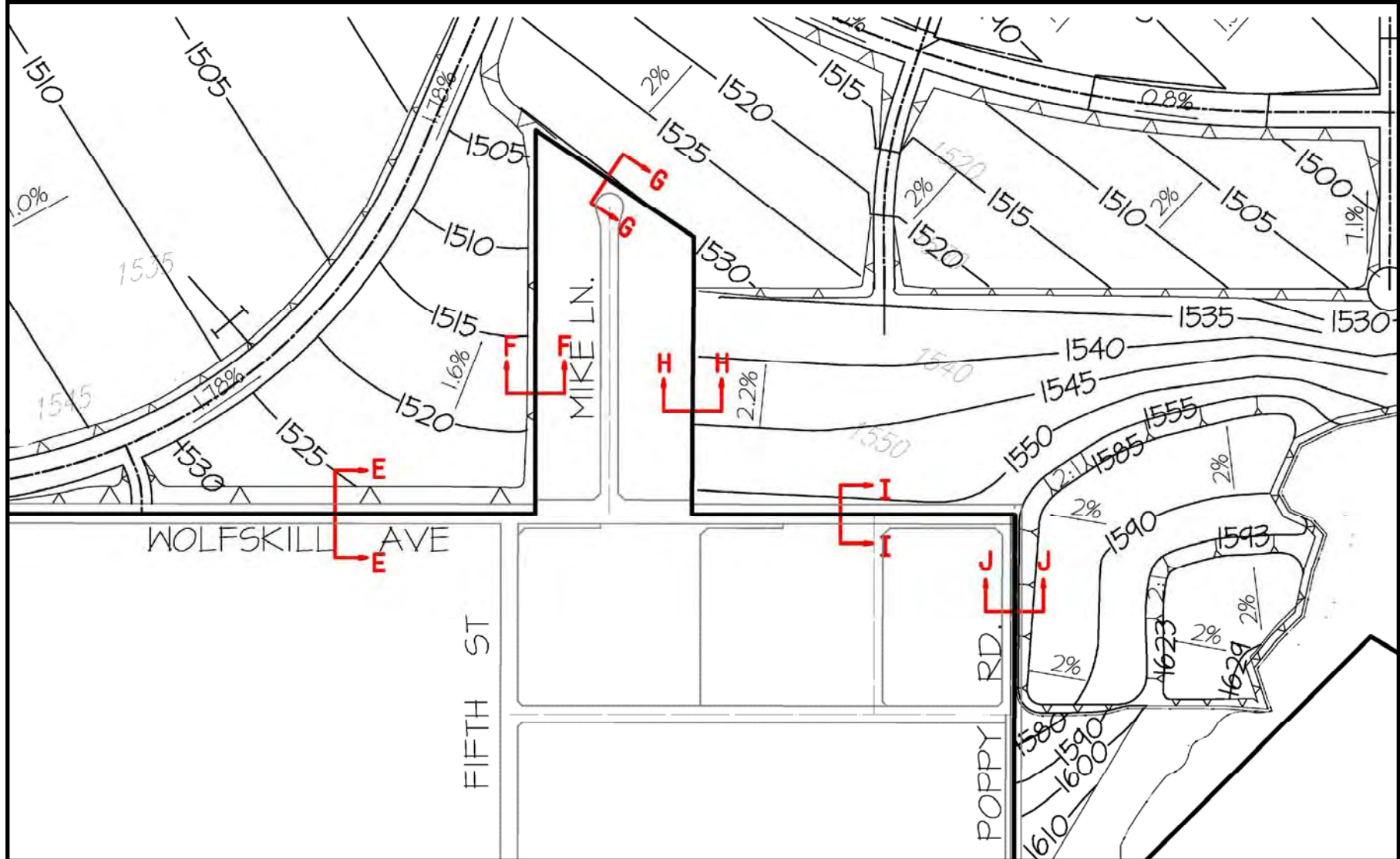
From Wolfskill Avenue, located east of the thoroughbred farm, the proposed project building pads will be approximately 7-feet to 25-feet lower than existing gradients (cross sections II and EE, respectively). Houses proposed within the project site could then be between 33-feet and 15-feet higher than the existing elevation of Wolfskill, based on a maximum 40-foot high Medium High Density house. Due to the conceptual nature of the grading plan, the fact that heights of the proposed homes are not known at this time, and the height and/or spaces between houses could still afford views, potential significant adverse impacts to scenic vistas along Wolfskill Avenue are considered **less than significant**. If Wolfskill remains higher than the proposed pads and the plotting and/or height of buildings still affords some views during more detailed mapping and design stages of the project, impacts will be **less than significant with mitigation**. Mitigation Measure **MM Aesthetics 4** will assure that future grading and building plans do not cause a significant adverse environmental effect to scenic vistas along Wolfskill Avenue.

Threshold D: *Interferes with the nighttime use of the Mt. Palomar Observatory.*

The project site is located within 45 miles of the Mt. Palomar Observatory. Therefore, the nighttime lighting within the proposed project has the potential to adversely affect the Mt. Palomar Observatory (**Figure 5.1-3, Mt. Palomar Nighttime Lighting Zones**). In 1988, the Riverside County Board of Supervisors adopted Ordinance No. 655 to regulate outdoor lighting which could have a detrimental effect on astronomical observation and research at the observatory. The proposed project is required to comply with the regulatory requirements set forth in Ordinance No. 655.

Impacts to the SJWA from project lighting are analyzed in the **Biological Resources Section 5.4**, under Threshold A.

Adherence to the regulations set forth in Riverside County Ordinance No. 655 will allow the project to avoid interfering with nighttime astrological observations at the Mt. Palomar Observatory. The proper shielding of lighting and the use of lighting types as identified in Ordinance No. 655 will ensure that the proposed project will have a **less than significant** impact on activities at the Observatory with the implementation of required regulations.



Source: AAWA, 2007.

Not to Scale

ALBERT A.
WEBB
ASSOCIATES

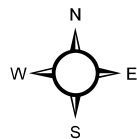
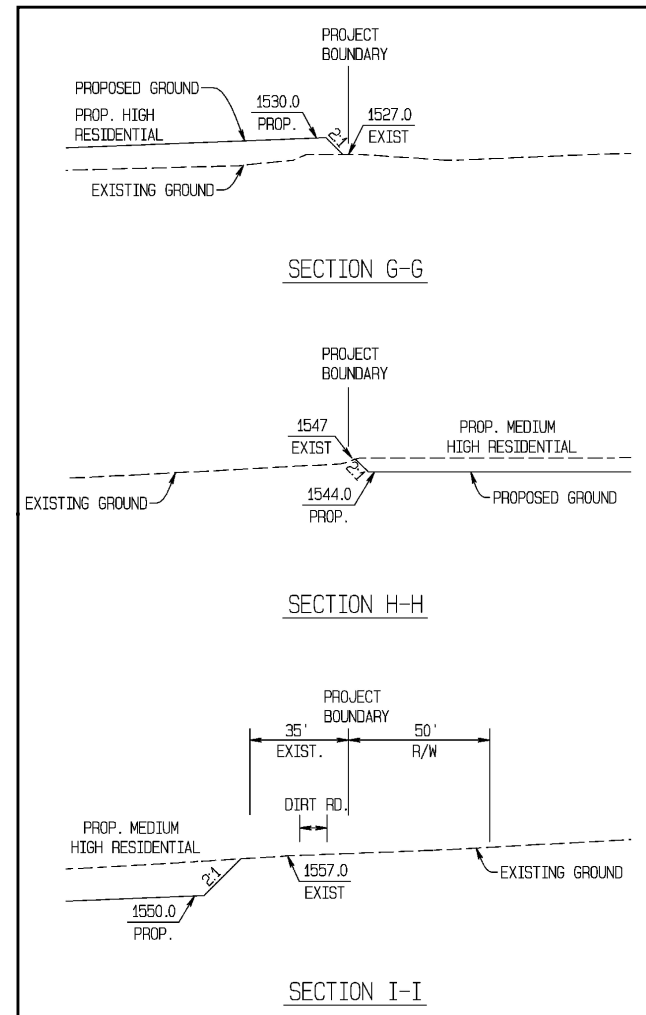
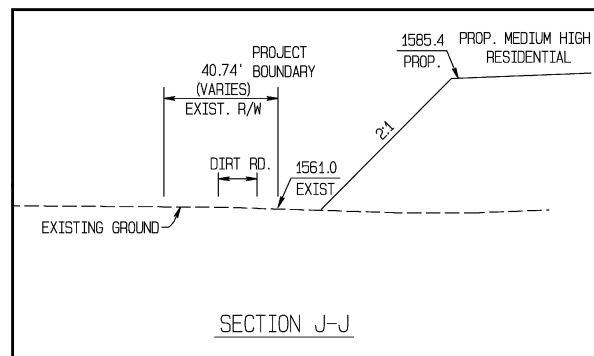
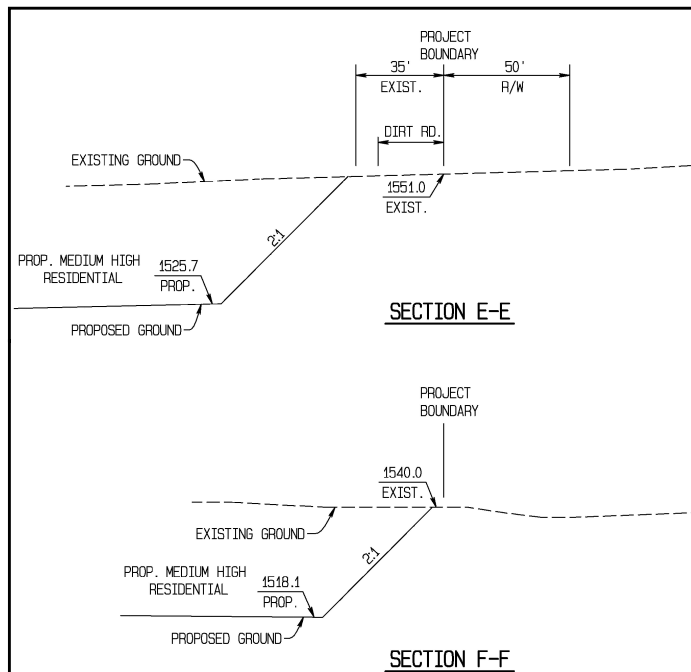


Figure 5.1-21

Edge Condition Cross Sections Index

The Villages of Lakeview EIR No. 471



Source: AA Webb Assoc., 2007.

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Figure 5.1-22

Edge Condition Cross Sections

The Villages of Lakeview EIR No. 471



Legend

--- Edge of Wildlife Corridor/Conservation Area

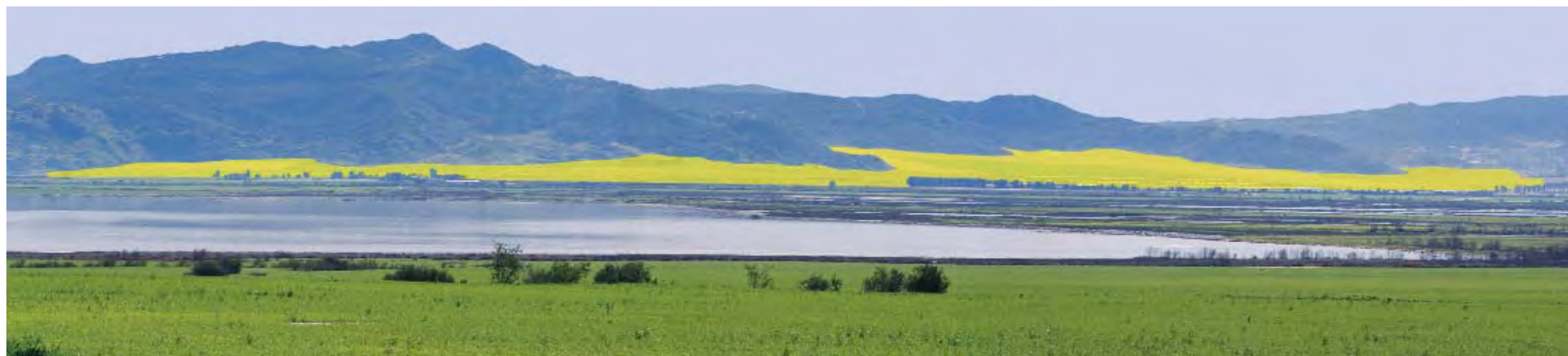
■ Development Area

Sources:
AA Webb Associates, May 2006



Figure 5.1-23
Northerly View from Eastern Foothills of the Project Site
(Photo 19 Panorama)

The Villages of Lakeview EIR No. 471



Legend

Project Development Area



Figure5.1- 24
View of TVOL Development Footprint from SJWA
(North of Mystic Lake)

The Villages of Lakeview EIR No. 471



Legend

Project Development Area

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Figure 5.1- 25
View of TVOL Development Footprint from Lake Perris

The Villages of Lakeview EIR No. 471

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts related to aesthetics to below the level of significance.

MM Aesthetics 1: To mitigate for potential substantial adverse effects upon a scenic highway corridor and to avoid the creation of an aesthetically offensive site open to public view, the water tank(s) to be located within Planning Area 81 in the Lakeview Mountains shall be screened using landscaping and paint colors that blend in with the surrounding hills. A combination of earthen berms and landscaping may be used. The landscape screening plans shall be submitted to Eastern Municipal Water District for approval prior to approval of final construction documents for the tank(s).

MM Aesthetics 2: To reduce potential significant adverse impacts upon the scenic views from Ramona Expressway (a County Eligible Scenic Highway corridor), landscaping shall be provided adjacent to the Mixed-Use Town Center Village to address foreground views from Ramona Expressway. The extent and nature of the landscaping shall be identified reviewed and approved by the County during the Village Refinement Process for this village. The landscaping shall include drought-tolerant, low groundcover and shrubs with mulch or rock to provide an attractive ground plain. Because views of the Lakeview Mountains may be afforded trees shall be grouped in such a way as to allow open areas for intermittent views (i.e., no solid rows of trees).

MM Aesthetics 3: To reduce potential significant adverse impacts to local scenic resources, the landscaping of the Hansen Avenue area park shall include the preservation of existing mature trees, if possible, and the use of white split rail fences. The preservation of the trees shall be confirmed at the approval of the VRP for the Garden Village and finalized prior to Final Inspection of last adjacent residential unit. If the 24 existing trees along the entry to the thoroughbred farm cannot be preserved, then they shall be replaced within the planned park at a ratio of 1:1 by the planting of new 36-inch box trees of the same species as the mature trees being removed. The ~~equestrian-trail~~ Multi-Purpose Community Trail along Hansen and Wolfskill Avenues and Poppy Road shall also include trees spaced so as not to block views and white split-rail fences. Prior to grading permits, landscape plans shall be submitted to the Building Department for approval. Construction of trail and landscaping shall occur commensurate with adjacent implementing tracts and finalized prior to Final Inspection of last adjacent residential unit. Construction of the park elements shall be completed as required per unit number triggers in the Specific Plan (No. 342) as reflected in the Parkland Tracking Report.

MM Aesthetics 4: To reduce potential significant adverse impacts to public scenic views from Wolfskill Avenue, Mike Lane, and Poppy Lane, grading plans for the portions of Planning Areas 57 and 58, which abut Wolfskill or Poppy, shall be reviewed by the Building Department to ensure that slopes which are higher than existing roads are no higher or longer than the Conceptual Grading Diagram in Specific Plan 342 indicates. Building layouts and setbacks shall also be reviewed to ensure that some views over or between proposed buildings are maintained

along Wolfskill Avenue. Some means of achieving the intent of this mitigation may include, but are not limited to: reduced-height homes along the frontage with existing local roads, larger setbacks, stepped grading, etc.

Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented

To address potential impacts of development of the proposed tank(s) in the Lakeview Mountains, **MM Aesthetics 1**, screening and painting above, impacts to the scenic highway from the tank(s) will be **less than significant**. Potential significant adverse impacts associated with the proposed project having a substantial effect upon a scenic highway corridor were found to be **less than significant with MM Aesthetics 2** which addresses landscaping of foreground views to the Lakeview Mountains.

The significant area-wide scenic resource on site is the Lakeview Mountains. Retention of the mountains avoids substantial damage to scenic resources on site. A local scenic resource on site includes the mature trees and the white split rail fences of the local landmark thoroughbred farm. With the implementation of **MM Aesthetics 3**, potential impacts to the neighborhood from loss of this local scenic resource will be reduced to **less than significant**.

Potential significant adverse impacts to public scenic views from roads located on Wolfskill Avenue, Poppy Road, and Mike Lane were found to be **less than significant with the implementation of MM Aesthetics 4**, which calls for review and appropriate mitigation when grading and building plans are available.

Adherence to the regulations set forth in Riverside County Ordinance No. 655 will allow the project to avoid interfering with nighttime astrological observations at the Mt. Palomar Observatory. The proper shielding of lighting and the use of lighting types as identified in Ordinance No. 655 will ensure that the proposed project will have a **less than significant** impact on activities at the Observatory with the implementation of required regulations.

Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented

Cumulative impacts are also discussed in Section 7.1 of this DEIR.

A number of proposed development projects will be built, if approved, along several miles of Ramona Expressway between Perris and Lakeview, a County Eligible Scenic Highway. (See **Table 5.14-K, Cumulative Developments Within the Project Study Area** and **Figure 5.14-8a, Cumulative Developments Within Study Area (West)** for all cumulative projects, including those located along Ramona Expressway.) This will change the character of the foreground views from vacant, natural open space and agriculture, to ornamental landscaping and buildings within planned communities. The current RCIP General Plan designations for these areas located east of Perris and west of Lakeview, are currently ~~residential~~ Residential, Commercial, ~~commercial~~, and Community Center Designations ~~community center~~ south of Ramona. The

majority of the land located north of Ramona Expressway, is located within the Lake Perris State Recreation Area. Land located north of Ramona and south of the Lake Perris Recreation Area is designated in the General Plan for Rural Community uses. Thus, even under the existing RCIP General Plan, the visual character along Ramona Expressway will change over time as the General Plan builds out and prominent scenic vistas open to the public will be lost.

For this reason, even the existing RCIP General Plan land uses are considered cumulatively significant by the County of Riverside. As stated in the RCIP EIR, “future development within Riverside County and development in surrounding [cities] would result in the intensification of urban uses as well as conversion of open space into urban land uses. . . . The conversion of open space to urban uses would result in a significant unavoidable [cumulative] impact by causing the obstruction of existing open views as well as potentially obstructing distant panoramic views from existing development; therefore, implementation of the proposed General Plan will cumulatively contribute significantly to the loss of visual character of the County.” Therefore, because the project is: located adjacent to approximately 4.5 miles of Ramona Expressway, will convert hundreds of acres of agricultural open space to urban uses, and may block some views of the Lakeview Mountains from the Ramona Expressway; it will contribute considerably to this effect, therefore, the aesthetic impacts of the proposed project is considered **cumulatively significant**.

The County of Riverside Board of Supervisors found that “no additional mitigation is available to address the conversion of open space to urban land uses. This impact remains significant and unavoidable [in the RCIP EIR]. The Board also finds that specific economic, legal, social, technological, or other considerations identified in the Statement of Overriding Considerations support approval of the project as modified by the adopted mitigation measures despite unavoidable residual impacts.” (Page 6 of the "Findings of Fact for Riverside General Plan Impacts and Mitigation Measures" table located in the CEQA Findings of Fact and Statement of Overriding Considerations adopted by the Board of Supervisors on October 7, 2003.)

With respect to the project, **MM Aesthetics 2** which addresses landscaping and enhancement of foreground views to the Lakeview Mountains, and Alternatives 1, 2, 3, and 5 which all retain more agricultural open space than the proposed project, reduce but do not eliminate this cumulatively significant impact; especially when Alternative 1 is no development at all and Alternative 2 is development of the RCIP General Plan land uses which are considered cumulatively significant. Therefore, because the proposed project will contribute cumulatively to a significant and unavoidable change in visual character through conversion of open space to urban uses, as defined in the County General Plan EIR, cumulative impacts will remain **significant and unavoidable after consideration of mitigation measures and alternatives**. A Statement of Overriding Considerations will be required prior to project approval.

Other types of scenic resources are site-specific (e.g., trees, rock outcroppings, etc.) and do not contribute to cumulative impacts to scenic resources. As well, the obstruction of any prominent scenic vista or view open to the public by on-site uses or the creation of an aesthetically offensive site open to public view are localized and not considered cumulative.

Light and glare from this project will add cumulatively with other new light sources in the area to the overall ambient increase in nighttime light which could affect Palomar Observatory. Adherence by all proposed development projects in the area to Riverside County Ordinance No. 655 will ensure that cumulatively projects avoid interfering with nighttime astrological observations at the Mt. Palomar Observatory. The proper shielding of lights, limitation on hours, and the use of lighting types as identified in Ordinance No. 655, will ensure that the proposed project will have a **less than significant cumulative** impact on activities at the Observatory with the implementation of required regulations.

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

5.2 AGRICULTURAL RESOURCES

The focus of the following discussion is related to the potential impacts associated with the conversion of agricultural land to non-agricultural use as determined in the Initial Study prepared for the proposed project (see Appendix A, CD #3). These potential impacts relate to the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (“Designated Farmland”) Proximity to land zoned for and used as agriculture, changes in the existing environment which would result in conversion including Farmland of Local Importance, and conflicts/incompatibility between existing agricultural uses and urban uses.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- County of Riverside, *County of Riverside General Plan*, October 2003. (Available at <http://www.rctlma.org/genplan/content/gp.aspx>)
- County of Riverside, *County of Riverside General Plan, Lakeview/Nuevo Area Plan*, October 2003. (Available at <http://www.rctlma.org/genplan/content/ap2/lmap.html>)
- County of Riverside, *Riverside County Integrated Project General Plan Draft Environmental Impact Report*, August 14, 2002 adopted October 7, 2003. (Available at County of Riverside and <http://www.rcip.org/generalplan.htm>)
- California Agricultural Land Evaluation and Site Assessment (LESA) of THE VILLAGES OF LAKEVIEW, *Specific Plan Project Site*, July 21, 2006. (Appendix N (CD #4).)
- U.S. Department of Agriculture, *Soil Conservation Service, Soil Survey, Western Riverside Are, California*. November 1971. (Available at the County of Riverside.)
- Office of the Agricultural Commissioners, *Riverside County 2005 Agricultural Production Report*, 2005. (Available at <http://www.rivcoag.org>)
- Riverside County Transportation Department, *Mid County Parkway Project, Corona-San Jacinto*, site accessed October 17, 2006, <http://www.midcountyparkway.org>)
- Personal Communication with Michelle Tracey at the Riverside County Agricultural Commissioners Office, October 02, 2006 at 11:30 a.m.
- Personal Communication with Chuck Hale at Southern California Agricultural Land Foundation, October 31, 2006 at 10:45 a.m.
- California Department of Finance, *Summary of California County Agricultural Commissioners’ Reports, 2004-2005, Gross Values by Commodity Groups*, October 2006. (Available at http://www.dof.ca.gov/HTML/FS_DATA/Fs_home.asp)
- U.S. Department of Finance, *California’s Leading Agricultural Counties by Total Value of Production*, 2005, accessed on January 30, 2007. (Available at http://www.dof.ca.gov/HTML/FS_DATA/STAT-ABS/documents/G14.xls)

Setting

One of Riverside County's most important land uses in terms of historic character and economic strength is its widespread and diverse agriculture lands. Agriculture production is one of the largest industries in terms of dollar value in the County and competes successfully in the global economy. According to the Riverside County Office of the Agricultural Commissioner's (OAC) *2005 Agricultural Production Report*, gross valuation for agricultural production within the County represented approximately \$1.17 billion, an increase of approximately \$37 million from 2004. According to the California Department of Finance 2005 financial and economic data for California and Riverside County, the total economic value of Riverside County Agriculture is representative of approximately three percent of California's total agricultural value. Agricultural uses provide important employment opportunities for many County residents. Agricultural uses also preserve a lifestyle choice that is synonymous with the County's history and character. In fact, it is agriculture that defines the unique character of many communities in Riverside County, and helps to define the edges of and provide separation between developed areas.

The project is located in the unincorporated community of Lakeview/Nuevo, in Riverside County, California, in the northeast corner of the Lakeview/Nuevo planning area, which has historically been characterized by agriculture and residential uses. Within the Lakeview/Nuevo planning area, dairies and agricultural uses dominate the lands north of Ramona Expressway. To the south of Ramona Expressway, field crops, dry land farming, and residential/equestrian uses are characteristic. The residential uses in the Lakeview/Nuevo community are rural in nature and are located on lots one-half to two acres in size.

The project site currently contains an 89-acre poultry farm (McAnally Ranch) containing approximately 1.2 million chickens, a 150-acre thoroughbred farm, and approximately 950 acres of productive row crops (potatoes and other crops) or fallow land. At the time the NOP was issued, less than ten single-family residences were located on site. The Lakeview/Nuevo planning area as a whole is characterized by its agriculturally productive lands, and there are several dairies, row crops, and other chicken ranches adjacent to the project (personal communication with Michelle Tracey 10/02/2006).

Soils

According to the Soil Survey of the Western Riverside Area, California, published by the U.S. Department of Agriculture, Soil Conservation Service (now the Natural Resources Conservation Service), the project has two general types of soil families on the site, the Hanford-Tujunga-Greenfield and Cieneba-Rockland-Fallbrook associations. The United States Department of Agriculture has identified thirty-eight soil types on site. These soil types are identified in Appendix N (CD #4) of this DEIR on **Figure 5, Soils Map**, and are described in **Table 1, Soil Types on THE VILLAGES OF LAKEVIEW Project Site**, located in the LESA report.

Designated Farmland

“Designated Farmland” is a resource based on soil types which is regulated by the California Department of Conservation. The Department of Conservation maintains maps identifying important farmland across the state. Based on the Department of Conservation maps for Western Riverside County, the project site is identified as having Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. The current active agricultural uses described in the setting above do not directly correlate to the areas of Designated Farmland because some active agriculture is not located on Designated Farmland.

Portions of the project site will be developed (“Developed Area”) as residential, commercial, educational, roads, and other built items. Other portions of the site will not be developed (“Un-Developed”). The Un-Developed Area includes open space, conservation, MWD Property, the Greenbelt, and the Central Park. Including both the Developed and Un-Developed areas of the project site, Prime Farmland encompasses approximately 367 acres of the project site, of which 289 acres are planned for development. Farmland of Statewide Importance encompasses approximately 246 acres, of which 205 acres is planned for development. And Unique Farmland encompasses approximately 23 acres, of which 1 acre is planned for development (refer to **Figure 5.2-1, Conceptual Land Use and Farmland Designations** and **Table 5.2-A Designated Farmland**.)

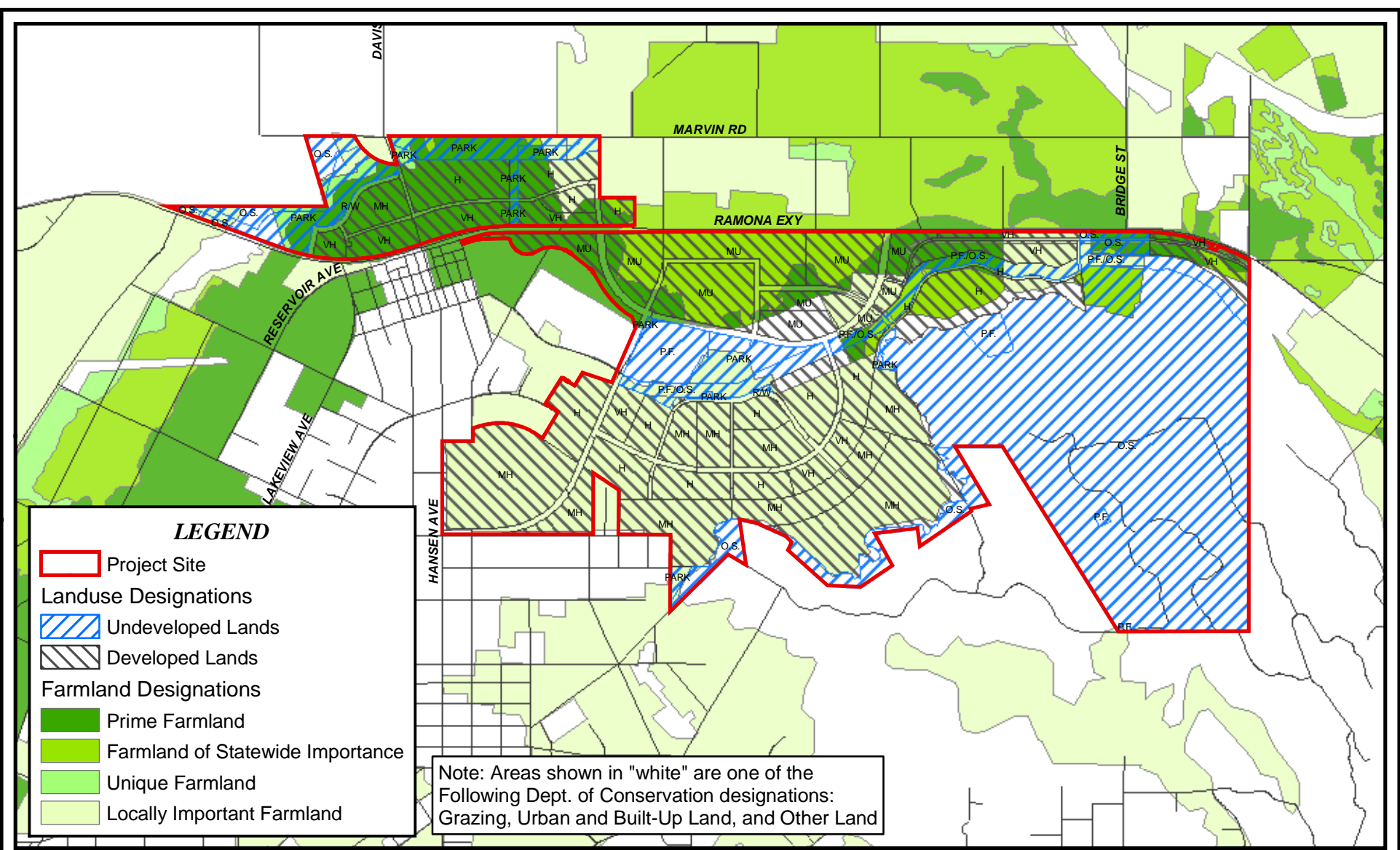
The project site also includes Farmland of Local Importance. Locally Important Farmlands are designated by the Department of Conservation but are not specifically addressed in the CEQA Checklist. However, as indicated in the Riverside County General Plan (Open Space Element, Chapter 5, OS-14), these soils have locally significant economic importance, and include the following: “lands with soils that would be classified as Prime or Statewide Important Farmlands but lack available irrigation water; lands planted in 1980 or 1981 in dry land grain crops such as barley, oats, and wheat; lands producing major crops for Riverside County but that are not listed as Unique Farmland crops (including permanent pasture (irrigated)), summer squash, okra, eggplant, radishes, and watermelon; dairylands including corrals, pasture, milk facilities, hay and manure storage areas if accompanied with permanent pasture or hayland of 10 acres or more; lands identified by the County with Agriculture land use designations or contracts; and lands planted with jojoba that are under cultivation and are of production age.” Farmland of Local Importance encompasses approximately 839 acres of the total project site, which includes a broad spectrum of lands, as indicated above. Approximately 741 acres of Farmland of Local Importance will be Developed Area.

The current zoning on the project site is A-1-10 (Light Agricultural – 10-ac minimum), A-2-10 (Heavy Agricultural – 10-ac minimum), A-P (Light Agricultural with Poultry), C-R (Rural Commercial), M-SC (Manufacturing-Service Commercial), R-1 (One-Family Dwelling), R-A (Residential Agricultural), R-A-1 (Residential Agricultural – 1-ac minimum), R-A-10 (Residential Agricultural, 10-ac minimum), R-A-2^{1/2} (Residential Agricultural – 2^{1/2}-ac minimum), and R-R (Rural Residential). Refer to Section 5.9, Land Use and Planning, of this document, **Figure 5.9-3, General Plan Land Use Designations** and **Figure 5.9-4, Existing Zoning**.

Table 5.2-A, Designated Farmland

	Total Designated Farmland	Project Proposed Developed Area	Project Proposed Un-Developed Area
Prime Farmland	367 acres	289 acres	78 acres
Unique Farmland	23 acres	1.0 acre	22 acres
Farmland of Statewide Importance	246 acres	205 acres	41 acres
Farmland of Local Importance	839 acres	741 acres	98 acres
TOTAL	1,475 acres	1,236 acres	239 acres

All table values are based on 2004 Department of Conservation Maps and are represented by acres. This table does not include the Department of Conservation's Farmland Designations of Grazing, Urban and Built-up, Other, or lands not identified by CEQA or the County as potential significance.



Sources: SP No. 342, CA Dept. of Conservation, 2004.

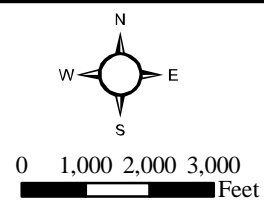


Figure 5.2-1

Conceptual Land Use and Farmland Designations

The Villages of Lakeview EIR No. 491

Thresholds of Significance

Riverside County has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the Riverside County’s “Environmental Assessment Form: Initial Study” (Environmental Assessment Number: 39816) which is part of the Notice of Preparation for the subject project (see Appendix A (CD #3) of this document) indicates that agricultural resource impacts may be considered potentially significant if the project would:

- A. 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.
- B. Conflict with existing agricultural use, or Williamson Act Contract.
- C. Cause development of non-agricultural uses within 300 feet of agriculturally zoned property.
- D. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Designated Farmland to non-agricultural use, including Farmland of Local Importance.

Related Regulations

Federal

There are no federal regulations which apply to agricultural lands with respect to this project.

State

California Land Conservation 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. Contracts are valid for an initial period of ten years and automatically renew each year to maintain a ten-year life. The property owner may file a notice of non-renewal, stopping the automatic annual renewals and placing the contract in a status in which it runs out over the remaining life of the contract. THE VILLAGES OF LAKEVIEW Specific Plan does not include parcels which are covered by Williamson Act contracts, as discussed under the second threshold below.

Local

County General Plan

Land use mapping at the Riverside County General Plan (RCIP GP) level is depicted within four “Foundation Components”. A consistent set of land use designations fall under the umbrella of each Foundation Component. As a result, the land use designations used in this General Plan fall under the umbrella of four Foundation Components, or major categories of County land use: Community Development, Rural, Agriculture, and Multipurpose Open Space.

As per the Riverside County Integrated Project (RCIP) General Plan and the Lakeview/Nuevo Area Plan, the designated Land Uses across the project site consist of Agriculture with a Community Development Overlay, Rural Residential with a Community Development Overlay, Low Density Residential, Very Low Density Residential, Rural Mountainous, Open Space Conservation, and Commercial Retail.

Riverside County General Plan Agricultural Foundation Amendment Cycles

Pursuant to County Ordinance 348, Section 2.7, the Agriculture Foundation Amendment Cycle allows up to 7% of all land designated as Agriculture to change to other Foundation Components and land use designations during each 2½-year Agriculture Foundation Amendment Cycle. The first 2 ½-Year Cycle commenced January 1, 2004. As of that date, the County has determined the total acreage of land within the Agricultural Foundation Component for each of the following three areas: the area covered by the Palo Verde and Desert Center Area Plans and the Eastern Desert Land Use Plan; the area covered by the Eastern Coachella Valley and Western Coachella Valley Area Plans; and the area covered by all other Area Plans. The project site is located in the area covered by “other area plans,” as it is located in the Lakeview/Nuevo Area Plan.

During the first 2 ½-Year Agricultural Foundation Amendment Cycle, 7% of the Agricultural Foundation Base Acreage for each of the areas listed shall be generally authorized for conversion from the Agricultural Foundation Component to any other Foundation Component (the “Agricultural Amendment General Authorization Acreage”). During each subsequent 2 ½-Year Agricultural Foundation Amendment Cycle, the Agricultural Amendment General Authorization Acreage for each of the three areas listed above shall consist of an acreage equal to the Agricultural Amendment General Authorization Acreage for the first 2 ½-Year Agricultural Foundation Amendment Cycle plus the Agricultural Amendment General Authorization Acreage for all subsequent 2 ½-Year Agricultural Foundation Amendment Cycles reduced by the acreage of all General Plan amendments adopted after January 1, 2004 (except those adopted pursuant to Subsection g [of Section 2.7]) which converted land from the Agricultural Foundation Component to any other Foundation Component.

General Plan Policies

The following are applicable policies from the County of Riverside General Plan related to agriculture:

- LU Policy 16.1 Encourage retaining agriculturally designated lands where agricultural activity can be sustained at an operational scale, where it accommodates lifestyle choice, and in locations where impacts to and from potentially incompatible uses, such as residential uses, are minimized, through incentives such as tax credits.
- LU Policy 16.2 Protect agricultural uses, including those with industrial characteristics (dairies, poultry, hog farms, etc) by discouraging inappropriate land division in the immediate proximity and allowing only land uses and intensities that are compatible with agricultural uses (AI 3).

The relationship of the project to the above General Plan policies is presented in Appendix N (CD #4) of this DEIR.

Riverside County Ordinance 625

To help viable agricultural enterprises continue as urbanization approaches, the County of Riverside adopted Ordinance 625. This ordinance is known as the “Right to Farm” ordinance. The purpose of the ordinance is to allow agricultural facilities protection from nuisance complaints generated from new non-agricultural land uses. Ordinance 625 applies to new land divisions, and requires notice to owners of newly divided land that agricultural zoning exists within 300 feet of their property. The Ordinance restricts property owners from filing a nuisance grievance on “normal” operating activities of the neighboring agricultural properties.

Project Design Considerations

Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts to agricultural resources through the design of the project.

The proposed THE VILLAGES OF LAKEVIEW Specific Plan includes the following design features which would reduce or eliminate impacts related to loss of agricultural uses. The project proponent is proposing a land plan that will leave approximately 47% of the project undeveloped (see **Figure 5.2-1 Conceptual Land Use and Farmland Designations**). Of that undeveloped portion, the Project Proponent is dedicating to the County of Riverside (Riverside Conservation Authority) in excess of 950 acres for the Riverside County Integrated Project Multiple Species Habitat Conservation Plan. That land includes approximately 70 acres of "agricultural land" as defined by Public Resources Code Section 10213 which land will be preserved within the MSHCP as passive open space resulting in the long-term conservation of this productive agricultural land.

Environmental Impacts Before Mitigation

Threshold A: *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 Department of Conservation, to non-agricultural use.*

Development of the proposed THE VILLAGES OF LAKEVIEW Specific Plan will convert approximately 495 acres of Designated Farmland (289 acres of Prime Farmland, 205 acres of Farmland of Statewide Importance, 1 acre of Unique Farmland) into non-agricultural land uses and conserve approximately 141 acres of Designated Farmland (78 acres of Prime Farmland, 41 acres of Farmland of Statewide Importance, 22 acres of Unique Farmland) (see **Figure 5.2-1 Conceptual Land Use and Farmland Designations** and **Table 5.2-A, Designated Farmland**). The impacts of this conversion are also addressed in the Cumulative Effects section of this document (Section 7.1).

As part of the project, a general plan amendment (GPA) will be processed with the County to effect several land use changes. The GPA proposes to convert 106 acres of Agriculture Foundation to Community Development Foundation and 2 acres of Agriculture Foundation to Open Space Foundation. These changes will follow the Agricultural Foundation Amendment Cycle, which allows up to 7% of all County lands designated as Agriculture to change to other Foundation and land use designations during each 2½-year Agriculture Foundation Amendment Cycle and convert to another land use consistent with the amended Foundation and land use designation. In addition to the 106 and 2 acres mentioned above, some agriculturally designated land within the project site is designated with a Community Development Overlay (CDO). Lands within the project site which are designated as Agriculture and which has a CDO are not subject to this cycle.

The Land Evaluation and Site Assessment (LESA) model was used to confirm the significance of the conversion of Designated Farmland lands to urban uses on the project site. The LESA model is referenced in the CEQA Guidelines as an optional methodology for evaluating the significance of the conversion of agricultural lands. For the purpose of evaluation in this DEIR, the LESA model is used as a tool to assess the significance of this conclusion. The LESA model report and findings are included in Appendix N (CD #4) of this DEIR.

In applying the LESA model, soil types, soil characteristics, relative project size, water availability, and surrounding uses related to agriculture were all factors used to “rate” the project site based on its “agricultural value.” The LESA model utilizes a rating system based on 100 possible points to evaluate each of these factors then weights them to comprise a final score which ultimately describes the agricultural value of the project site.

The proposed project site scored 28.82 out of 50 points on the Land Evaluation (LE) section which relates soil types and characteristics to agriculture. The proposed project site scored 32 out of 50 for its Site Assessment (SA) characteristics (e.g., water availability, project site, surrounding agriculture). The final LESA model score for the proposed project site was 60.82 out of 100. This score of 60.82 resulted in a scoring decision of “Considered Significant” because both the LE and SA scores were not lower than 20 points. This LESA model score

confirms that conversion of Designated Farmland on the project site will be considered a **significant impact** (see Appendix N (CD #4)).

Threshold B: *Conflict with existing agricultural use, or a Williamson Act contract.*

The proposed project will eliminate the following agricultural-related activities currently being conducted on the project site: the active farming of approximately 950 acres of row crop agriculture, an approximately 150-acre thoroughbred horse farm, and the 89-acre chicken ranch. Therefore, the project will result in the conversion of the row crops operations, the thoroughbred horse ranch operation, and the chicken ranch and egg processing facility to non-agricultural uses: this is considered **significant without mitigation**.

There are no active Williamson Act contracts or other agricultural preserve contracts within the project site and therefore, the proposed project would not conflict with a Williamson Act contract. Therefore, **no impact** would result (see Effects Found Not Significant, Section 4).

Threshold C: *The proposed project would cause development of non-agricultural uses within 300 feet of agriculturally zoned property (County of Riverside Ordinance No. 625, Right-to-Farm).*

Current zoning designations adjacent to the project site include a variety of agriculture designations (A), natural assets (N-A), residential agriculture (R-A), and specific plan (SP). Project implementation, without mitigation, will locate non-agricultural uses within 300 feet of the agriculturally-zoned properties west, north, and south of the project site. Pursuant to Riverside County Ordinance No. 625, property owners of the proposed residential development will be notified of the existing agricultural uses within 300 feet of their property, and the residents will be restricted from filing nuisance grievances against the adjacent agricultural properties. However, because the project will result in the development of non-agricultural uses within 300 feet of agriculturally-zoned property, this impact is considered **significant without mitigation**. Mitigation measure **MM Ag 1** requires setbacks of 300 feet between existing agricultural uses of an offensive nature and new urban development built as a part of the project. Potentially significant impacts are reduced to **less than significant with implementation of existing regulations and mitigation measures**.

Threshold D: *The proposed project involves other changes in the existing environment which, due to their location or nature, could result in conversion of Designated Farmland to non-agricultural use, including Farmland of Local Importance.*

Other than direct conversion of Designated Farmland on site to non-agricultural uses, discussed above, improvements to several of the project area roadway intersections, as well as improvements to the region's utilities (water and sewer), could have an impact on the remaining agricultural lands within the vicinity of the project area. Farmland of Local Importance will also be impacted and is discussed below.

The project site is located in an area that has historically and currently consists of agricultural uses. The project includes improvements to, and the addition of, several access roads in the area

surrounding the project. If access in and around the area were limited, such roadway improvements might encourage the conversion of other agricultural lands to urban uses. Because access to the adjacent agricultural sites to the west and northwest is not limited, however, these circulation improvements should not create any additional opportunities to convert these lands to urban uses.

The project site also includes approximately 741 acres of Farmland of Local Importance (see **Table 5.2-A**). Locally Important Farmlands are designated by the Department of Conservation but are not specifically addressed in the CEQA Checklist. However, as indicated in the Riverside County General Plan (Open Space Element, Chapter 5, OS-14), these soils have locally significant economic importance. Approximately 741 acres of Farmland of Local Importance will be Developed Area (see **Figure 5.2-1**).

The project also includes improvements to utilities such as water and sewer. These improvements are identified in SP 342 and the Eastern Municipal Water District's (EMWD) Lakeview/Nuevo Area Master Plan for Water, Sewer, and Recycled Water (Master Plan), which describes the specific infrastructure facilities needed to serve the Lakeview/Nuevo area of unincorporated Riverside County. The Master Plan planning area boundary covers approximately 16.7 square miles generally located from Nuevo Road on the south to approximately one half mile north of Ramona Expressway. Implementation of the project will include the construction of Master Plan facilities, which will allow for the construction of additional sewage disposal lines and facilities, and increases to the water delivery to the area, all of which will accommodate the additional 34,000 population anticipated as a result of the project. Some of these facilities may allow for development in areas where Designated Farmland would be converted.

The Riverside County Transportation Commission (RCTC) project, Mid County Parkway, has been planned to accommodate existing and projected growth in the region. The Mid County Parkway is a proposed 32-mile transportation corridor that will relieve traffic congestion for east-west travel along Ramona Expressway in western Riverside County between the San Jacinto and Corona areas, and help address future transportation needs through 2035. The proposed corridor was identified as a part of the Riverside County Integrated Project, a region-wide transportation and environmental planning project undertaken over several years by the RCTC and the County of Riverside.

The Mid County Parkway will create an express route for regional trips and public transit between the population centers of San Jacinto/Hemet, Perris/Moreno Valley, and Corona/Norco. This RCTC project will significantly reduce congestion, improve traffic flow, and reduce travel times on I-215, SR 91, SR 74, and SR 60, thus resulting in better, less congested access to the existing agricultural communities along its route, which could lead to the conversion of agriculturally productive lands adjacent to the property to non-agricultural land uses. The Mid County Parkway will be implemented with or without the project.

The cumulative effect of the project as well as planned regional improvements to roadways and utilities could result in the conversion of surrounding Designated Farmland, including Farmland of Local Importance, to non-agricultural uses, which is considered **significant without mitigation**.

Mitigation Measures Considered

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate the potential significant adverse impacts upon existing agricultural uses, Designated Farmland, and compatibility between agricultural and non-agricultural uses/zoning. A number of mitigation approaches were considered and determined to be infeasible, as discussed below:

- **Place a conservation easement on other Designated Farmland or place such alternative farmland under Williamson Act contract.** A conservation easement conveys a property right that would restrict the use of the encumbered land such that only agricultural uses could be conducted on said property. A land trust or other non-profit organization could then accept the easement and become the steward of that property. According to the Southern California Agricultural Land Foundation representative, Mr. Chuck Hale on October 31, 2006, while conservation easements may work in other parts of the state, the Foundation does not know of any conservation easements that exist in Southern California because of the unique real estate market in this region, making it economically infeasible to a property owner to place property under permanent agricultural uses. The Foundation representative also stated that the process of acquiring an easement is lengthy. Placing conservation easements on alternate property as a mitigation measure to offset the impacts associated with the loss of agricultural lands is undesirable, if not infeasible for economic reasons, and may not be able to be accomplished in a reasonable time frame.

A conservation easement for the protection of agricultural lands is different than placing lands under conservation for biological habitat, because agriculture is a business. When a property is set aside to preserve habitat, a land trust is responsible for making sure the land is left alone as native habitat. Placing that natural land under permanent conservation does not economically burden the property owner, as that owner has likely been compensated for its purchase. However, the placement of a permanent restriction on a property that only allows for agriculture in perpetuity, limits that property to one type of business. Continued agricultural production is dependent on economic and social factors that determine where, when, and how long that business will stay in operation. When the business is no longer profitable, the farmer will stop operations. Placing a piece of property under permanent agricultural use could also cause future land use compatibility issues as surrounding lands are developed.

It would be true that such an arrangement might not be feasible if an easement had to be granted by a property owner who would need to be convinced of the value of this easement to his or her interests. Mitigation measure **MM Ag 2**, below, was developed through discussions with the Master Developer because they own land in the vicinity of the project site, thus making the placement of an easement on such land feasible in a timely manner. The property that will receive an agricultural easement as a result of this mitigation measure is expected to be located within five miles of the project site, in the vicinity of the San Jacinto Wildlife Area and existing agricultural uses.

An alternative to a permanent conservation easement would be to place agricultural land under a Williamson Act contract. However, as evidenced in many other communities of Riverside County, property owners have filed notices of non-renewal on their properties in order to remove the property from the restrictions of the Williamson Act. Agriculture is not considered in County land use designations for this area and zoning must be brought into conformance with the General Plan land use designations to comply with state law. Although less restrictive than an easement, Williamson Act contracts would result in similar issues with respect to compatibility and mandating a particular business, whether profitable or not.

Even if feasible, the placement of alternative farmland under a conservation easement or under a Williamson Act contract, would establish a commitment to retain that alternative farmland for agricultural use. The length of time that this alternative land will remain in agricultural use would be dependent upon the terms of the conservation easement or Williamson Act contract and the economic feasibility of continued agricultural operations. However, the conservation easement or Williamson Act contract will only reduce the potential that the alternative land will convert to non-agricultural use. The individual and cumulative loss of agricultural land caused by the proposed project will still occur, however, resulting in a net loss. Therefore, mitigation measure **MM Ag 2** will not reduce the proposed project's impacts upon agriculture to below the level of significance.

- **Pay a per-acre mitigation fee to be used for the acquisition of development rights on farmland elsewhere.** Riverside County does not have a program for the transfer of development rights from one property to another. In any event, the payment of a mitigation fee for the acquisition of development rights from agricultural property would only have the effect of preserving agricultural uses on existing agricultural property. There would be no reduction in the individual or cumulative impacts resulting from the loss of agricultural land and uses on the project site. Thus this potential mitigation measure would not reduce or eliminate the proposed project's impacts upon agriculture.

Proposed Mitigation Measures

After consideration, the following mitigation measures and Alternatives 1, 2, 3, and 5 in Section 8.0 were developed to reduce impacts due to loss of agricultural land and incompatibility issues.

MM Ag 1: To reduce potential significant adverse impacts due to incompatibility between agricultural uses and proposed suburban development, proposed residences, school buildings, and commercial structures shall be setback 300 feet from existing active agricultural uses of an offensive nature which are defined as: corrals, chicken houses, dairy waste ponds, manure stockpiles, or commercial livestock. This setback shall not apply to areas of the project where Ramona Expressway intervenes between active agriculture and proposed development because the expressway will act as the buffer. The 300-foot buffer area may include public road rights-of-way, parking lots, and service or maintenance areas. In addition to project edge conditions, the 300-foot setback shall also apply to interim conditions on site between occupied project-related buildings and existing on-site agricultural uses of an offensive nature (e.g., chicken ranch) that are located in a later phase of project development and may remain operational while earlier phases of development are being built.

MM Ag 2: A perpetual agricultural conservation easement (Easement) as defined by Section 815.1 of the California Civil Code containing a minimum of 100 acres of "agricultural land" as defined by Public Resources Code Section 10213 within five miles of the project, shall be provided by the Master Developer to the state, county, resource conservation district, regional park or open-space district, regional park or open-space authority, a nonprofit organization, or other entity authorized to acquire and hold conservation easements under Civil Code Section 815.3. The purpose of this Easement is to restrict the property's use to only those uses that will not impair or interfere with the property's agricultural productive capacity, its soils, and its agricultural character, values, and utility. To the extent that the preservation of the open space character and scenic, habitat, natural, or historic values of the property are consistent with such use, it will be within the purpose of this easement to protect those values. Rural enterprises or activities, including, but not limited to, grazing, hunting and fishing, wildlife habitat improvement, predator control, timber harvesting, and firewood production, shall be permitted uses provided that the agricultural productivity of the land and is not significantly impaired by those activities. The Easement shall be recorded on or before the issuance of the 1,500th building permit.

MM Ag 3: Master Developer shall preserve within the project no less than 3 acres of "Prime Farmland" as defined by Public Resources Code Section 10213 for use as a community garden or gardens by recordation of a conservation easement as defined by Section 815.1 of the California Civil Code. To the extent that the preservation of the open space character and scenic, habitat, natural, or historic values of the property are consistent with such use, it will be within the purpose of this easement to protect those values. The Community Garden will be run by the Homeowners Association or County Service Area so as to be available to the public for the purpose of gardening. The location of the community garden or gardens shall occur within the 500-foot Greenbelt as defined by Planning Areas 5, 7, 8, 21, and 22. An easement shall be recorded and the community garden or gardens shall be available for use on or before the issuance of the 1,500th building permit.

Summary of Project-Specific Environmental Effects After Mitigation Measures Are Implemented

Implementation of **MM Ag 2** and **3**, which relate to the off-site conservation easement and a 3-acre on-site community garden, will reduce potential adverse environmental impacts related to loss of Designated Farmland and existing agricultural uses, however, the reduction will not be sufficient to result in less than significant impacts. Alternatives to the proposed project are discussed in Section 8.0, which avoids some areas of Designated Farmland; however, not all areas can be avoided. Therefore, impacts related to loss of Designated Farmland and existing agricultural uses remain **significant and unavoidable after mitigation**, and a Statement of Overriding Consideration will be required prior to project approval.

Implementation of **MM Ag 1**, which requires a 300-foot setback between existing offensive agricultural uses and urban uses, will reduce impacts caused by the proximity of incompatible land uses (urban/agriculture). This potential adverse impact will be reduced to **less than significant after mitigation**.

Summary of Cumulative Environmental Effects After Mitigation Measures Are Implemented

Section 7.1 of the DEIR discusses cumulative effects in detail.

Full build-out of the proposed project will result in the conversion of the existing agricultural uses to non-agricultural uses. Such conversion of farms and agricultural operations is occurring throughout the Lakeview/Nuevo area. The project site currently contains an 89-acre poultry farm containing approximately 1.2 million chickens, a 150-acre thoroughbred farm, and approximately 950 acres of productive row crops or fallow land. At the time of circulation of the Notice of Preparation for this DEIR, less than 10 residences existed on the site, some of which have subsequently been removed. The Lakeview/Nuevo planning area as a whole is characterized by its agriculturally productive lands, and there are several dairies, row crops, and other chicken ranches adjacent to the project. The project does not accommodate the continuation of these commercial agricultural activities.

Prime Farmland encompasses approximately 367 acres of the project site, of which 289 acres are planned for development. Farmland of Statewide Importance encompasses approximately 246 acres, of which 205 acres is planned for development. And Unique Farmland encompasses approximately 23 acres, of which 1 acre is planned for development. Farmland of Local Importance is designated by the Department of Conservation but is not specifically addressed in the CEQA Checklist. However, as indicated in the Riverside County General Plan (Open Space Element, Chapter 5, OS-14), these soils have locally significant economics importance. Farmland of Local Importance encompasses approximately 839 acres of the total project site. Approximately 741 acres of Farmland of Local Importance will be Developed Area.

Figure 8-2, Farmland Designations in the Lakeview/Nuevo Area of Riverside County, shows that many areas surrounding the project site are currently Designated Farmland of varying types. Most farmland will be lost to development under the County General Plan. One measure of protection given such lands is a General Plan land use classification which promotes agricultural uses. The Lakeview/Nuevo Area Plan shows 826 acres of agriculturally designated land at build-out within the project site. The project includes approximately three acres of agriculture (community garden), after mitigation.

The RCIP EIR evaluated the potential environmental impacts upon agriculture resulting from build-out of the RCIP General Plan. The RCIP EIR stated that the amount of unincorporated land actively utilized for agricultural uses totaled 266,926 acres, of which 132,183 acres were designated “prime” farmland, 42,096 acres as “statewide important” farmland and 37,726 acres as “unique” farmland. The RCIP General Plan designates approximately 180,177 acres for agricultural use at build-out (see **Table 7.1-D, RCIP Projected RCIP General Plan Land Use Acreage at Build-Out**). In the Lakeview/Nuevo Area Plan a total of 2,031 acres are designated for agricultural use. Assuming all agriculturally designated land will be in active agricultural use at General Plan build-out, there will be a loss of approximately 62,084 acres of agricultural land countywide. The RCIP EIR determined that this loss of prime agricultural lands will be a significant unavoidable impact and that it would contribute to a cumulative adverse impact.

Since the project increases this loss, it is found to be **cumulatively significant** with respect to loss of agricultural uses and Designated Farmland.

As mentioned above, the DEIR identifies mitigation measures and Alternatives to the project (Section 8.0) which will lessen but not reduce to less than significant the potential impacts of the project with respect to Designated Farmland of Importance to the state and county, therefore, cumulative impacts will remain **significant and unavoidable**.

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

5.3 AIR QUALITY

The Air Quality Impact Analysis prepared for this project (Appendix C, CD #3) evaluated whether the expected criteria air pollutant emissions generated as a result of construction and long term operations (i.e., vehicle emissions) of the proposed project would cause significant impacts to air resources in the project area. The Air Quality Impact Analysis (AQIA) was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 *et seq.*). The methodology follows the “CEQA Air Quality Handbook” (1993) prepared by the South Coast Air Quality Management District (SCAQMD) for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD staff, the URBEMIS 2007 for Windows version 9.2.4 computer program was used to quantify project-related emissions. The two Health Risk Assessments (HRA’s) (Appendix C, CD #3) evaluated the impacts to the future residents of THE VILLAGES OF LAKEVIEW from diesel particulate matter from trucks on the Ramona Expressway and from the toxic air contaminants emitted from the existing Nutrilite manufacturing facility. Information regarding the methodologies used in the HRA’s can be found in the body of the reports in Appendix C (CD #3). The focus of the following discussion is related to the potential adverse impacts from point and non-point sources (i.e., vehicles) with respect to sensitive receptors, air quality plans, air quality standards, cumulative increases of pollutants, and production of odors.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

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- California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*, Publication CEC-600-2006-013-SF, December 2006. (Available at <http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-SF.PDF>) (CEC 2006a)
- California Energy Commission, *Our Changing Climate*, Publication CEC-500-2006-077, July 2006. (Available at <http://www.energy.ca.gov/2006publications/CEC-500-2006-077/CEC-500-2006-077.PDF>) (CEC 2006b)
- California Energy Commission, *Public Health Related Impacts of Climate Change in California*, Publication CEC-500-2005-197-SF, March 2006. (Available at <http://www.energy.ca.gov/publications/index.php>) (CEC 2006c)
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- California Public Utilities Commission, *News Release: PUC Sets GHG Emissions Performance Standard to Help Mitigate Climate Change*, January 25, 2007. (Available at http://www.cpuc.ca.gov/static/energy/electric/climate+change/070411_ghgeph.htm)
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Setting

The proposed project site lies within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB consists of Orange County together with the coastal and mountain portions of Los Angeles, Riverside, and San Bernardino counties.

Topography, atmospheric inversions, and dominant onshore flows affect regional and local air quality within the SCAB. Topographic features such as the San Gabriel, San Bernardino, and San Jacinto mountains form natural barriers to the horizontal dispersion of air contaminants. The presence of atmospheric inversions limits the vertical dispersion of air pollutants. With an inversion, the temperature initially follows a normal pattern of decreasing temperature with increasing altitude, however, at some elevations, the trend reverses and temperature begins to increase as altitude increases. This transition to increasing temperature establishes the effective mixing height of the atmosphere and acts as a barrier to vertical dispersion of pollutants. Dominant onshore flow provides the driving mechanism for both air pollution transport and pollutant dispersion. Air pollution generated in coastal areas is transported east to inland receptors by the onshore flow during the daytime until a natural barrier (the mountains) is confronted, limiting the horizontal dispersion of pollutants. The result is a gradual degradation of air quality from coastal areas to inland areas, which is most evident with photochemical pollutants (formed by reactions under sunlight), such as ozone.

Climate

Climate in the SCAB is determined by terrain and geographical location. The project site lies within the terrain south of the San Bernardino mountains, east of the Santa Ana mountains and west of the San Jacinto mountains. The Lakeview mountains and Bernasconi Hills are southeast and northwest of the proposed project site, however, these mountains are not as relevant as the San Bernardino mountains considering the elevation and ability to deflect or funnel air. The climate in the Basin is typical of southern California's Mediterranean climate which is characterized by dry, warm summers and mild winters. Winters typically have infrequent rainfall, light winds and frequent early morning fog and clouds that turn to hazy afternoon sunshine.

The following includes factors that govern micro-climate differences among inland locations within the Basin: 1) the distance of the average air trajectory from the site to the ocean; 2) the site elevation; 3) the existence of any intervening terrain that may affect airflow or moisture content; and 4) the proximity to canyons or mountain passes. As a general rule, locations farthest inland from the ocean have the hottest summer afternoons, the lowest rainfall, and the least amount of fog and clouds. Foothill communities in the Basin have greater levels of precipitation, cooler summer afternoons and may be exposed to wind funneling through nearby canyons during Santa Ana winds. Terrain will generally steer local wind patterns. The project site is located in an open valley area toward the eastern reaches of the Basin with no intervening hills or mountains of significant height nearby to divert the prevailing winds.

Precipitation and Temperature

Annual average temperatures in the Basin typically range in the low to mid-60s (degrees Fahrenheit). Temperatures above 100 degrees in the summer are normal and can occur in all portions of the Basin, while winter month temperatures can reach the lower 30s.

The rainy season in the Basin is November to April. Rainfall averages vary over the Basin. Perris averages 6 inches of rainfall per year, while Hemet and San Jacinto average 11 and 12 inches, respectively. Rainy days vary from 5 to 10 percent of all days in the Basin, with the most frequent occurrences of rainfall near the coast.

Winds

The interaction of land (offshore) and sea (onshore) breezes control local wind patterns in the area. Daytime winds typically flow from the coast to the inland areas, while the pattern typically reverses in the evening, flowing from the inland areas to the ocean. Air stagnation may occur in the early evening and early morning during periods of transition between day and nighttime flows.

Approximately 5 to 10 times a year, the project site vicinity experiences strong, hot, dry desert winds known as the Santa Ana winds. These winds, associated with atmospheric high pressure, originate in the upper deserts and are channeled through the passes of the San Bernardino Mountains and into the inland valleys. Santa Ana winds can last for a period of hours or days, and gusts of over 60 miles per hour have been recorded.

High winds, such as the Santa Ana winds, affect dust generation characteristics and create the potential for off-site air quality impacts, especially with respect to airborne nuisance and particulate emissions. Local winds in the project area are also an important meteorological parameter because they control the initial rate of dilution of locally generated air pollutant emissions.

Air Pollution Constituents

Criteria Pollutants

Air pollutants are classified as either primary, or secondary, depending on how they are formed. Primary pollutants are generated daily and are emitted directly from a source into the atmosphere. Examples of primary pollutants include: carbon monoxide (CO), nitrogen dioxide (NO₂), nitric oxide (NO), sulfur dioxide (SO₂), particulates (PM-10 and PM-2.5) and various hydrocarbons (HC), also known as reactive organic gases (ROG) or volatile organic compounds (VOC). The predominant source of air emissions generated by the project development is expected to be vehicle emissions. Motor vehicles primarily emit CO, NO_x and VOC/HC.

Secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. An example of a secondary pollutant is ozone (O₃), which is one of the products formed when NO_x reacts with hydrocarbons (HC), in the presence of sunlight. Other secondary pollutants include photochemical aerosols. Secondary pollutants, such as oxidants, represent major air quality problems in the Basin.

The Federal Clean Air Act of 1970 established the National Ambient Air Quality Standards (NAAQS). Six “criteria” air pollutants were identified using specific medical evidence available at that time, and NAAQS were established for those chemicals. The state of California has adopted the same six criteria pollutants, but has established different allowable levels (see **Table 5.3-A**). The six criteria pollutants are: ozone, carbon monoxide, particulates less than 10 microns in size, nitrogen dioxide, sulfur dioxide, and lead. The following is a further discussion of the *criteria pollutants*, as well as volatile organic compounds.

- **Carbon Monoxide (CO)** – A colorless, odorless toxic gas produced by incomplete combustion of carbon-containing substances. Concentrations of CO are generally higher during the winter months when meteorological conditions favor the build-up of primary pollutants. Automobiles are the major source of CO in the Basin, although various industrial processes also emit CO through incomplete combustion of fuels. In high concentrations, can cause serious health problems in humans by limiting the red blood cells’ ability to carry oxygen (SCAQMD 1993).
- **Oxides of Nitrogen (NO_x)** – Those that are important in air pollution are nitric oxide (NO) and nitrogen dioxide (NO₂). NO is a colorless, odorless gas formed by a combination of nitrogen and oxygen when combustion takes place under high temperatures and pressures. NO₂ is a reddish-brown gas formed by the combination of NO with oxygen. Combustion in motor vehicle engines, power plants, refineries and other industrial operations, as well as ships, railroads and aircraft, are the primary sources of NO_x. NO₂ at atmospheric concentrations is a potential irritant and can cause coughing in healthy people, can alter respiratory responsiveness and pulmonary functions in people with preexisting respiratory illness, and potentially lead to increased levels of respiratory illness in children (EPA 2005).
- **Ozone (O₃)** – A colorless toxic gas that irritates the lungs and damages materials and vegetation. During the summer’s long daylight hours, plentiful sunshine provides the energy needed to fuel photochemical reactions between NO₂ and VOC which result in the formation of O₃. Conditions that lead to high levels of O₃ are adequate sunshine, early morning stagnation in source areas, high surface temperatures, strong and low morning inversions, greatly restricted vertical mixing during the day, and daytime subsidence that strengthens the inversion layer (all of which are characteristic of Western Riverside County). Ozone represents the worst air pollution-related health threat in the SCAB as it affects people with preexisting respiratory illness as well reduces lung function in healthy people. Studies have shown that children living with the SCAB experience a 10–15 percent reduction in lung function (SCAQMD 1993).
- **Atmospheric Particulate Matter (PM)** – Made up of fine solid and liquid particles, such as soot, dust, aerosols, fumes, and mists. PM-10 consists of particulate matter that is 10 microns or less in diameter, and PM-2.5 consists of particulate matter of 2.5 microns or less in size. Both PM-10 and PM-2.5 can be inhaled into the deepest part of the lung, attributing to health effects. The presence of these fine particles by themselves cause lung damage and interfere with the body’s ability to clear its respiratory tract. Said particles can also act as a carrier of other toxic substances (SCAQMD 1993) and reduce visibility. The sources contributing to particulate matter pollution include road dust, windblown dust, agriculture, construction, fireplaces and wood burning stoves, and vehicle exhaust. Specifically, SCAQMD data indicates the largest component of PM-10 particles in the area comes from dust (unpaved roads, unpaved yards, agricultural lands, and vacant land that has been disked). PM-2.5

particles are mostly manmade particles resulting from combustion sources.

- **Sulfur dioxide (SO₂)** – A colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. SO₂ can result in temporary breathing impairment in asthmatic children and adults engaged in active outdoor activities. When combined with PM, SO₂ can cause symptoms such as shortness of breath and wheezing and, with long-term exposure, lead to the exacerbation of existing cardiovascular disease and respiratory illnesses (EPA 2005). Although SO₂ concentrations have been reduced to levels well below state and federal standards, further reductions in SO₂ emissions are needed because SO₂ is a precursor to sulfate and PM-10.
- **Lead (Pb)** – Lead concentrations once exceeded the state and federal air quality standards by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982. Health effects associated with lead include neurological impairments, mental retardation, and behavioral disorders. At low levels, lead can damage the nervous systems of fetuses and result in lowered IQ levels in children (EPA 2005). Though special monitoring sites immediately downwind of lead sources recorded very localized violations of the state standard in 1994, no violations have been recorded at these stations since 1996. Unleaded gasoline has greatly contributed to the reduction in lead emissions in the SCAB. Since the proposed project will not involve leaded gasoline, or other sources of lead emissions, this criteria pollutant is not expected to be a factor with project implementation.
- **Reactive Organic Gases/Volatile Organic Compounds (ROG/VOC)** - It should be noted that there are no state or federal ambient air quality standards for VOCs because they are not classified as criteria pollutants. VOCs are regulated, however, because a reduction in VOC emissions reduces certain chemical reactions, which contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM-10 and lower visibility levels. Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOC because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere, even at low concentrations, are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, is a hydrocarbon component of VOC emissions that is known to be a human carcinogen.

Toxic Air Contaminants

Toxic air contaminants (TACs) are chemicals generally referred to as those contaminants known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. There are hundreds of air toxics, and exposure to these pollutants can cause or contribute to cancer or non-cancer health effects such as birth defects, genetic damage, and other adverse health effects. Effects may be both chronic (i.e., of long duration) or acute (i.e., severe but of short duration) on human health. Acute health effects are attributable to sudden exposure to high quantities of air toxics. These effects can include nausea, skin irritation, respiratory illness, and, in some cases, death. Chronic health effects usually result from low-dose, long-term exposure from routine releases of air toxics. The effect of major concern for this type of exposure is cancer, which typically requires a latency period of 10-30 years after exposure to develop.

In 2000, the SCAQMD released the Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-II). The monitoring portion of MATES-II was designed to measure numerous air toxic compounds at different locations in the Basin in order to establish a baseline of existing air toxic ambient concentrations, as well as risk level data, and to assist in the assessment of modeling performance accuracy. Ten sites were selected and air samples were collected for up to one year. The ten locations are in Anaheim, Burbank, Compton, Fontana, Huntington Park, Long Beach, Los Angeles, Pico Rivera, Rubidoux, and Wilmington. Rubidoux is the nearest monitoring site to the proposed project.

In January 2008, the SCAQMD released the Draft Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III). The draft report completed the 90-day public review on April 4, 2008. The Final report was released in September 2008. The ten monitoring sites listed above remained the same for the MATES III study, with the exception of the Wilmington Station moving 2.5 miles east.

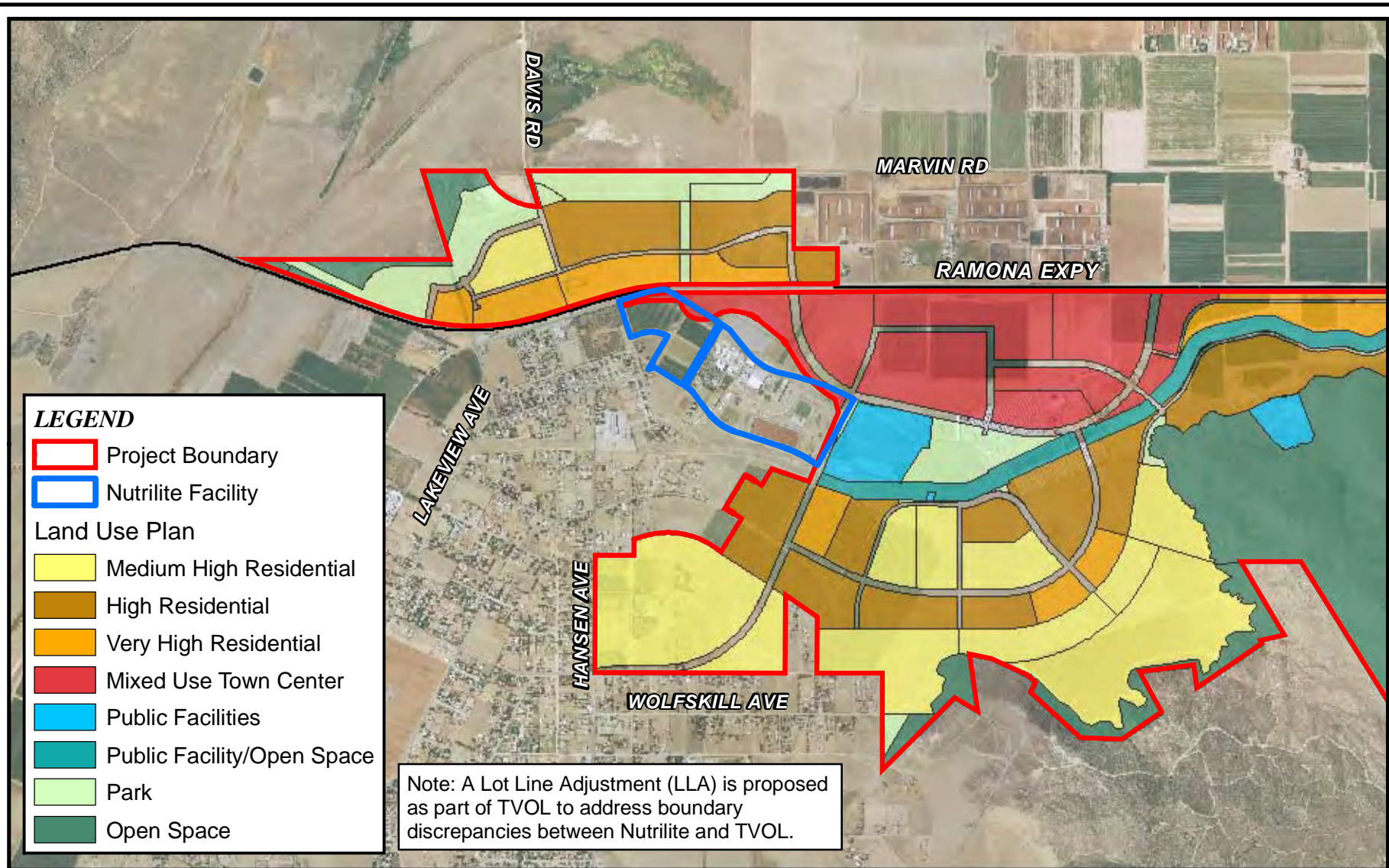
The nearest stationary source of TAC emissions to the project site is the Nutrilite facility located south of Planning Area 26 and west of Planning Area 38 depicted in **Figure 5.3-1, Nutrilite Facility Location**. Since the Nutrilite facility currently operates in close proximity to the proposed project, its effects on the project were evaluated to determine if significant health risks to future residents can be expected. This facility is involved with vitamin and food supplement manufacturing. The following information and references are contained in the Nutrilite facility HRA (Appendix C of this DEIR).

The Nutrilite facility reports the following 11 chemicals to the South Coast Air Quality Management District (SCAQMD) as of 2004; 1,3-Butadiene, Ammonia (NH₃), Arsenic, Benzene, Cadmium, Hexavalent chromium (Cr(VI)), Formaldehyde, Lead, Polycyclic Aromatic Hydrocarbons (PAH's) without components reported, Naphthalene, and Nickel. It is unknown what the exact sources (e.g. stationary, mobile etc.) of these on-site pollutants are. This is because the Nutrilite facility is exempt from AB 2588, the CalEPA air toxics hot spots program, based on SCAQMD District Prioritization scores (SCAQMD 2008c) and thus is exempt from having to perform a specific HRA because of the low-priority score it received. The facility is also not required to monitor and report information specific enough to perform a facility-specific HRA. Therefore, the following descriptions provide only general information about each pollutant from a statewide and/or national perspective.

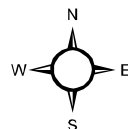
- **1,3-Butadiene** – 1,3-Butadiene is a flammable, colorless gas with a pungent odor. It is also an HAP and a TAC. 1,3-Butadiene is commercially produced in the U.S., but is not produced in California. Nearly all statewide emissions result from incomplete combustion of mobile source fuel. Vehicles without catalytic converters emit far greater amounts than vehicles with functioning catalytic converters. Only four percent of statewide emissions result from stationary area and point sources, three and one percent, respectively. Stationary area sources emit exhaust from boilers, heaters, internal combustion engines, and turbines during agricultural, manufacturing, residential fuel combustion, and oil and gas production. Stationary point sources emit 1,3-butadiene during stationary engine fuel combustion and the production of certain fungicides, for example. Staff at the Office of Environmental Health Hazard Assessment (OEHHA) has concluded that ambient concentrations may pose a potential hazard to human health and is considered a carcinogen. It is known to induce cancer

in the hearts of laboratory animals and some evidence from epidemiological studies shows an increased risk of death to production workers from leukemia and other lymphomas. Based on the California Air Resources Board (CARB) staff population-weighted outdoor ambient exposure of $0.82 \mu\text{g}/\text{m}^3$, up to 140 excess cancers per million are predicted over a 70 year lifetime.

- **Ammonia** – Although ammonia is not listed as a TAC in California under the CARB or OEHHA or as a Hazardous Air Pollutant (HAP) by the U.S. EPA, it is listed as a TAC under SCAQMD Rule 1401. Ammonia is known to be emitted in California and has defined acute and chronic inhalation rates, but does not have a cancer potency value. Ammonia is a volatile colorless gas which is very soluble in water, alcohol, and ether. The most common uses of ammonia are found in industry processes such as fertilizers, plastics, and explosives. Ammonia vapors cause eye and respiratory tract irritation. When Ammonia comes in contact with the skin, it causes burns and blisters.
- **Inorganic arsenic** – Inorganic arsenic is listed as both an HAP and a TAC. It can be detected in the ambient air throughout California from a variety of stationary sources. Arsenic in its metallic form can be a yellow, black, or gray solid which is soluble in nitric acid and insoluble in water. It is also odorless. Inorganic arsenic remains in the atmosphere for approximately nine days. The majority of statewide emissions of inorganic arsenic result from fuel combustion and pesticide/herbicide usage. Arsenic is also found in tobacco smoke. Acute inhalation may result in severe respiratory tract irritation. Symptoms include coughing, dyspnea, and chest pain followed by garlicky breath and gastrointestinal symptoms such as vomiting and diarrhea. Acute poisoning can result in dermatitis, mild bronchitis, and conjunctivitis. The California Department of Health Services (CDHS) estimates the number of excess cancer deaths due to airborne inorganic arsenic. Using the overall population-weighted average based on smoking levels in California, the excess cancer deaths ranges from 4 to 6 per million.
- **Benzene** – Benzene is also listed as both an HAP and a TAC. Benzene is a colorless liquid with a sweet smell. It is soluble in ethanol, chloroform, and oils etc. Common uses for benzene include the manufacture of plastics and the synthesis of many pesticides and pharmaceuticals. Acute exposure to benzene can cause many symptoms including but not limited to giddiness, euphoria, nausea, drowsiness, vomiting, respiratory tract and eye irritation, and even cardiac failure. Chronic effects cause disorders of the blood, specifically bone marrow, excessive bleeding, and damage to the immune system. Reproductive and developmental effects have been observed in lab animals. Specifically, adverse affects on the fetus which include low birth rates, delayed bone formation, and bone marrow damage. In occupationally exposed humans, there has been an increased incidence in leukemia. CARB estimated that the added lifetime cancer risk for the South Coast Air Basin using the benzene population-weighted average concentration is in the range of 101 to 780 per million exposed.



Sources: AirPhoto USA 2007;
SP No. 342



0 1,000 2,000 3,000
Feet

Figure 5.3-1

Nutrilite Facility Location

The Villages of Lakeview EIR No. 471

- **Cadmium** – Cadmium is a soft silver-white metal usually found combined with other elements. It is both an HAP and a TAC. Cadmium is emitted from both stationary and mobile sources in California. Stationary sources include secondary smelters, plants burning oil or coal. Mobile sources of cadmium are gasoline and diesel vehicles and particles released into the atmosphere from tire wear. Stationary sources emit approximately 80 percent or more of statewide emissions. Acute inhalation exposure to cadmium affects the lungs resulting in bronchial and pulmonary irritation. Chronic inhalation can cause effects on the lungs including bronchiolitis and emphysema. Chronic inhalation or oral exposure causes buildup of cadmium in the kidneys which may cause kidney disease and increase the frequency of kidney stones. Human developmental studies are limited for this chemical, though some evidence suggests that maternal cadmium exposure may result in decreased birth-weights. There is also limited evidence which links inhalation exposure to reduced sperm counts and viability in humans. For California, the estimated upper-bound excess lifetime cancer risk from atmospheric concentrations is 30 per million. However, for persons living near sources of cadmium which emit $0.04 \mu\text{g}/\text{m}^3$ 24-hours per day the excess lifetime cancer risk increases to 480 per million persons exposed.
- **Hexavalent chromium** – Hexavalent chromium (Cr(VI)) is listed as both an HAP and a TAC. Industrial sources emit chromium in two forms; hexavalent or trivalent, or a combination of both. Hexavalent chromium is used as a corrosion inhibitor in the cooling towers and in chrome plating operations. These processes contribute the most known emissions in the state. Other sources of chromium emissions include the combustion of oil, coal, municipal waste, and sewage sludge. However, the historical data for these source categories were reported in total chromium not specifying what form these emissions were in and in what quantities. Available information from CARB suggests that combustion emissions are trivalent chromium. The atmospheric persistence of Cr(VI) is unknown, but measurements have shown that removal of this element mostly occurs through wet deposition. Acute effects of Cr(VI) inhalation mainly target the respiratory tract. Other inhalation effects include gastrointestinal and neurological effects. Chronic inhalation also affects the respiratory tract. The following effects have been reported; perforation and ulcerations of the septum, bronchitis, and decreased pulmonary function, pneumonia, asthma, and nasal itching and soreness. Chronic inhalation or oral exposure may also affect the liver, kidney, gastrointestinal and immune systems with the possibility of effects on the blood as well. While there is limited information on the reproductive effects of Cr(VI) in humans, inhalation exposure may result in complications during pregnancy and childbirth. Based on conservative estimation, the CDHS reported the added lifetime cancer risk ranges from 12 to 146 per million people exposed. This is based on breathing an ambient concentration of $0.001 \mu\text{g}/\text{m}^3$ over a 70-year lifetime.
- **Formaldehyde** – Formaldehyde is a colorless, flammable gas with a pungent irritating odor which is listed as both an HAP and a TAC. Sources of formaldehyde include both stationary and mobile sources. Mobile source fuel combustion and process emissions from oil refineries account for the largest sources of directly emitted formaldehyde. Formaldehyde is also formed in the atmosphere as a result of photochemical oxidation of VOC's in polluted atmospheres containing ozone and nitrogen oxides. This process can account for as much as 90 percent of annual ambient concentrations. Indoor sources include many different products varying from building materials, clothing, and furniture to draperies, paper products, and fingernail hardeners. Acute exposure through inhalation of formaldehyde can

irritate the eye, nose, and throat and affect the nasal cavity. Other effects include coughing, wheezing, chest pains, and bronchitis. Chronic inhalation exposure to formaldehyde causes the same effects to the eye, nose, and throat. Skin irritation and dermatitis result from repeated exposure to the liquid form of formaldehyde. There is no supporting evidence linking formaldehyde exposure to reproductive or developmental effects. Limited evidence suggests the increased incidence of lung and nasopharyngeal cancer resulting from formaldehyde exposure. Staff at OEHHA has estimated the potential lifetime cancers per million to be 235 based on a statewide ambient concentration.

- **Lead** – Lead compounds are listed as HAPs and TACs. Lead is a bluish grey metal occurring naturally in various mineral forms. It is easily molded and resistant to corrosion. Inorganic lead refers to substances which do not contain carbon. This includes metallic lead. Major statewide outdoor sources of lead are inorganic and include stationary point and area source fuel combustion, aircraft fuel combustion, industrial metal smelting, autobody refinishing, cement manufacturing, and incineration. Inorganic lead exposure occurs through various routes such as air, water, soil, foods, consumer products, dust, and lead-based paint chips. Acute effects from lead poisoning include death in children with blood lead levels greater than 125 µg/dL. Brain and kidney damage can occur at blood lead levels of 100 µg/dL in adults and at 80µg/dL in children. Colic has also been observed in acute exposures of lead with blood lead levels at approximately 60 µg/dL in both children and adults. Chronic exposure in humans can result in affects on the blood and nervous system. Anemia has been reported in adults and children with blood lead levels of 50 to 80 µg/dL and 40 to 70 µg/dL, respectively. Other blood related effects include effects on blood pressure and kidney function, and interference with vitamin D metabolism. Neurological symptoms have been reported in workers with blood lead levels of 40 to 60 µg/dL. Slowed nerve conduction in peripheral nerves in adults occurs at blood lead levels of 30 to 40 µg/dL. Children are much more sensitive to the neurotoxic effects of lead. Evidence suggests that children's hearing threshold and growth may be affected by low blood lead levels of 10 to 30 µg/dL or less. Reproductive and developmental effects include decreased sperm count and reduced function of the prostate in men from both acute and chronic exposure. Effects on women and their unborn children include spontaneous abortion, increased risk in preterm delivery, low birth-weight, impaired mental development, and decreased IQ scores. Cancer risks from lead exposure include increased risk in respiratory tract, lung, stomach, and kidney cancers. However, the usefulness of these studies on cancer risks is limited due to lack of exposure routes, exposure levels, and unknown exposure of other chemicals. OEHHA staff estimated the lifetime statewide excess cancer risk to be 0.7 in one million persons exposed.
- **Naphthalene** – Naphthalene is listed as both an HAP and TAC. It occurs naturally in coal tar and thus is present in gasoline and diesel fuel. Sources of naphthalene include stationary and mobile sources. Naphthalene is also used in mothballs, wood preserving, and ink and dye production. Symptoms of acute exposure include headache, nausea, vomiting, diarrhea, jaundice, anemia, confusion, convulsions, and coma. Acute naphthalene exposure through ingestion and inhalation has also been linked to cataracts. Acute human exposures by inhalation, ingestion, and dermal contact have been associated with hemolytic anemia (destruction of red blood cells within blood), liver damage, and neurological damage in infants. Workers who have been chronically exposed to naphthalene also reported cataracts as well as retinal hemorrhage. Studies that have been conducted with mice, rats, and rabbits have reported eye and respiratory tract damage under chronic exposure. In mice, chronic lung

and nasal inflammation, increased cell production of the inner nasal cavity tissues, and production of abnormal cell types within the odor detecting tissues of the nasal cavity were all observed during chronic inhalation exposure. Reproductive and developmental effects include hemolytic anemia in infants whose mothers “sniffed” and ingested mothballs during pregnancy. The EPA has classified naphthalene as a possible human carcinogen due to limited studies dealing with only naphthalene; therefore, no excess lifetime cancer risks were presented. Female mice exposed to naphthalene by inhalation showed an increased number of alveolar/bronchiolar adenomas and carcinomas while no carcinogenic responses were shown in rats fed and injected by naphthalene.

- **Nickel** – Nickel is a silvery white, soft metal which is very resistant to corrosion. It is listed as both an HAP and a TAC. Nickel is emitted from a variety of sources. It is used for nickel alloys, electroplating, batteries, coins, industrial plumbing, spark plugs, machinery parts, stainless-steel, etc. Nickel is found in the air at low levels from the burning of oil and coal, manufacturing facilities, and other sources. Nickel has an estimated average atmospheric lifetime of about seven days, based on an average particle size. Acute inhalation exposure to nickel resulted in severe damage to the lungs and kidneys. Workers exposed to nickel as nickel sulfate and nickel chloride through drinking water during a single shift reported nausea, vomiting, and diarrhea as well as neurological effects. Nickel carbonyl short-term exposure resulted in pulmonary fibrosis and renal edema in both humans and animals. Chronic effects of nickel exposure also vary depending on exposure pathway. Chronic inhalation exposure in humans affects the respiratory system which includes decreased lung function, bronchitis, and even a type of asthma specific to nickel. Chronic dermal exposure in humans most commonly results in dermatitis with symptoms including eczema of the fingers, hands, wrists, and forearms. Animal studies have reported reproductive and developmental effects which include decreased litter size, mortality, and fetal body weight resulting from the mother’s oral exposure to nickel. Male animals experienced sperm abnormalities and decreased sperm count resulting from both oral and inhalation exposure. The CDHS staff estimates that the excess carcinogenic risk from lifetime exposure to nickel range from 1.4 to 27 cancer cases per million.
- **Polycyclic Aromatic Hydrocarbons (PAHs)** – PAHs are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances such as tobacco or charbroiled meat. PAHs usually contain two or more substances. PAHs are classified under polycyclic organic matter on the HAP list and are monitored as benzo(a)pyrene (BaP) on the TAC list. PAHs can also attach to other particles in the air such as dust. Break down of PAHs can occur in the air through chemical reactions with sunlight and other ambient chemicals within a few days or weeks. Acute oral exposure of rats to BaP has shown high acute toxicity. Chronic skin exposure to solutions containing BaP has been shown to cause adverse skin effects in humans and animals. Worker inhalation of BaP and other particulate matter have reported respiratory effects; however the role of BaP alone remains unclear. Animal studies reported that oral exposure of BaP induces reproductive toxicity and decreases fertility in females while the developmental effects to the young include reduced viability of litters and reduced birth weight. Human exposure of many different PAHs through coke oven emissions, roofing tar emissions, and cigarette smoke reported an increase in lung cancer. Animal studies have shown respiratory tract tumors from inhalation exposure and forestomach tumors, leukemia, and lung tumors from oral exposure. Staff at OEHHA estimates the potential increase in cancer risk to range from 0.6 to 1.7 per one million exposed to a statewide population-weighted average.

Diesel Emissions

Diesel particulate matter (DPM) is also a TAC of concern throughout the entire Basin because of its toxicity.

The addition of diesel particulate toxicity dramatically increases carcinogenic risk. According to the MATES-II results, the modeled cancer risk for diesel particulates at the Rubidoux Station, nearest to the project site, is approximately 1000 in one million. The Final MATES-III results show that the modeled cancer risk for diesel particulates at the Rubidoux Station is approximately 950 in one million. It should be noted that different methods were used to estimate diesel particulate levels in the MATES-III Study from those used in the ~~Mates~~-MATES-II study, so the results are not strictly comparable. This cancer risk is what residents are currently exposed to in the Rubidoux portion of the Basin. This location is less than a half-mile south of SR-60 and 1.3 miles west of the Santa Ana River. The Rubidoux Station is approximately 20 miles northwest from the project site. The SR-60 freeway is approximately 6.5 miles north and the I-215 is approximately 6.5 miles west of the project site which represents the nearest major transportation corridors. In addition to the results for the specified monitoring sites, the MATES-III document also shows the estimated regional cancer risk for the entire Basin. It shows that the entire project site has a modeled cancer risk ranging from approximately 250 to 370 cases of cancer per one million people. Therefore, existing conditions in Lakeview are less impacted by diesel as opposed to the Rubidoux Monitoring Station.

Diesel engines utilize compression, contrary to standard gasoline engines which use conventional spark plugs, to ignite fuel. Engines that use compression typically run at higher temperatures than gasoline engines, thereby causing the oxygen and nitrogen present in air during intake, to form oxides of nitrogen (NO_x). To combat NO_x production in a diesel engine, the engine temperature can be reduced, but then increased amounts of particulate matter (PM) and hydrocarbons (HC) are produced as byproducts of the now uncombusted fuel. Hydrocarbons, once in the atmosphere, react with NO_x to produce ozone (O_3), among other pollutants.

Diesel exhaust composition is dependent on many factors: fuel composition, engine type, lubricating oils, and emission control systems. Diesel exhaust is a complex mixture of thousands of gases and fine particles. The gaseous fraction of diesel exhaust is comprised of typical combustion gases such as oxygen, carbon dioxide, nitrogen, and water vapor. However, air pollutants such as carbon monoxide, sulfur oxides (SO_x), nitrogen oxides (NO_x), volatile hydrocarbons and low-molecular weight polycyclic aromatic hydrocarbons (PAH) and PAH-derivatives are also components of the gaseous fraction. Additionally, some of the gaseous components, such as benzene, are known carcinogens.

The particle fraction of diesel exhaust is comprised of aggregates of carbon particles with inorganic and organic substances adhered to them. The inorganic fraction of diesel exhaust particles consists of solid carbon (or elemental carbon) particles ranging in size from 0.01 to 0.08 microns in diameter. The organic fraction consists of soluble organic compounds such as aldehydes, alkanes, alkenes, PAH and PAH derivatives. The total component of a diesel particle (inorganic + organic) is in the fine particle range of 10 microns in size or less (width of a human hair), but 92 percent of these diesel particles are even smaller, at less than 1 micron in diameter.

Diesel particles can remain airborne for up to 10 days because of their small size. Therefore they do not fall-out or precipitate easily, and remain an air quality problem for some time after being emitted. Scientists use elemental carbon as a surrogate since there is no current technology available to monitor directly for diesel particles. It is important to understand that the cancer risks estimated by the CARB related to mobile-source diesel exhaust and health risk assessment studies represent the probability that a person develops cancer; the estimated risks do not represent mortality rates.

Greenhouse Gases and Climate Change

Some gases in the atmosphere affect the Earth's heat balance by absorbing infrared radiation. This layer of gases in the atmosphere functions much the same as glass in a greenhouse (i.e., both prevent the escape of heat). This is why global warming is also known as the "greenhouse effect." Increased emissions of these gases due to combustion of fossil fuels and other activities increase the greenhouse effect, leading to global warming and other climate changes. Gases responsible for global climate change in the SCAB and their relative contribution to the overall warming effect are carbon dioxide (55 percent), CFCs (24 percent), methane (15 percent), and nitrous oxide (6 percent) (SCAQMD 2005). It is widely accepted that continued increases in greenhouse gases (GHG) will contribute to global climate change although there is uncertainty concerning the magnitude and timing of future emissions and the resultant warming trend (SCAQMD 2005). Human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors contribute to these GHG (CEC 2006a). According to the California Energy Commission (CEC) in December of 2006, transportation was responsible for 41 percent of the state's GHG emissions, followed by electricity generation in 2004 (CEC 2006a). More recently in November 2007, CARB reported that transportation was 38 percent of the state's GHG emissions, followed by electricity generation in 2004 (CARB 2007). Emissions of CO₂ and nitrous oxide (N₂O) are byproducts of fossil fuel combustion. Methane, a highly potent GHG, results from off-gassing associated with agricultural practices, landfills, and wastewater treatment.

"Stratospheric ozone depletion" refers to the slow destruction of naturally occurring ozone, which lies in the upper atmosphere (called the stratosphere) and which protects Earth from the damaging effects of solar ultraviolet radiation. Certain compounds, including chlorofluorocarbons (CFCs,) halons, carbon tetrachloride, methyl chloroform, and other halogenated compounds, accumulate in the lower atmosphere and then gradually migrate into the stratosphere. In the stratosphere, these compounds participate in complex chemical reactions to destroy the upper ozone layer. Destruction of the ozone layer increases the penetration of ultraviolet radiation to the Earth's surface, a known risk factor that can increase the incidence of skin cancers and cataracts, contribute to crop and fish damage, and further degrade air quality (SCAQMD 2005).

GHG and ozone-depleting gases include, but are not limited to, the following:

- **Carbon dioxide** – Carbon dioxide results from fossil fuel combustion in stationary and mobile sources. It contributes to the greenhouse effect, but not to stratospheric ozone depletion. In 2004, carbon dioxide accounted for approximately 84 percent of total GHG emissions in the state (CEC 2006a). In the SCAB, approximately 48 percent of carbon dioxide emissions come from transportation, residential and utility sources which contribute

approximately 13 percent each, 20 percent come from industry, and the remainder comes from a variety of other sources (SCAQMD 2005).

- **Methane** – Atmospheric methane is emitted from both non-biogenic and biogenic sources. Non-biogenic sources include fossil fuel mining and burning, biomass burning, waste treatment, geologic sources, and leaks in natural gas pipelines. Biogenic sources include wetlands, rice agriculture, livestock, landfills, forest, oceans, and termites. Methane sources can also be divided into anthropogenic and natural. Anthropogenic sources include rice agriculture, livestock, landfills, and waste treatment, some biomass burning, and fossil fuel combustion. Natural sources are wetlands, oceans, forests, fire, termites and geological sources. Anthropogenic sources currently account for more than 60 percent of the total global emissions. (IPCC) It is a greenhouse gas and traps heat 40-70 times more effectively than carbon dioxide. (SCAQMD 2005) In the SCAB, more than 50 percent of human-induced methane emissions come from natural gas pipelines, while landfills contribute 24 percent. Methane emissions from landfills are reduced by SCAQMD Rule 1150.1 - Control of Gaseous Emissions from Active Landfills. Methane emissions from petroleum sources are reduced by a number of rules in SCAQMD Regulation XI that control fugitive emissions from petroleum production, refining, and distribution. (SCAQMD 2005)
- **Other regulated greenhouse gases include Nitrous Oxide, Sulfur Hexafluoride, Hydrofluorocarbons, and Perfluorocarbons** - These gases all possess heat-trapping potentials hundreds to thousands of times more effective than carbon dioxide. Emission sources of nitrous oxide gases include, but are not limited to, waste combustion, waste water treatment, fossil fuel combustion, and fertilizer production. Because the volume of emissions is small, the net effect of nitrous oxide emissions relative to carbon dioxide or methane is relatively small. Sulfur hexafluoride, hydrofluorocarbon, and perfluorocarbon emissions occur at even lower rates.
- **Chlorofluorocarbons** – Chlorofluorocarbons (CFCs) are emitted from blowing agents used in producing foam insulation. They are also used in air conditioners and refrigerators and as solvents to clean electronic microcircuits. CFCs are primary contributors to stratospheric ozone depletion and to global climate change. Sixty-three percent of CFC emissions in the SCAB come from the industrial sector. Federal regulations require service practices that maximize recycling of ozone-depleting compounds (both CFCs, hydro-chlorofluorocarbons and their blends) during the servicing and disposal of air-conditioning and refrigeration equipment. SCAQMD Rule 1415 – Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems requires CFC refrigerants to be reclaimed or recycled from stationary refrigeration and air conditioning systems. SCAQMD Rule 1405 – Control of Ethylene Oxide and Chlorofluorocarbon Emissions From Sterilization or Fumigant Processes requires recovery of reclamation of CFCs at certain commercial facilities and eliminates the use of some CFCs in the sterilization processes. Some CFCs are classified as TACs and regulated by SCAQMD Rule 1401 – New Source Review of Toxic Air Contaminants and SCAQMD Rule 1402 Control of Toxic Air Contaminants from Existing Sources.
- **Halons** – These compounds are used in fire extinguishers and behave as both ozone-depleting and greenhouse gases. Halon production ended in the United States in 1993. SCAQMD Rule 1418 – Halon Emissions From Fire Extinguishing Equipment requires the recovery and recycling of halons used in fire extinguishing systems and prohibits the sale of halon in small fire extinguishers.

- **Hydro-chlorofluorocarbons** – HCFCs are solvents, similar in use and chemical composition to CFCs. The hydrogen component makes HCFCs more chemically reactive than CFCs, allowing them to break down more quickly in the atmosphere. These compounds deplete the stratospheric ozone layer, but to a much lesser extent than CFCs. HCFCs are regulated under the same SCAQMD rules as CFCs.
- **1,1,1-trichloroethane (TCA)** – TCA (methyl chloroform) is a solvent and cleaning agent commonly used by manufacturers. It is less destructive on the environment than CFCs or HCFCs, but its continued use will contribute to global climate change and ozone depletion. 1,1,1-trichloroethane (TCA) is a synthetic chemical that does not occur naturally in the environment. No TCA is supposed to be manufactured for domestic use in the United States after January 1, 2002 because it affects the ozone layer. TCA had many industrial and household uses, including use as a solvent to dissolve other substances, such as glues and paints; to remove oil or grease from manufactured metal parts; and as an ingredient of household products such as spot cleaners, glues, and aerosol sprays. SCAQMD regulates this compound as a toxic air contaminant under Rules 1401 and 1402.

TVOL residents, employees, and patrons of commercial and municipal buildings use electricity, heat their homes and water (typically with natural gas), and are transported in motor vehicles, all of which directly or indirectly emit GHGs. The principal GHGs resulting from such developments are emissions of carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). CO₂ is considered the most important GHG, due primarily to the large emissions produced by fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles. CH₄ and N₂O are also emitted by fossil fuel combustion, though their emissions are much less significant than CO₂. CH₄ is also emitted from the transmission, storage, and incomplete combustion of natural gas. (Environ, pg 1)

The effect that each of these gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound for pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO₂. CH₄ and N₂O are substantially more potent GHGs than CO₂, with GWPs of 21 and 310, respectively.¹ In emissions inventories, GHG emissions are typically reported in terms of pounds (lbs) or tonnes² of CO₂ equivalents (CO₂e). CO₂e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH₄ and N₂O have much higher GWPs than CO₂, CO₂ is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO₂e, both from residential developments and human activity in general. (Environ, pg 1)

As emissions of GHGs increase, temperatures in California are projected to rise significantly over the twenty-first century. The modeled magnitudes of the warming vary because of uncertainties in future emissions and in the climate sensitivity. According to the California Climate Change Center (CEC 2005), there are three projected warming scenarios referred to as the low, medium, and high range. These expected increases from 2000 to 2100 vary from approximately 1.7°C–3.0°C (3.0°F–5.4°F) in the lower range of projected warming, 3.1°C–4.3°C

¹ GWP values from IPCC's Second Assessment Report (SAR, 1996) are still used by international convention and are used in this protocol, even though more recent (and slightly different) GWP values were developed in the IPCC's Third Assessment Report (TAR, 2001)

² In this report, "tonnes" will be used to refer to metric tonnes (1,000 kilograms). "Tons" will be used to refer to short tons (2,000 pounds).

(5.5°F–7.8°F) in the medium range, and 4.4°C–5.8°C (8.0°F–10.4°F) in the higher range. To comprehend the magnitude of these projected temperature changes, over the next century the lower range of projected temperature rise is slightly larger than the difference in annual mean temperature between Monterey and Salinas which is 2.5°F, and the upper range of project warming is greater than the temperature difference between San Francisco and San Jose which is 7.4°F.

Other resource areas could be affected as a result of GHGs. For example, increased global average temperature will cause increases to ocean temperatures and the Pacific Ocean strongly influences the climate within California. As the temperature of the ocean warms, it is anticipated that rain will fall instead of snow in the Sierra Nevada during the wet season. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. According to a California Energy Commission report, the snowpack portion of the supply could potentially decline by 70–90 percent by the end of the 21st century (CEC 2006b). This phenomenon could lead to significant challenges securing an adequate water supply for a growing population.

Some models indicate that the increased ocean temperature could result in increased moisture into the state; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential for flood events, placing more pressure on California's levee/flood control system. Sea level has risen approximately 7 inches during the last century and, according to the CEC report, it is predicted to rise an additional 22–35 inches by 2100, depending on the future GHG emissions levels (CEC 2006b), further straining the states water conveyance infrastructure.

Another impact of global climate change is increased fire hazard. Fire is an important natural disturbance within many California ecosystems that promotes vegetation and wildlife diversity, releases nutrients, and eliminates heavy fuel accumulations that can lead to catastrophic burns. The changing climate could alter fire regimes in ways that could have social, economic, and ecological consequences. As the existing climate throughout California changes over time, mass migration of species, or worse, failure of species to migrate in time to adapt to the changes in climate, could also result.

Due to its weather, topography, and native vegetation, nearly all Southern California is at some risk from wildland fires also called wildfires. The extended droughts characteristic of California's Mediterranean climate result in large areas of dry vegetation that provide fuel for wildland fires which can spread into urban areas. Wildland-urban fires occur when a fire burning in wildland vegetation gets close enough to ignite urban structures. Areas of dense, dry vegetation, particularly in canyon areas and hillsides pose the greatest wildland fire potential.

Many factors contribute to an area being at risk or structural fire in terms of the local fire departments capabilities to control them, including the construction size and type, built-in protection, density of construction, street widths, and occupancy size. Sources of wildfire risk to the project site from surrounding properties include the open and natural state of the San Jacinto Wildlife Area and the abutting Lakeview Mountains. The southeast area of the project site, along the Lakeview Mountains, is designated as a "Hazardous Fire Area" in the Riverside County General Plan. A hazardous fire area is land which is covered with grass, grain, brush, or forest, whether privately- or publicly-owned, which is so situated or is of such inaccessible location that

a fire originating upon such land would present an abnormally difficult job of suppression or would result in great and unusual damage through fire or resulting erosion. Subsequent to the adoption of the Riverside County General Plan, the state mapping, upon which the General Plan maps were based, has been updated. Government Code 51175-89 directed the California Department of Forestry and Fire Protection (CAL FIRE) to map areas of very high fire hazard within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on relevant factors such as fuels, terrain, and weather. The VHFHSZ maps were initially developed in the mid-1990s, but are currently being updated based on improved science, mapping techniques, and data. Along with discussion in Section 5.7, Hazards, **Figure 5.7-4, High Fire Risk Areas** shows the updated VHFHSZ, adopted by CAL FIRE on November 7, 2007. According to the state mapping, in addition to unzoned (lower risk) areas, the south/southeast portion of the project site is located in areas of “moderate” risk and “very high” risk of fire hazards. In 2005, the California Building Commission adopted the Wildland-Urban Interface codes which will be effective in 2008. Project proposed development adjacent to the Lakeview Mountains will be subject to these codes. The codes will require local building officials to enforce the use of appropriate construction materials for new buildings in the Wildland-Urban Interface, and the imposition of a 100-foot defensible space clearance.

Conservative estimates indicate the risk of large statewide wildfires, characterized as approximately 500 acres, would rise almost 35 percent by 2050 and 55 percent by 2100 under the medium temperature described previously. Under the low warming range, the increased risk of wildfires is nearly cut in half. (CEC 2005)

Wildfires affect public safety and have the potential to significantly impact public health through smoke inhalation. For example, a survey of 26 percent of all tribal households on the Hoopa Valley National Indian Reservation in northern California showed a 52 percent increase in medical visits for respiratory problems during a large fire in 1999, compared to the same period of 1998. More than 60 percent of those surveyed reported an increase in respiratory symptoms during the smoke episode, and 20 percent continued to report increased respiratory symptoms two weeks after the smoke cleared. The projected increases in fire season severity could lead to more “bad air” days. However, quantitative estimation of the impacts of future wildfire events is extremely difficult. The impacts of any fire are unique to that event, and are influenced not only by the magnitude, intensity, and duration of the fire, but also the proximity of the smoke plume to a population. (CEC 2005)

Climate change will affect the health of Californians by increasing the frequency, duration, and intensity of ambient conditions conducive to air pollution formation, oppressive heat, and wildfires. Not only are average temperatures expected to increase, but the projected increase in extreme temperatures is also expected to increase which can cause the most serious health impacts. The modeled warming scenarios indicate that the number of extremely hot and extremely cold days will increase by 2100. For Riverside/San Bernardino metropolitan areas, the number of extremely hot days will increase approximately 40 to 80 days per year under the lower and higher warming scenarios, respectively. Recent studies suggest that no capacity for future adaptation to extreme heat is seen in San Bernardino/Riverside metropolitan areas. The results the San Bernardino/Riverside metropolitan areas actually indicate increased sensitivity during the hottest summers, which is counterintuitive to what might be expected in hot inland urban areas. Current investigations are underway seeking alternative explanations by taking greater

account of socioeconomic factors (such as the availability of air conditioning, age structure of the population, and the housing stock) that might explain these non-intuitive results. If, for example, the San Bernardino/Riverside metropolitan area has a lesser proportion of air-conditioned residents than other hot inland urban areas, increased heat could create an indoor environment that is almost intolerable and could lead to greater numbers of deaths. It is clear that a thorough investigation of these socio-economic issues is necessary to understand the increased sensitivity of San Bernardino/Riverside metropolitan area residents to heat during the hottest summers. (CEC 2006c)

Unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, global climate change is a global problem and GHGs are global pollutants. Impacts of GHG emissions are a function of their total atmospheric concentration and most GHGs are globally well mixed atmospheric constituents. This means that the location of a particular GHG emission, in contrast to the situation for criteria pollutants, does not change its environmental impact.

Globally, for the years 2000 through 2005, the annual average emissions of fossil fuel-related carbon dioxide was 26.4 gigatons of CO₂ (one gigaton equals one billion Mt) per year (IPCC). It should also be noted that the annual total U.S. emissions of GHG dropped 1.5 percent in 2006 from 7,181 million Mt to 7,075 million Mt due to warmer weather and decreased energy demand, according to the Energy Information Administration (EIA). During the same timeframe, the U.S. economic output increased 2.9 percent (EIA). This decline results in a GHG intensity reduction of 4.2 percent as a measure of gross domestic product (EIA).

Worldwide, California is the 12th to 16th largest emitter of CO₂, and is responsible for approximately two percent of the world's CO₂ emissions (CEC 2006a). In 2004, the most recent year for which statewide data is available, the CEC reported that California produced 492 million gross metric tonnes (one metric tonne equals 2,205 pounds) of carbon dioxide-equivalent (CEC 2006a).

In order to reduce GHGs in California, Governor Arnold Schwarzenegger signed Executive Order S-3-05 in June of 2005. This Order requires the State of California to achieve the following GHG emission reductions: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emission levels to 1990 levels; by 2050, reduce GHG emission levels to 80 percent below 1990 levels.

In September 2006, California Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. To accomplish this objective, AB 32 establishes regulatory, reporting, and allows for market mechanisms to achieve quantifiable reductions in GHG emissions. AB 32 applies to sources or categories of sources which are defined as any source of GHG emissions whose emissions are at a level of significance as determined by the CARB.

In January 2007, Assembly Bill 1803 transferred responsibility for developing and maintaining the state's GHG inventory from the California Energy Commission (CEC) to CARB. Using the CEC GHG inventory as a starting point, CARB staff determined the state's 1990 GHG emissions level by conducting a comprehensive review of all GHG emitting sectors. The seven sectors are:

Transportation, Electricity Generation, Industrial, Residential, Agriculture, Commercial, and Forestry.

In November 2007, the CARB released its staff report establishing a statewide 1990 GHG emission level and a 2020 emission limit. (CARB 2007) As part of this staff report, CARB staff recommended an amount of 427 million metric tonnes of carbon dioxide equivalent (MMTCO_{2e}) as the total statewide GHG 1990 emissions level and 2020 emissions limit. The Board approved the 2020 limit on December 6, 2007. This limit is an aggregated statewide limit, rather than sector- or facility-specific. The staff report also included the statewide GHG emissions for 2004, which was 480 MMTCO_{2e}.

While the inventory data numbers from the CEC and CARB are similar for 2004, these estimates have important differences. Emissions from individual sectors differ between CEC and CARB estimates by up to 30 percent due to updated data, methodologies, and differences in included and excluded emissions. Staff at CARB treated carbon stored in landfills differently than CEC by separately tracking stored carbon instead of considering it an emission sink within a landfill. In addition, the CARB estimate only includes intrastate aviation, whereas the CEC estimates include both interstate and intrastate flights. Staff also included emissions from international shipping and related port activities in California waters, whereas the CEC excluded all emissions from international ships.

As of February 2009, no air districts within California, including SCAQMD, have promulgated quantitative or qualitative emissions thresholds for determining significance associated with GHG from residential or commercial development projects. Given the global nature of GHG and their ability to alter the Earth's climate, it is not anticipated that a single development project, even one this size, would have an effect on global climate conditions. It is, however, reasonably foreseeable that emissions resulting from this project in combination with statewide, national, and international emissions could cumulatively contribute to a change in Earth's climate, i.e., global warming or climate change. Therefore, this DEIR analyzes potential GHG emissions in the context of the project's incremental contribution to cumulative GHG emissions that could affect climate change.

Monitored Air Quality

The project site is located within SCAQMD Source Receptor Area (SRA) 24. The most recent published data for SRA 24 is presented in **Table 5.3-A, Source Receptor Area (SRA) 24, Air Quality Monitoring Summary 1998-2007**. This data indicates that the baseline air quality conditions in the project area include occasional events of very unhealthful air. However, the frequency of smog alerts has dropped significantly in the last decade. Atmospheric concentrations of ozone and particulate matter are the two most significant air quality concerns in the project area. The yearly monitoring records document that prior to 1998, approximately one-third or more of the days each year experienced a violation of the state hourly ozone standard, with around ten days annually reaching first stage alert levels of 0.20 parts per million (ppm) for one hour.

It is encouraging to note that ozone levels have decreased in the last few years with approximately one-fifth or less days each year experiencing a violation of the state hourly ozone standard since 1998. Locally, no second stage alert (0.35 ppm/hour) has been called by

SCAQMD in the last twenty years. In fact, the last second stage alert was in Upland in 1988. The California Air Resources Board (CARB) established a new 8-hour average California Ozone standard of 0.07 ppm, effective May 17, 2006. The federal 1-hour ozone standard was revoked and replaced by the 8-hour average ozone standard of 0.08 ppm effective in June 2005. The federal 8-hour ozone standard was recently revised from 0.08 ppm to 0.075 ppm and became effective on May 27, 2008.

The California NO₂ standards were amended and approved by CARB on February 23, 2007, which lowered the 1-hour standard from 0.25 ppm to 0.18 ppm and established a new annual standard of 0.030 ppm. However, these standards only become effective once the California Office of Administrative Law (OAL) approves them. The proposed regulation to change the NO₂ standards was sent to the OAL in January 2008 and approved on February 19, 2008. The new standards became effective on March 20, 2008.

Monitoring for PM-2.5 did not begin until 1999. Since then, the annual standard has been consistently exceeded in SRA 24. The 1997 federal annual average standard for PM-2.5 (15 µg/m³) was upheld by the U.S. Supreme Court in February 2001. The state standard annual average standard for PM-2.5 (12 µg/m³) was finalized in 2003 and became effective on July 5, 2003. Additionally, the federal annual PM-10 standard was revoked in December 2006.

**Table 5.3-A, Source Receptor Area (SRA) 24, Air Quality Monitoring Summary
1998-2007**

	Pollutant/Standard Source: SCAQMD	Monitoring Year									
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
No. Days Exceeded	Ozone:										
	Health Advisory - 0.15 ppm	--	--	--	5	1	1	0	0	3	0
	California Standard:										
	1-Hour - 0.09 ppm	30	10	65	73	59	67	37	11	76	66
	8-Hour - 0.07 ppm ^a	--	--	--	--	--	--	47	18	84	88
	Federal Primary Standards:										
	8-Hour - 0.08 ppm (0.075 ppm) ^a	28	7	41	58	41	47	19	3	53	37(73)
	Max 1-Hour Conc. (ppm)	0.15	0.11	0.16	0.152	0.147	0.15	0.128	0.126	0.17	0.139
	Max 8-Hour Conc. (ppm)	0.13	0.10	0.126	0.136	0.117	0.12	0.103	0.103	0.122	0.116
No. Days Exceeded	Carbon Monoxide^b:										
	California Standard:										
	1-Hour - 20 ppm	0	0	0	0	0	0	0	0	0	0
	8-Hour - 9.0 ppm	0	0	0	0	0	0	0	0	0	0
	Federal Primary Standards:										
	1-Hour - 35 ppm	0	0	0	0	0	0	0	0	0	0
	8-Hour - 9.0 ppm	0	0	0	0	0	0	0	0	0	0
	Max 1-Hour Conc. (ppm)	6.0	7.0	5.0	5.0	8.0	5	4	3	3	4
	Max 8-Hour Conc. (ppm)	4.6	4.4	4.3	3.4	3.0	3.7	3.0	2.5	2.1	2.9
No. Days Exceeded	Nitrogen Dioxide^b:										
	California Standard:										
	1-Hour - 0.18 ppm,	0	0	0	0	0	0	0	0	0	0
	Federal Standard:										
	Annual Arithmetic Mean (AAM) (ppm) ^c	0.023	0.025	0.024	0.025	0.024	0.02	0.017	0.022	0.020	0.021
	Max. 1-Hour Conc. (ppm)	0.10	0.13	0.10	0.15	0.10	0.09	0.09	0.08	0.08	0.07
No. Days Exceeded	Sulfur Dioxide^b:										
	California Standards:										
	1-Hour – 0.25 ppm	0	0	0	0	0	0	0	0	0	0
	24-Hour – 0.04 ppm	0	0	0	0	0	0	0	0	0	0
	Federal Primary Standards:										
	24-Hour – 0.14 ppm	0	0	0	0	0	0	0	0	0	0
	Annual Standard – 0.03 ppm ^d	No	No	No	No	No	No	No	No	No	No
	Max. 1-Hour Conc. (ppm)	0.03	0.03	0.11	0.02	0.02	0.02	0.02	0.02	0.01	0.02
	Max. 24-Hour Conc. (ppm)	0.010	0.011	0.041	0.011	0.002	0.01	0.015	0.011	0.004	0.002
No. Days Exceeded	Suspended Particulates (PM10):										
	California Standards:										
	24-Hour - 50 µg/m ³	14	30	13	16	24	19	15	19	19	32
	Federal Primary Standards:										
	24-Hour – 150 µg/m ³	0	0	0	0	0	0	0	0	0	0
	Annual Arithmetic Mean (µg/m ³) ^e	36.1	50.0	41.1	40.8	45.2	43.9	41.4	39.2	45.0	54.8
	Max. 24-Hour Conc. (µg/m ³)	98	112	87	86	100	142	83	80	125	120
No. Days Exceeded	Suspended Particulates (PM2.5)^b:										
	California and Federal Primary Standards:										
	24-Hour – 65 µg/m ³ (35µg/m ³) ^f	--	9	11	19	8	8	5	4	1(32)	3(33)
	Annual Arithmetic Mean (µg/m ³) ^g	--	30.9	28.2	31.3	27.5	24.9	22.1	21.0	19.0	19.1
	Max. 24-Hour Conc. (µg/m ³)	--	111.2	119.6	98.0	77.6	104.	91.7	98.7	68.5	75.7

Note -- No data available.

^a. 2004 is first year of SCAQMD records for state 8-hour Ozone standard. Federal 8-hour ozone standard 0.075 ppm effective May 27, 2008.^b. Metro Riverside County 1 air monitoring station (SRA 23) data summaries used.^c. Federal NO₂ standard is AAM > 0.053; State NO₂ standard of AAM > 0.030 effective March 20, 2008.^d. Yes or No indicating whether or not the standard has been exceeded for that year.^e. Federal PM-10 standard is AAM > 50µg/m³ was revoked December 17, 2006. State standard is AAM > 20µg/m³, effective July 5, 2003.^f. 1999 is first year of SCAQMD records for federal 24-hour PM-2.5 standard and data summary. Threshold changed to 35µg/m³ in 2006.^g. Federal PM-2.5 standard is annual average (AAM) > 15µg/m³. State standard is annual average (AAM) > 12µg/m³.

Thresholds of Significance

The County of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the CEQA Guidelines. However, the County’s “Environmental Checklist” for the subject project (see Appendix A of this document) indicates that impacts to air quality may be considered potentially significant if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors which are located within one mile of the project site to project substantial point source emissions.
- Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter.
- Create objectionable odors affecting a substantial number of people.

Due to the nature of the information and analysis presented herein, the threshold regarding cumulative impacts will also include a qualitative and quantitative evaluation of project-related GHG emissions analyzed under threshold C, below, and is also briefly described in the paragraph following threshold F. The threshold involving the construction of sensitive receptors within one mile of an existing substantial point source emitter above will be expanded on and analyzed under the thresholds E, below based on the SCAQMD’s threshold for Toxic Air Contaminants (TACs). All thresholds analyzed are listed below.

- A. Conflict with or obstruct implementation of the applicable air quality plan.
- B. Violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation.
- C. 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).
- D. Expose sensitive receptors which are located within one mile of the project site to project substantial point source emissions.
- E. Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter, specifically:
 - Expose sensitive receptors to any Toxic Air Contaminant (TAC), at a level that exceeds 10 excess cancer cases per one million people (per SCAQMD);

- Expose sensitive receptors to a hazard index of 1.0 or greater using a chronic reference exposure level for chronic non-cancer risks associated with TACs(per SCAQMD); and

F. Create objectionable odors affecting a substantial number of people.

In regards to Thresholds of Significance related to GHG, prior to December 5, 2008, neither the SCAQMD nor any other air district in California has generated a quantitative significance threshold for GHG. Similarly, neither the California EPA nor the U.S. EPA have developed to date guidelines on how to prepare an impact assessment for a community's or project's GHG contribution to global climate change under CEQA. However, both the SCAQMD and the California Air Resources Board (CARB) released draft approaches for setting interim GHG significance thresholds in CEQA documents in late October 2008. Subsequently, the SCAQMD adopted, on December 5, 2008, a GHG significance threshold for industrial projects where the SCAQMD is the lead agency. Additionally, the OPR released preliminary draft CEQA guideline amendments for GHG emissions on January 8, 2009. These approaches are described below in the Related Regulations section. Another limitation to establishing a local threshold based on a quantitative analysis is that emissions models such as EMFAC and URBEMIS evaluate aggregate emissions and do not demonstrate, with respect to global impact, how much of these emissions are "new" emissions specifically attributable to the proposed project in question as opposed to emissions that are already occurring but are now localized within the project site, e.g., vehicle trips. Therefore, no threshold exclusively related to GHG has been adopted by the County of Riverside. This analysis addresses GHG emissions both qualitatively and quantitatively in the context of cumulative impacts.

Related Regulations

Criteria Air Pollutants

The federal and state ambient air quality standards (AAQS) establish the context for the local air quality management plans (AQMP) and for determination of the significance of a project's contribution to local or regional pollutant concentrations. State and federal AAQS are presented above, in **Table 5.3-A**. The AAQS represent the level of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness and persons engaged in strenuous work or exercise, all referred to as "sensitive receptors." SCAQMD defines a "sensitive receptor" as a land use or facility such as residences, schools, childcare centers, athletic facilities, playgrounds, retirement homes, and convalescent homes.

The California Air Resources Board (CARB) maintains records as to the attainment status of air basins throughout the state, under both state and federal criteria. The portion of the SCAB within which the proposed project is located is designated as a non-attainment area for ozone, PM-10, and PM-2.5 under both state and federal standards. The Air Quality Management Plan (AQMP) for the SCAB establishes a program of rules and regulations directed at attainment of the state and national air quality standards. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans. Existing land uses on the project site include a chicken ranch, MWD aqueduct and basin, a thoroughbred farm,

abandoned RV park and additional farmland and vacant land. The project area is zoned for agricultural, residential (mostly low and medium density), and community development overlay uses. This project involves the development of both residential (mostly medium and high to very high density) and commercial properties, which is not consistent with the land use envisioned in the Riverside County General Plan.

The project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. They include the application of water or chemical stabilizers to disturbed soils at least twice a day, covering all haul vehicles before transport of materials, restricting vehicle speeds on unpaved roads to 15 mph, and sweeping loose dirt from paved site access roadways used by construction vehicles. In addition, it is required to establish a vegetative ground cover on disturbance areas that are inactive within 30 days after active operations have ceased. Alternatively, an application of dust suppressants can be applied in sufficient quantity and frequency to maintain a stable surface. Rule 403 also requires grading and excavation activities to cease when winds exceed 25 mph.

SCAQMD Rule 1113 governs the sale of architectural coatings and limits the volatile organic content (VOC) content in paints and paint solvents. This rule will dictate the VOC content of paints available for use during the construction of the buildings.

Toxic Air Contaminants

Toxic Air Contaminants are regulated under both federal and state laws. Federally, the 1970 Amendments to the Clean Air Act included a provision to address air toxics. California regulates toxic air contaminants through its air toxics program, mandated in Chapter 3.5 (Toxic Air Contaminants) of the Health and Safety Code (H&SC § 39660, et seq.) and Part 6 Air Toxics “Hot Spots” Information and Assessment (H&SC § 44300, et seq.). The California Air Resources Board (CARB), working in conjunction with the Office of Environmental Health Hazard Assessment (OEHHA), identifies toxic air contaminants. Air toxic control measures may then be adopted to reduce ambient concentrations of the identified toxic air contaminant below a specific threshold based on its effects on health, or to the lowest concentration achievable through use of best available control technology for toxics (T-BACT). The program is administered by the CARB. Air quality control agencies, including the SCAQMD, must incorporate air toxic control measures into their regulatory programs or adopt equally stringent control measures as rules within six months of adoption by CARB.

Diesel Regulations

In 1990, the State of California listed diesel exhaust as a known carcinogen under its Safe Drinking Water and Toxic Enforcement Act (Proposition 65). In 1998, the California Air Resources Board listed diesel particulate as a toxic air contaminant.

The California Air Resources Board (CARB), a sub-agency of the California Environmental Protection Agency (Cal EPA), is taking the lead on addressing diesel emissions in the state of California. The first step to significantly reduce diesel emissions occurred in September 2000 when the CARB approved the “Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles” or Diesel Risk Reduction Plan. The two main goals of the Diesel Risk Reduction Plan are: 1) to get new diesel fueled engines to use state-of-the-art emission controls as well as low-sulfur diesel fuel and, 2) for existing diesel engines to be

retrofitted with emission control features. Effects of meeting these goals set by the CARB would be reducing the health effects experienced by Californians from diesel exhaust.

Under the CARB's Diesel Risk Reduction Program, mobile diesel emissions have their own set of reduction programs, as opposed to stationary diesel sources (generators) which are addressed separately under the Reduction Plan. One of the incentive programs for mobile diesel sources is the Carl Moyer Program which is a clean engine incentive program. This program provides money in the form of grants to cover the incremental portion of the cost to purchase cleaner burning engines or retrofitting existing ones.

Other programs include a program designed to develop and implement strategies to reduce emissions from new on-road heavy-duty diesel engines. The primary method of implementing this program will be through the development of emission control regulations and test procedures for those new engines. The California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles were amended on October 17, 2007 and will reduce emission from new on-road heavy-duty diesel engines.

Strategies for reducing diesel emissions from existing on-road heavy duty engines will mainly be implemented through three sections of this program: retrofit assessment, heavy-duty testing and field support, and retrofit implementation. The CARB staff has developed a regulation to reduce diesel particulate matter and other emissions from existing on-road heavy-duty diesel powered vehicles operating in California. The proposed regulation is planned to be presented to CARB at the December 2008 hearing.

In addition to the above listed programs and regulations, CARB's Air Quality and Land Use Handbook provides recommendations for siting new sensitive land uses. (CARB 2005) These recommendations include a 500-foot buffer between sensitive land uses and freeways or urban roads with 100,000 vehicles per day. These are recommendations, not mandates, and land use decisions ultimately lie with the local agency. The project's proposed schools meet this recommendation.

Although the CARB will hand down programs and standards by which the South Coast Air Quality Management District (SCAQMD) can manage their jurisdiction for diesel emissions, the above programs are not regulations. Due to interstate commerce issues, regulating diesel emissions becomes not only a state level issue, but largely a federal issue. The SCAQMD is not responsible for direct regulation of mobile sources, including diesel trucks, except for publicly-owned fleets with 15 or more vehicles. The SCAQMD becomes involved in diesel issues because they are the permitting agency for stationary sources such as diesel generators and they are the agency responsible for implementing the Air Quality Management Plan for the South Coast Air Basin (SCAB). Specifically in the case where the project is in close proximity to diesel trucks traveling on the Ramona Expressway, the SCAQMD does not have direct regulatory control over the diesel truck emissions, but they do have the responsibility for implementing and managing air quality plans for the SCAB in which these public fleets will be operating.

In 2000, SCAQMD established a rule which mandated that whenever a public fleet operator with 15 or more vehicles replaces or purchases new vehicles, they must be either low-emission or alternatively fueled. The validity of this rule is currently being challenged by the Engine Manufacturer's Association. The case was heard by the Supreme Court on January 14, 2004 and

on April 28, 2004, the Supreme Court issued an opinion that under the Clean Air Act, SCAQMD (and other local jurisdictions) are prohibited from adopting regulations that require private fleet owners to purchase clean-fueled vehicles. However, the court allowed the possibility that fleet rules can be applied to public fleets and may be valid for leased and used vehicles.

As far as regulations, the state of California is on the forefront of making an attempt to regulate mobile-source diesel emissions. On the federal level, in December 2000, the U.S. EPA announced its “Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements” (2007 Rule). This new rule required that new emission standards take effect in 2007 on new heavy duty engines and vehicles. The 2007 Rule standards are based on the use of emission control devices (much like the catalytic converters on gasoline automobiles). Coupled with the mechanical devices to control emissions which are not effective with the current high-sulfur diesel fuels on the market, the EPA also required diesel fuel to have 97 percent less sulfur content beginning in 2006.

On February 1, 2005, a requirement limiting the idling of diesel-fueled commercial vehicles to five minutes at any location pursuant to Section 2485 of Chapter 10 within Title 13 of California Code of Regulations was adopted.

Off-road diesel vehicles are also regulated under CARB for both in-use (existing) and new engines. Off-road diesel vehicles include construction equipment.

There have been four sets of standards implemented by CARB, Known as Tiers. Tier 1 standards began in 1996. Tier 2 and 3 were adopted in 2000 and were more stringent than the first tier. Tier 2 and 3 standards were completely phased in by 2006 and 2008, respectively. On December 9, 2004, CARB adopted the Tier 4 or fourth phase of emission standards for late model year engines. These emission standards are nearly identical to those finalized by the US EPA in May 2004. These standards will decrease PM and NO_x emissions 90 percent below current levels beginning in 2011.

Since most off-road vehicles today have no emission controls and can last 30 years or longer, CARB approved, on July 26, 2007, a regulation to reduce emission from existing off-road diesel vehicles used in construction and other industries. This regulation establishes emission rates targets that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these targets. The regulation will take affect on the larger fleets first with average compliance dates in 2010 while medium and small fleet requirements will achieve compliance in 2013 and 2015, respectively. This regulation also includes the Surplus Off-Road Opt-in for NO_x (SOON) program. The local air districts may opt into the SOON program to reduce NO_x emissions beyond what is required by the regulation. Staff at SCAQMD proposed Rule 2449 which would implement the SOON program. This rule was adopted at the May 2, 2008 board meeting. Opting in to this program is anticipated to achieve a 12 ton per day reduction in NO_x by 2014.

Greenhouse Gases and Climate Change

The Montreal Protocol on Substances That Deplete the Ozone Layer controls the phase-out of ozone depleting compounds (ODCs). Under this international agreement, several organizations report on the science of ozone depletion, implement projects to help move away from ODCs, and provide a forum for policy discussions. Many ODCs are also potent GHGs and so policies aimed at reducing their emissions also reduce emissions of GHGs. The SCAQMD supports state, federal and international policies to reduce levels of ozone depleting gases through its Global Warming Policy and rules. Further, SCAQMD has developed ODC Replacement Guidelines to facilitate transition from ODCs to substances that are the most environmentally benign (SCAQMD 2005).

There are currently no federal regulations or policies regarding GHG emissions. In 2002, President George W. Bush set a national policy goal of reducing the GHG emission intensity (tons of GHG emissions per million dollars of gross domestic product) of the U.S. economy by 18% by 2012. No binding reductions were associated with the goal. Rather, the U.S. EPA administers a variety of voluntary programs and partnerships with GHG emitters in which the U.S. EPA partners with industries producing and utilizing synthetic GHGs to reduce emissions of these particularly potent GHGs. (Environ, pg 12)

In *Massachusetts et al. vs. Environmental Protection Agency et al.* (April 2, 2007) the U.S. Supreme Court ruled that the Clean Air Act authorizes the U.S. EPA to regulate CO₂ emissions from new motor vehicles. The Court did not mandate that the U.S. EPA enact regulations to reduce GHG emissions, but found that the only instances where the U.S. EPA could avoid taking action were if it found that GHGs do not contribute to climate change or if it offered a “reasonable explanation” for not determining that GHGs contribute to climate change. (Environ, pg 12) However, on July 11, 2008, the U.S. EPA gave *Advance Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions under the Clean Air Act* (CAA). It will review various CAA provisions that may be applicable to regulate GHGs and examine the issues that regulating GHGs under those provisions may raise. It will also provide information regarding potential regulatory approaches and technologies for reducing GHG emissions and raise issues relevant to possible legislation and the potential for overlap between legislation and CAA regulation. The Congress instructed the U.S. EPA to publish a proposed mandatory greenhouse gas rule using its authority under the existing CAA in September 2008 and a final rule by June 2009.

In response to the U.S. Supreme Court ruling, the Bush Administration issued an executive order on May 14, 2007, directing the U.S. EPA and Departments of Transportation (DOT) and Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) (discussed below) was signed into law, which requires an increased Corporate Average Fuel Economy (CAFE) standard of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020. EISA requires establishment of interim standards (from 2011 to 2020) that will be the “maximum feasible average fuel economy” for each fleet. On October 10, 2008, the National Highway Traffic Safety Administration (NHTSA) released a final environmental impact statement analyzing proposed interim standards for model years 2011 to 2015 passenger cars and light trucks. NHTSA is expected to issue a final rule on interim

standards in January 2009. A standard for model year 2011 must be issued by the end of March 2009. (Environ, pg 12)

In addition to setting increased CAFE standards for motor vehicles, the EISA includes other provisions:

- Renewable Fuel Standard (RFS) (Section 202);
- Appliance and Lighting Efficiency Standards (Section 301–325);
- Building Energy Efficiency (Sections 411–441).
- Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.”

Congress passed “The Consolidated Appropriations Act of 2008” (HR 2764) in December 2007, which includes provisions requiring the establishment of mandatory GHG reporting requirements. The measure directs U.S. EPA to publish draft rules by September 2008, and final rules by June 2009 mandating reporting “for all sectors of the economy.” As of the time of release of this document, the U.S. EPA has not developed draft rules as directed by the Act, but states that the proposed rule is currently in interagency review. The Act also directs U.S. EPA to determine what reporting thresholds to use. (Environ, pg 13)

California Code of Regulations Title 24 Part 6: California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, were first established in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest amendments were made in October 2005 and currently require new homes to use half the energy they used only a decade ago. In September 2008, the new 2008 standards were adopted to update the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Part 1. The amended 2008 standards will go into effect in August 2009. Energy efficient buildings require less electricity, and electricity production by fossil fuels results in greenhouse gas emissions. Therefore, increased energy efficiency results in decreased greenhouse gas emissions.

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608), dated December 2006, were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally-regulated appliances and non-federally regulated appliances. While these regulations are now often seen as “business as usual,” they do exceed the standards imposed by any other state and reduce GHG emissions by reducing energy demand. (Environ, pg 16)

On July 17, 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations). Part 11 establishes voluntary standards, that will become mandatory in the 2010 edition of the Code, on planning and design for sustainable site development, energy efficiency

(in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. (Environ, pg 17)

In July 2002, Governor Gray Davis signed California Assembly Bill (AB) 1493 (Pavley), which requires CARB to develop and adopt regulations that reduce GHG emitted by passenger vehicles and light duty trucks. Regulations adopted by CARB will apply to 2009 and later model year vehicles. CARB estimates that the regulation, if implemented, will reduce GHG emissions from the light duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030. The US Environmental Protection Agency (EPA) denied the Clean Air Act waiver required to implement AB 1493 on December 19, 2007. However, the US EPA's decision is being challenged in federal court by the State of California. Nevertheless, in the event that the federal waiver be denied or the U.S. EPA's decision is upheld, AB 32 requires CARB to adopt alternative regulations to control mobile sources of greenhouse gas emissions to achieve greater or equivalent reductions (see Health & Safety Code section 38590). In January 2009, President Barack Obama issued a directive to the US EPA to reconsider California's request for a waiver. While the decision is not yet overturned, the US EPA is expected to approve the waiver.

In June 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. This Order calls for the following GHG emission reduction targets to be established: reduce GHG emissions to 2000 levels by 2010; reduce GHG emissions to 1990 levels by 2020; and reduce GHG emissions to 80 percent below 1990 levels by 2050. It also requires biennial reports on potential climate change effects on several areas, including water resources. The Order also requires that the Secretary of the California Environmental Protection Agency coordinate oversight of the efforts made to meet the targets with: the Secretary of the Business, Transportation and Housing Agency, Secretary of the Department of Food and Agriculture, Secretary of the Resources Agency, Chairperson of the Air Resources Board, Chairperson of the Energy Commission, and the President of the Public Utilities Commission.

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 directs the California Air Resources Board (CARB) to implement regulations for a cap on sources or categories of sources of GHG emissions. The bill requires that CARB develop regulations to reduce emissions with an enforcement mechanism to ensure that the reductions are achieved, and to disclose how it arrives at the cap. It also includes conditions to ensure businesses and consumers are not unfairly affected by reductions.

AB 32 requires the CARB to:

- adopt a list of discrete early action measures by July 1, 2007 that can be implemented before January 1, 2010;
- establish a statewide GHG emissions cap for 2020 based on 1990 emissions and adopt mandatory reporting rules for significant sources of GHG by January 1, 2008;
- indicate how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms and other actions by January 1, 2009; and

- Adopt regulations by January 1, 2011 to achieve the maximum technologically feasible and cost-effective reductions in GHG, including provisions for using both market mechanisms and alternative compliance mechanisms.

AB 32 codifies S-3-05's year 2020 goal by requiring that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be implemented no later than January 1, 2012. To effectively implement the cap, AB 32 directs CARB to develop appropriate regulations and establish a mandatory reporting system to track and monitor GHG emissions levels. The CARB adopted the Climate Change Scoping Plan in December 2008 fulfilling the AB 32 requirement of indicating how GHG emission reduction will be achieved by January 2009.

Also in September 2006, Governor Arnold Schwarzenegger signed Senate Bill (SB) 1368 which calls for the adoption of a greenhouse gas (GHG) performance standard for in-state and imported electricity generators to mitigate climate change. On January 25, 2007, the California Public Utilities Commission adopted an interim GHG emissions performance standard. This standard is a facility-based emissions standard requiring all new long-term commitments for baseload generation to serve California consumers be with power plants that have emissions no greater than a combined cycle gas turbine plant. The established level is 1,100 pounds of CO₂ per megawatt-hour.

Executive Order S-01-07 was approved by the Governor on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. It also requires that a Low Carbon Fuel Standard for transportation fuels be established for California.

The Western Regional Climate Action Initiative was signed on February 26, 2007 by five states: Washington, Oregon, Arizona, New Mexico, and California. Utah, as well as Manitoba and British Columbia, Canada joined in April, 2007. Montana joined in January, 2008 and Quebec moved from Observer to Partner status in April, 2008. Other United States and Mexican states and Canadian provinces have joined as observers. The Initiative plans on collaborating to identify, evaluate, and implement ways to reduce GHG emissions in the states collectively and to achieve related co-benefits. The Initiative plans to design a regional market-based multi-sector mechanism, such as a load-based cap and trade program by August 2008. In addition, a multi-state registry will track, manage, and credit entities that reduce GHG emissions.

In August 2007, Governor Arnold Schwarzenegger signed Senate Bill (SB) 97, CEQA: greenhouse gas emissions. The bill would require the OPR, by July 1, 2009, to prepare guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, as required by CEQA, including, but not limited to, effects associated with transportation or energy consumption. Also, an exemption exists for certain state bond-funded infrastructure projects. The Resources Agency would be required to certify and adopt those guidelines by January 1, 2010, which will also repeal the exemption for state bond-funded projects. On June 19, 2008, OPR released an interim technical advisory for addressing climate change in CEQA documents (OPR 2008). The recommended approach is to identify and quantify project-related GHG emissions; determine its significance; and if the impact is found to be potentially significant, implement mitigation measures or alternatives that will reduce the impact.

below significance. Further, the guidance states that the lead agency is not responsible for completely eliminating all project-related GHG emissions.

On January 8, 2009, OPR released preliminary draft CEQA guideline amendments for GHG (OPR 2009). The preliminary draft regulatory language proposed by OPR is intended to clarify existing state law and is consistent with existing statutes and regulations. OPR has attempted to make the preliminary draft Guideline amendments consistent with the existing CEQA framework for environmental analysis, including but not limited to the determination of baseline conditions, determination of significance, cumulative impacts and evaluation of mitigation measures. For these reasons, OPR did not identify a threshold of significance for greenhouse gas emissions, nor did they prescribe assessment methodologies or specific mitigation measures. The preliminary draft amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations based on substantial evidence. The preliminary draft amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. These draft guidelines are still preliminary at this time and only provided for informational purposes. No further analysis is incorporated.

On September 30, 2008, Governor Arnold Schwarzenegger signed Senate Bill (SB) 375 (Steinberg). SB 375 focuses on housing and transportation planning decisions to reduce fossil fuel consumption and conserve farmlands and habitat. This legislation is important to achieving AB 32 goals because greenhouse gas emissions associated with land use, which includes transportation, are the single largest source of emissions in California. SB 375 provides a path for better planning by providing incentives to locate housing developments closer to where people work and go to school, allowing them to reduce vehicle miles traveled (VMT) every year.

To achieve these goals, SB 375 will:

- require the regional transportation plan for each of the state's major metropolitan areas to adopt a "sustainable community strategy" that will meet the region's target for reducing GHG emissions from cars and light trucks. These strategies would get people out of their cars by promoting smart growth principles such as: development near public transit; projects that include a mix of residential and commercial use; and projects that include affordable housing to help reduce new housing developments in outlying areas with cheaper land and reduce vehicle miles traveled (VMT).
- create incentives for implementing the sustainable community strategies by allocating federal transportation funds only to projects that are consistent with the emissions reductions.
- provide various forms of CEQA relief by allowing projects that are shown to conform to the preferred sustainable community strategy through the local general plans (and therefore contribute to GHG reduction) to have a more streamlined environmental review process. Specifically, if a development is consistent with the sustainable community's strategy and incorporates any mitigation measures required by a prior EIR, then the environmental review does not have to consider: a) growth-inducing impacts, or b) project-specific or cumulative impacts from cars on global climate change or the regional transportation network. In addition, a narrowly-defined group of "transit priority projects" will be exempt from CEQA review.

Pursuant to OPR's request to recommend significance thresholds, CARB released the Preliminary Draft Staff Proposal: Recommended Approaches for Setting Interim Significant Thresholds for Greenhouse Gases under CEQA (CARB's Initial Significance Recommendations) on October 24, 2008. (CARB 2008) For industrial projects that do not qualify under existing CEQA statutory or categorical exemptions, CARB recommends that greenhouse gas -related impacts may be found to be insignificant if they: (1) meet interim performance standards for construction and transportation-related emissions; and (2) emit no more than 7,000 MTCO₂E from non-transportation operational sources. CARB recommends that residential and commercial projects that do not qualify under existing CEQA statutory or categorical exemptions are presumed to have a less than significant impact related to climate change if: (1) construction activities meet an interim CARB performance standard for construction-related emissions; (2) operational activities: i) meet the California Energy Commission's Tier II Energy Efficiency goal; ii) meet an interim CARB performance standard for water use; iii) meet an interim CARB performance standard for waste; and iv) meet an interim CARB performance standard for transportation; and (3) the project will emit no more than a "to be determined" limit for metric tons CO₂e per year. The approach used in this Draft EIR is to disclose the most recent regulatory activity, even if it not approved, and not incorporate the draft threshold recommendations into the significance findings.

In addition to current rules and regulations which also address GHG, SCAQMD plans to provide guidance to local lead agencies on determining significance for GHG in their CEQA documents by convening a *GHG CEQA Significance Threshold Working Group* to work with SCAQMD staff on developing GHG CEQA significance thresholds. The SCAQMD began hosting monthly working group meetings in April 2008. The result of the working group meeting on October 22nd was the *Draft AQMD Staff CEQA Greenhouse Gas Significance Threshold* (SCAQMD 2008a) and the *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (SCAQMD 2008b). The Draft Threshold is intended to be interim guidance until statewide significance thresholds or guidance is established. The proposed significance threshold is a tiered approach which allows for flexibility by establishing multiple thresholds to cover a broad range of projects.

SCAQMD proposes three tiers of compliance that may lead to a determination that impacts are less than significant, including: (1) projects with greenhouse gas emissions within budgets set out in approved regional plans, to be developed under the SB 375 process; (2) projects with greenhouse gas emissions that are below designated quantitative thresholds: (i) industrial projects with an incremental greenhouse gas emissions increase that falls below (or is mitigated to be less than) 10,000 MTCO₂e /yr; or (ii) commercial and residential projects with an incremental greenhouse gas emissions increase that falls below (or is mitigated to be less than) 3,000 MTCO₂e /yr, provided that such projects also meet energy efficiency and water conservation performance targets that have yet to be developed; (3) projects that purchase greenhouse gas offsets which, either alone or in combination with one of the three tiers mentioned above, achieve the target significance screening level.

On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency. Currently, the Board has only adopted thresholds relevant to industrial (stationary source) projects. To achieve a policy objective of capturing 90% of GHG emissions from new residential/commercial development projects and implement a "fair share" approach to reducing

emission increases from each sector, SCAQMD staff has proposed combining performance standards and screening thresholds. The performance standards suggested have primarily focused on energy efficiency measures beyond Title 24 Part 6, California's building energy efficiency standards, and a screening level of 3,000 tonnes CO₂e per year based on direct operational emissions. Above this screening level, project design features designed to reduce GHGs must be implemented to reduce the impact to below a level of significance. SCAQMD staff are performing additional analyses to further define the performance standards as well as coordinating with CARB's interim GHG proposal. At this time SCAQMD is waiting for CARB's recommendations for the residential/commercial sector. Once CARB adopts the statewide significance thresholds, staff will report back to the Board regarding any recommended changes or additions to the SCAQMD's interim threshold.³ The approach used in this Draft EIR is to disclose the most recent regulatory activity, even if it not approved, and not incorporate the draft threshold recommendations into the significance findings.

Riverside County General Plan Policies

The proposed project is subject to the Riverside County General Plan. The following General Plan policies relate to air quality:

- LU 10.1 Provide sufficient commercial and industrial development opportunities in order to increase local employment levels and thereby minimize long-distance commuting.
- LU 10.2 Ensure adequate separation between pollution producing activities and sensitive emission receptors, such as hospitals, residences, and schools.
- LU 10.3 Accommodate the development of community centers and concentrations of development to reduce reliance on the automobile and help improve air quality.
- LU 10.4 Provide options to the automobile in communities, such as transit, bicycle and pedestrian trails, to help improve air quality.
- AQ 4.7 To the greatest extent possible, require every project to mitigate any of its anticipated emissions that exceed allowable emissions as established by the SCAQMD, MDAQMD, SOCAB, the Environmental Protection Agency, and the California Air Resources Board.
- AQ 8.2 Emphasize job creation and reductions in vehicle miles traveled in job-poor areas to improve air quality over other less efficient methods.
- AQ 8.4 Support new mixed-use land use patterns and community centers which encourage community self-sufficiency and containment, and discourage automobile dependency.

The consistency of the proposed project with the above General Plan policies is presented in Appendix N of this DEIR.

³ <http://www.aqmd.gov/hb/2008/December/081231a.htm>

Project Design Considerations

Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts to air quality through the design of the project.

A focus of the project is to provide a walkable healthy community, based on smart growth principals. The walkable community is organized into villages that vary in character, theme, and lifestyle; including a mixed-use town center. Another focus is to provide a variety of transportation choices. Specific design considerations and programs incorporated in the project under Section B.12, Lakeview Green Design Program, of the Specific Plan which will reduce both criteria pollutant and GHG emissions and improve air quality. This aspect of the project generally includes:

- mixed use development, which provides housing, commercial, employment, and recreational opportunities in combination, will encourage residents to complete multiple-stops-per-trip rather than the one-stop-per-trip and encourage residents to use alternative modes of transportation such as walking and bicycling which can reduce vehicle miles traveled and their associated emissions;
- compact building design, which attempts to minimize the building footprint at the community level, neighborhood level, and individual lot level, preserves open space, and critical environmental areas by concentrating development and reducing removal of naturally-vegetated areas;
- walkable neighborhoods, which facilitate the use of bicycles and walking as an alternative to driving, are provided through a 32-mile network of bicycle lanes, trails, and paseos providing connections to schools, libraries, parks, open space, bus stops, and commercial centers and adequate bicycle parking shall be provided at these community facility locations;
- coordinating with local and regional transportation agencies to integrate the project with planned future transit options;
- energy efficiency standards for buildings that significantly exceed state requirements
- installation of Energy Star rated major appliances in order to further reduce home energy consumption
- reduction in the use of non-renewable resources, both during construction and operation of the project;
- use of California appropriate landscaping throughout the project; and
- public outreach programs directed to project residents and designed to maximize the effectiveness of mitigation measures that reduce project GHG emissions.

In addition to the general concepts described above, the following represents a list of some specific requirements outlined in Section B.12 of the Specific Plan.

Green Building Development Standards

- ~~1. THE VILLAGES OF LAKEVIEW will engage in public outreach efforts aimed at informing residents about opportunities to utilize walking, public transportation, carpooling, and bicycles. This effort will be implemented through signage and information posted at the transit center, library, public community center, Central Park parking area, and in commercial areas.~~
- ~~1. Within THE VILLAGES OF LAKEVIEW, all residential and non-residential uses excluding ancillary uses shall exceed by 15% the 2007 California Energy Code Title 24, Part 6 in energy efficient design. In order to meet this rating standard, elements of energy efficient design include, but are not limited to:~~
 - ~~a. High efficiency lighting~~

~~The installation of high efficiency lighting, such as CFLs (compact fluorescent lighting), greatly reduces energy consumption.~~
 - ~~b. Low energy cooling system, such as engineered heating, ventilation, and air conditioning (HVAC) systems with tight HVAC Ducts~~

~~Low energy HVAC systems that are installed with tight ducts increase the efficiency in heating and cooling the home.~~
 - ~~c. Improved drywall, insulation, and sealing installation~~

~~Proper installation helps to maintain the desired temperature inside the home, lessening the dependence on mechanical heating and cooling systems.~~
 - ~~d. Cool roofs~~

~~A cool roof reflects and emits the sun's heat back to the sky instead of transferring it to the building below. "Coolness" is measured by two properties, solar reflectance and thermal emittance—the higher the value, the "cooler" the roof. By limiting heat penetration into the attic and living areas of the home, dependence on mechanical cooling systems can be reduced.~~
 - ~~e. Double paned windows~~

~~Double paned windows dramatically improve the insulating capacity of windows, better maintain the desired temperature inside the home, and so reduce dependence on mechanical heating and cooling systems.~~
 - ~~f. Dual glazed LoE2 windows with high efficiency glazing (SHGC and U value < 0.40)~~

~~Dual glazed Lo E2 windows limit heat and coldness penetration, therefore reducing the need for mechanical heating and cooling.~~
- ~~2. Homebuilders within THE VILLAGES OF LAKEVIEW will be required to install Energy Star-rated model appliances in order to further reduce the home's energy consumption, if they choose to offer the installation of major appliances such as dishwashers, washing machines, and refrigerators in new homes.~~
- ~~3. Public Riverside County buildings shall employ photovoltaic cells, subject to agreement with the County and the builder.~~

- ~~4. Where professional management is available, such as an HOA, recycled water shall be used in residential front yards and back yards (also private common areas) and in adjacent public street parkways, subject to EMWD and County approvals.~~
- ~~5. In areas where recycled water is not used, turf shall be limited to 33% of the landscaped area of a conventional SFD lot.~~
- ~~6. California appropriate vegetation, that reduces the use of water, shall be incorporated into The Villages of Lakeview landscape. Appendix B, Plant Palette, shall be used as the outline for appropriate plants when incorporating trees, shrubs and groundcover.~~
- ~~7. The Villages of Lakeview shall create an “adopt a tree project,” where each new homeowner within The Villages of Lakeview shall receive a tree, either to be planted in their yard or to be donated and planted within the community.~~
- ~~8. The Master Developer shall provide priority parking for High Occupancy Vehicles (HOV) and bicycle parking. Ridesharing vehicles will be provided at community facilities.~~
- ~~9. The Villages of Lakeview will coordinate with the transportation department and with local and regional agencies where possible in order to maximize integration of the project with local transportation planning and implementation efforts. These efforts include the possibility of extending the Riverside Transit Agency’s Bus Rapid Transit System into the area and bus connections to proposed Metrolink stations along the Perris Valley Line.~~
- ~~10. A community vehicle shall be provided by the Homeowners’ Association for residential transport within the community.~~
- ~~11. Separate recycling and waste receptacles shall be provided at all public garbage bins along sidewalks, and at the transit center, library, public community center, Central Plan parking area, and in the commercial areas, and to all homeowners to reduce operational waste generated by the project. In addition, The Villages of Lakeview shall provide public education and publicity regarding recycling services offered in order to increase participation, implemented through signage posted at the transit center, library, public community center, Central Park parking area, and in commercial uses.~~
1. To utilize energy efficiently, large residential buildings, large public buildings (library, public community center, schools, and joint-use facilities), large private recreation buildings owned by the Homeowners’ Association (HOA) and large commercial buildings (retail and office) shall exceed the 2007 California Energy Code – Title 24, Part 6 energy efficiency standards by 35% (schools and joint-use facilities are subject to Nuview Union School District approval). To meet this rating standard, the following energy-efficient design elements could be considered:
 - i) Tankless water heaters
 - ii) High efficiency lighting
 - iii) Low energy HVAC systems with tighter HVAC ducts
 - iv) Improved drywall, insulation and sealing installation
 - v) “Cool roofs” reflect the sun’s light back to the sky
 - vi) Heat-repelling radiant barrier roof foil reflect the sun’s heat back to the sky
 - vii) Double-paned windows
 - viii) Dual-glazed, Lo E2 windows

2. To utilize energy efficiently, homebuilders shall install Energy Star-rated model appliances, if the homebuilder chooses to install major appliances such as a dishwasher, washing machine, and refrigerator in the new home.
3. To utilize energy efficiently, major appliances installed in large public buildings (library, public community center, schools, and joint-use facilities) and large private recreation buildings owned by the HOA shall be Energy Star-rated (schools and joint-use facilities are subject to Nuvview Union School District approval).
4. To utilize energy efficiently, street lights shall be installed with energy-efficient lighting.
5. To increase renewable energy sources and reduce greenhouse gas emissions, large public buildings (library, public community center, schools, and joint-use facilities) and large private recreation buildings owned by the HOA shall be installed with solar panels, photovoltaic cells, solar thermal systems or other renewable energy generating technology (schools and joint-use facilities are subject to Nuvview Union School District approval).
6. To increase renewable energy sources and reduce greenhouse gas emissions, homebuilders are encouraged to: 1) offer to home buyers solar panels, photovoltaic cells, solar thermal systems or other renewable energy generating technology as part of the homebuilder's option program, or 2) be consistent with the Governor's Million Solar Roofs plan.
7. Where professional management is available, such as an HOA, recycled water shall be used in residential front-yards and backyards, i.e. private common area, and in adjacent street parkways, subject to EMWD and County approvals.
8. Where professional management is not available, grass turf (live not artificial) shall be limited to 33% of the landscaped area of a conventional single-family detached lot.
9. To utilize water efficiently, California-appropriate vegetation shall be incorporated into THE VILLAGES OF LAKEVIEW landscape. Appendix B, Plant Palette, shall be used as the outline for appropriate plants when incorporating trees, shrubs and groundcover.
10. THE VILLAGES OF LAKEVIEW shall create an "adopt a tree project", where each new homeowner within THE VILLAGES OF LAKEVIEW shall receive a tree, either to be planted in their yard or to be donated and planted within the community.
11. To educate the residents, THE VILLAGES OF LAKEVIEW will engage in public outreach efforts aimed at informing residents about opportunities to utilize walking, public transportation, carpooling, and bicycles. This effort will be implemented through signage and information posted at the transit center, library, public community center, Central Park parking area, and in commercial areas.
12. To encourage less automobile use, THE VILLAGES OF LAKEVIEW will provide a transit center, including a bus stop opportunity and park-n-ride lot to facilitate carpooling and/or use of public transportation.

13. To encourage less automobile use, THE VILLAGES OF LAKEVIEW will designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing at the transit center, library, public community center, Central Park parking area, and in commercial areas.
14. To encourage less automobile use, adequate bicycle parking shall be provided at the transit center, library, public community center, Central Park parking area, and in commercial areas.
15. To encourage less automobile use, THE VILLAGES OF LAKEVIEW will coordinate with the transportation department and with local and regional agencies where possible in order to maximize integration of the project with local transportation planning and implementation efforts. These efforts include the possibility of extending the Riverside Transit Agency's Bus Rapid Transit System into the area and bus connections to proposed Metrolink stations along the Perris Valley Line.
16. To encourage less automobile use, a community vehicle shall be provided by the Homeowners' Association (or like entity) for resident transport prior to the issuance of the 9,551st building permit.
17. Separate recycling and waste receptacles shall be provided at all public garbage bins along sidewalks, and at the transit center, library, public community center, Central Park parking area, and in the commercial areas. Signage and information regarding the recycling bins and acceptable recyclable materials shall be posted at the transit center, library, public community center, Central Park parking area, and in commercial uses.
18. To improve air quality by reducing VOC emissions associated with the application of architectural coating, homebuilders shall apply coatings and solvents with a VOC content lower than required under Rule 1113 as amended July 13, 2007 to residential dwelling units. In addition, homebuilders are encouraged to consider the use of pre-coated construction materials and materials that do not require painting. Construction specifications shall be included in the building specifications that assure these requirements are implemented.

(Note: "large" is defined as the primary residence, main private recreation building, main public community center building, retail space with an anchor, etc.; "large" excludes a shed in a residential yard, small utility buildings, small pool buildings, trash enclosures, etc.)

Bicycle lanes, trails and paseos will be provided, as identified in the Specific Plan (SP342) on the Vehicular Circulation Plan (Exhibit 6a), Typical Street Cross Sections (Exhibit 7a-7h), and the Trails Plan (Exhibit 18b). This network provides connections to schools, libraries, parks, open space, bus stops, and commercial centers. This will provide options for non-vehicular circulation for THE VILLAGES OF LAKEVIEW residents which will reduce car trips, and therefore indirectly reduce both criteria pollutants and greenhouse gases such as carbon dioxide.

Environmental Impacts Before Mitigation

Threshold A: *Conflict with or obstruct implementation of the applicable air quality plan.*

The Air Quality Management Plan (AQMP) for the South Coast Air Basin (SCAB) sets forth a comprehensive program that will lead the SCAB into compliance with all federal and state air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections and meeting the land use designation set forth in the local General Plan. This analysis utilizes the compliance with local land use plans as the basis for its significance determination.

Existing land uses on the project site include a chicken ranch, MWD aqueduct and basin, a thoroughbred farm, abandoned RV park and additional farmland and vacant land. The project area is zoned for agricultural, residential (mostly low and medium density), and community development overlay uses. This project involves the development of both residential (mostly medium and high to very high density) and commercial properties, which is not consistent with the land use envisioned in the Riverside County General Plan. From Section 5.9, Land Use and Planning, **Tables 5.9-A** and **B** indicate an 88 percent increase in total dwelling units within the project boundary compared to the existing land uses. Therefore, the proposed project is not consistent with the underlying local land use plan used in the AQMP.

Therefore, impacts are considered **significant**.

Threshold B: *Violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation.*

The increased criteria pollutant concentrations from the project-related development may contribute to the existing health effects known to occur from exposure to criteria pollutants which are described in more detail on pages 5.3-6 and 5.3-7. Criteria pollutant exposure primarily affects the respiratory system although it can affect the skin, eyes, and other body systems. Symptoms can include coughing, sneezing, increased respiratory illness, reduced lung function, and lung damage.

Air quality impacts can be divided into short-term and long-term impacts. Short-term impacts are usually related to construction and grading activities. Long-term impacts are usually associated with build-out conditions and long-term operations of a project. The following information was derived from the AQIA which is found in Appendix C.

SCAQMD's Regional Significance Threshold (RST) Analysis

Short-Term Impacts – RST Analysis

The proposed project will create “short-term” air quality impacts from fugitive dust, other particulate matter, exhaust emissions generated by earthmoving activities and operation of grading equipment during site preparation (demolition and grading). Short-term impacts will also include emissions generated during construction of the buildings as a result of operation of

equipment, operation of personal vehicles by construction workers, and coating and paint applications.

The project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of this project (approximately 2,800), a Fugitive Dust Control Plan or Large Operation Notification would be required.

The thresholds shown below in **Table 5.3-B** are from the SCAQMD's CEQA Handbook and are the standard thresholds for determining significance under CEQA sanctioned by the SCAQMD. These regional significance thresholds were developed by SCAQMD based on the estimated daily emissions of a major stationary source.

Table 5.3-B
SCAQMD CEQA Regional Significance Thresholds

Emission Threshold	Units	VOC	NO_x	CO	SO_x	PM-10	PM-2.5
Daily Threshold – Construction	lbs/day	75	100	550	150	150	55
Daily Threshold – Operations	lbs/day	55	55	550	150	150	55

Source: SCAQMD's CEQA Handbook

SCAQMD Rule 1113 governs the sale of architectural coatings and limits the VOC in paints and paint solvents. Although this rule does not directly apply to the project, it does dictate the VOC content of paints available for use during building construction.

Short-term emissions were evaluated using the URBEMIS 2007 for Windows version 9.2.4 for Windows computer program. The model evaluated emissions resulting from site grading and construction. The total construction period is expected to require approximately 11 years, from January 2009 to January 2020. The default parameters within URBEMIS were used and these default values reflect a worst-case scenario, which means that project emissions are expected to be equal to or less than the estimated construction emissions. In addition to the default values used, several assumptions relevant to model inputs for short-term construction emission estimates are included below and in the AQIA in Appendix C in detail:

- The project will be built in three phases; Phase 1 (Phase 1A + 1B), Phase 2, and Phase 3 (Phase 3A + 3B), respectively. Phasing information was taken from the traffic study (Webb 2007) and Exhibit B.6.16, Conceptual Phasing Plan within the Specific Plan. For analysis purposes, it is assumed that each phase will not begin until after the completion of the previous phase and no overlap of construction of each phase will occur. Additionally, site

grading of each phase is assumed to occur all at once because exact timing for each planning area is unknown.

- Existing land uses on-site include four homes along Davis Road, the chicken ranch, Metropolitan Water District (MWD) aqueduct and basin, a thoroughbred farm, an abandoned RV park, and dryland and irrigated farmland. The chicken ranch will close prior to occupancy of the project and the emissions from demolition will be analyzed herein. The demolition of the chicken ranch (approximately 8,524,400 cubic feet) is expected to take four months and is anticipated to begin no earlier than January 2012, which is the beginning of Phase 2 of the project.
- In addition to the on-site infrastructure proposed for the project, the Specific Plan indicates that off-site infrastructure is also needed to develop the project. Specific infrastructure facilities analyzed herein are described in the Project Description, Section 3.0 of this DEIR. All infrastructure located within the project site and some located off-site but needed for Phase 1 development are included. All other off-site infrastructure not included herein but needed to serve the project and other proposed development in the Lakeview/Nuevo area has been evaluated at a programmatic level in the EIR prepared for the *Eastern Municipal Water District Lakeview/Nuevo Area-Wide Master Plan for Water, Sewer, Recycled Water* (Master Plan), (EMWD 2009). Phase 1 of the project requires some off-site infrastructure to be installed prior to occupancy as shown in **Figure 3-3, Phase 1 Off-site Infrastructure**.

The construction emissions estimates for the off-site sewer infrastructure (approximately 23,800 linear feet) needed for Phase 1 was analyzed in the Master Plan EIR and is included in the tables below. It was not necessary to analyze the remaining Phase 1 off-site infrastructure (water lines and a storm drain channel) as discussed below. These remaining Phase 1 facilities include approximately 6,852 linear feet of water line that will run along Hansen Avenue from Wolkskill Avenue to Contour Avenue and west on Contour Avenue to 11th Street and a small open drainage (625 ft) between Davis Street and the project boundary as shown in **Figure 3-3**. These were not analyzed because they are much smaller by comparison to the off-site sewer pipeline with existing or proposed sensitive receptors, as previously defined by SCAQMD, in the vicinity no closer than those assumed in the Master Plan EIR and the construction emissions would be equal to, or less than, the emissions modeled in the aforementioned sewer pipeline analysis. The following is a description of the assumptions used in the Master Plan EIR analysis.

- Much of the construction for the off-site infrastructure will take place either within the road rights-of way, or on vacant sites, so no demolition will be necessary.
- The construction of the sewer pipelines will begin in January 2009 and will take approximately 6 months to complete.
- The first phase of construction will consist of grading.
 - For the sewer pipelines. According to the Master Plan EIR, the maximum daily acreage disturbed was assumed to be 3.96 acres.
- All on-site infrastructures within the project boundary were assumed to be constructed during site grading in the beginning of each Phase.

- The emissions from the demolition of the thoroughbred farm and abandoned RV park will not be analyzed here since the exact demolition scheduling is unknown at this time and the estimated earthworks numbers are already included in their respective phases.
- Section B.7 of the Specific Plan indicates that the project will move approximately 17 million cubic yards of dirt which will be balanced on the site. This estimation differs from values given below under each phase. The 17 million cubic yards represent the total raw cut/fill volume that the project needs to be graded. This represents the total movement of dirt from the perspective of cutting from some areas, and moving that dirt to areas that need the fill. The one million cubic yards needed to cross Ramona Expressway in Phase 1 will be coming from the 17 million yards on the project. Other dirt handling that is not included in the 17 million cubic yards is the dirt that will need to be remediated. These values are included in the estimates for each phase below. Through the process of remediation, dirt will be removed (overexcavated), conditioned, and placed back in the same place and compacted. This dirt does not travel to other places to be used as fill. However, the grading contractor may decide to overexcavate from point A and fill point B with it, but that's not something we can be foreseen at the Specific Plan level.
- To evaluate project compliance with SCAQMD Rule 403 for fugitive dust control during site grading of each Phase, the project utilized the mitigation option of watering the project site three times daily which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions.
- Construction of Phase 1 of the project will begin in January 2009 and take a total of 3 years to complete. On-site dirt cut/fill for this phase was estimated to be approximately 10,390,000 cubic yards. In addition to that quantity, 1,000,000 cubic yards of dirt will be relocated from areas of Phase 1 south of Ramona Expressway to the north of Ramona Expressway. There are two alternative hauling methods being proposed. They are both analyzed and described below. The most economical method will be used and determined at a later date. Phase 1 of the project consists of 860 single-family dwelling units, 1,770 multi-family dwelling units, one elementary school with 1,200 students, 100,000 square feet of retail uses, and approximately 108 acres of parks.
- Phase 1 Dirt Movement Option A: Move fill from Planning Areas 26 and 27 across Ramona Expressway to Planning Areas 9-20 via a temporary realignment of Ramona Expressway proposed to redirect traffic generally north of Planning Areas 9, 17, and 19, within the project boundary. Prior to the realignment, dirt will be excavated in these Planning Areas and relocated to stock piles within Planning Areas 10, 12 and 14. Once completed and the temporary realignment is in place, the dirt will then be moved from Planning Areas 26 and 27 into the excavated areas in Planning Areas 9, 15, 16, 17, 19 and 20. The intent is to use earth moving machinery, such as scrapers, to move the dirt directly, avoiding the need for loading and unloading trucks to move the dirt. Each earth mover/scrapper can carry approximately 25 cubic yards per load. This method would require approximately 50 working days moving 20,000 cubic yards per day. This equates to approximately 40,000 round trips of scrapers from the borrow site to the fill site. Once the dirt has been moved, the original alignment of Ramona Expressway will be repaved and utilized again.
- Phase 1 Dirt Movement Option B: Move fill from Planning Areas 26 and 27 across Ramona Expressway to Planning Areas 9-20 via a temporary overcrossing or undercrossing of existing Ramona Expressway, so as not to affect existing traffic on Ramona. Once the

temporary crossing is constructed, the intent is to use earth moving machinery, such as scrapers, to move the dirt directly, avoiding the need for loading and unloading trucks to move the dirt. Each earth mover/scrapper can carry approximately 25 cubic yards per load. This method would require approximately 50 working days moving 20,000 cubic yards per day. This equates to approximately 40,000 round trips of scrapers from the borrow site to the fill site. Once the fill is relocated from the south side of Ramona Expressway, the temporary overcrossing or undercrossing will remain in place to remain as construction access from the south side of Ramona Expressway to the north side without affecting the traffic.

- Construction of Phase 2 of the project will begin in January 2012 and take a total of 4 years to complete. On-site dirt excavation for this phase was estimated to be approximately 7,640,000 cubic yards. Phase 2 of the project consists of 690 single-family dwelling units, 3,450 multi-family dwelling units, a 1,200-student elementary school, 200,000 square feet of retail uses, and approximately 36 acres of parks.
- Construction of Phase 3 of the project will begin in January 2016 and take a total of 4 years to complete. On-site dirt excavation for this phase was estimated to be approximately 11,530,000 cubic yards. Phase 3 of the project consists of 970 single-family dwelling units, 3,610 multi-family dwelling units, a 1,200-student elementary school, 200,000 square feet of retail and office uses, and approximately 4 acres of parks.

The construction equipment estimated to be used for each phase is shown in Appendix A of the AQIA. **Table 5.3-C**, below, summarizes the estimated construction emissions.

Table 5.3-C, Estimated Daily Construction Emissions

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
PHASE 1						
Construction 2009						
Site Grading	73.51	679.20	324.78	0.01	5,655.78	1,201.50
Soil Movement Option A	31.32	280.81	139.90	0.01	1,338.82	288.46
Option A - Asphalt	9.72	41.56	20.49	0.03	2.63	2.35
Soil Movement Option B	31.32	280.81	139.90	0.01	1,338.82	288.46
Building Construction ¹	102.59	294.08	699.00	0.75	22.20	18.42
Off-site Sewer Pipeline ²	8.63	55.98	32.78	0.00	82.89	19.91
Maximum ³	113.46	1,015.99	699.00	0.75	7,077.49	1,509.87
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes
Construction 2010						
Building Construction ⁴	79.12	170.87	582.38	0.72	12.75	9.80
Maximum	79.12	170.87	582.38	0.72	12.75	9.80
Exceeds Threshold?	Yes	Yes	Yes	No	No	No
Construction 2011						
Building Construction ⁴	76.11	157.24	540.65	0.72	12.22	9.31
Exceeds Threshold?	Yes	Yes	No	No	No	No
PHASE 2						
Construction 2012						
Demolition	5.05	44.90	25.05	0.03	43.99	10.74
Site Grading	62.88	566.85	259.01	0.01	5,621.34	1,190.06
Building Construction ¹	88.78	258.76	561.71	0.78	19.94	16.30
Maximum ⁵	88.78	611.75	561.71	0.78	5,665.33	1,200.80
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes
Construction 2013						
Building Construction ⁴	70.51	157.07	466.23	0.76	11.95	9.00
Exceeds Threshold?	No	Yes	No	No	No	No
Construction 2014						
Building Construction ⁴	67.82	141.56	432.30	0.76	11.10	8.23
Exceeds Threshold?	No	Yes	No	No	No	No
Construction 2015						

Table 5.3-C, Estimated Daily Construction Emissions

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
Building Construction ⁴	65.44	127.38	401.05	0.76	10.54	7.71
Exceeds Threshold?	No	Yes	No	No	No	No
PHASE 3						
Construction 2016						
Site Grading	52.10	417.98	202.52	0.01	5,627.24	1,186.98
Building Construction	85.87	189.80	431.21	0.80	15.42	12.11
Maximum ⁶	85.87	417.98	431.21	0.80	5,627.24	1,186.98
Exceeds Threshold?	Yes	Yes	No	No	Yes	Yes
Construction 2017						
Building Construction ⁴	69.44	108.72	350.37	0.77	9.55	6.78
Exceeds Threshold?	No	Yes	No	No	No	No
Construction 2018						
Building Construction ⁴	67.57	98.72	327.55	0.77	9.00	6.28
Exceeds Threshold?	No	No	No	No	No	No
Construction 2019						
Building Construction ⁴	65.99	90.00	306.86	0.77	8.54	5.85
Exceeds Threshold?	No	No	No	No	No	No

Notes: See Appendix A of AQIA for model output report.

¹ This phase of building construction includes emissions from asphalt and painting also since these activities could be occurring concurrently.

² The emissions for the Offsite Sewer pipeline were obtained from Table 4.1-C of the Master Plan EIR.

³ The maximum emissions include each activity occurring concurrently. Therefore, maximum emissions are the greater of building construction or site grading which includes the off-site sewer pipelines, soil movement from one option or Option A asphalt since Option A soil movement and asphalt occur independently due to timing

⁴ This phase of building construction includes emissions from painting also since this activity could be occurring concurrently and the paving was assumed to occur in the beginning of each Phase.

⁵ It is assumed that demolition and site grading could occur concurrently in different locations within Phase 2. Therefore, maximum emissions are the greater of demolition and site grading alone or building construction.

⁶ It is assumed that each phase occurs independently of one another. Therefore, maximum emissions are the greater of site grading or building construction.

Evaluation of the above table indicates that all criteria pollutant emissions from construction of this project are above the SCAQMD recommended daily thresholds for VOC, NO_x, and CO, throughout Phase 1 and 2 during one or more years and VOC and NO_x during one or more years in Phase 3. PM-10 and PM-2.5 emissions will also exceed the regional thresholds during the grading of each during the years of 2009, 2012, and 2016. The main sources of VOC are from painting and construction vehicle emissions. The main source of CO and NO_x is from construction vehicle exhaust. The main source of PM-10 and PM-2.5 is from fugitive dust emissions during grading. Since SCAQMD thresholds are exceeded in the short term, significant impacts will occur with project construction.

Since this project will be constructed in phases, Phase 1 will be operational while Phase 2 is under construction and both Phase 1 and 2 will be operational while Phase 3 is under construction. The maximum daily emissions from these overlapping phases occurring between 2012 and 2019 are contained in **Table 5.3-D**.

Table 5.3-D, Estimated Maximum Daily Emissions (2012-2019)

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
<u>SCAQMD Daily Operational Thresholds</u>	<u>55</u>	<u>55</u>	<u>550</u>	<u>150</u>	<u>150</u>	<u>55</u>
2012						
Phase 1 Operation	326.74	320.02	1,864.19	1.99	320.95	65.42
Phase 2 Construction	88.78	611.75	561.71	0.78	5,665.33	1,200.80
Maximum	415.52	931.77	2,425.90	2.77	5,986.28	1,266.22
<u>Exceeds Threshold?</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
2013						
Phase 1 Operation	326.74	320.02	1,864.19	1.99	320.95	65.42
Phase 2 Construction	70.51	157.07	466.23	0.76	11.95	9.00
Maximum	397.25	477.09	2,330.42	2.75	332.90	74.42
<u>Exceeds Threshold?</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
2014						
Phase 1 Operation	326.74	320.02	1,864.19	1.99	320.95	65.42

Table 5.3-D, Estimated Maximum Daily Emissions (2012-2019)

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
<u>SCAQMD Daily Operational Thresholds</u>	<u>55</u>	<u>55</u>	<u>550</u>	<u>150</u>	<u>150</u>	<u>55</u>
Phase 2 Construction	67.82	141.56	432.30	0.76	11.10	8.23
Maximum	394.56	461.58	2,296.49	2.75	332.05	73.65
<u>Exceeds Threshold?</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
2015						
Phase 1 Operation	326.74	320.02	1,864.19	1.99	320.95	65.42
Phase 2 Construction	65.44	127.38	401.05	0.76	10.54	7.71
Maximum	392.18	447.4	2,265.24	2.75	331.49	73.130
<u>Exceeds Threshold?</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
2016						
Phase 1 Operation	326.74	320.02	1,864.19	1.99	320.95	65.42
Phase 2 Operation	414.25	327.73	1,867.79	2.78	442.48	89.29
Phase 3 Construction	85.87	417.98	431.21	0.80	5,627.24	1,186.98
Maximum	826.86	1,065.73	4,163.19	5.57	6,390.67	1,341.69
<u>Exceeds Threshold?</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
2017						
Phase 1 Operation	326.74	320.02	1,864.19	1.99	320.95	65.42
Phase 2 Operation	414.25	327.73	1,867.79	2.78	442.48	89.29
Phase 3 Construction	69.44	108.72	350.37	0.77	9.55	6.78
Maximum	810.43	756.47	4,082.35	5.54	772.980	161.49
<u>Exceeds Threshold?</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
2018						
Phase 1 Operation	326.74	320.02	1,864.19	1.99	320.95	65.42
Phase 2 Operation	414.25	327.73	1,867.79	2.78	442.48	89.29
Phase 3 Construction	67.57	98.72	327.55	0.77	9.00	6.28
Maximum	808.56	746.47	4,059.53	5.54	772.43	160.99
<u>Exceeds Threshold?</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
2019						
Phase 1 Operation	326.74	320.02	1,864.19	1.99	320.95	65.42

Table 5.3-D, Estimated Maximum Daily Emissions (2012-2019)

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
<u>SCAQMD Daily Operational Thresholds</u>	<u>55</u>	<u>55</u>	<u>550</u>	<u>150</u>	<u>150</u>	<u>55</u>
Phase 2 Operation	414.25	327.73	1,867.79	2.78	442.48	89.29
Phase 3 Construction	65.99	90.00	306.86	0.77	8.54	5.85
Maximum	806.98	737.75	4,038.84	5.54	771.97	160.56
<u>Exceeds Threshold?</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>

Note: To ensure a worst-case analysis, the higher of either summer or winter operational emissions were listed for each pollutant.

The short-term emissions during 2012 to 2019 will be higher than the construction emissions alone when operation of earlier completed phases is also considered. According to SCAQMD, the results of overlapping construction and operation emissions, both within a phase and between phases, should be compared to the operational regional significance thresholds. Since these estimates of the maximum daily emissions involve both construction and operational emissions, it is not known which SCAQMD threshold would apply. However, Evaluation of the table above indicates that these maximum daily emissions far will exceed both the construction and operational emissions thresholds for VOC, NO_x, CO, PM-10, and PM-2.5 in each year shown. Therefore, the short-term emissions from project construction are still considered significant.

Long-Term Impacts – RST Analysis

Long-term emissions are evaluated at buildout for the completed project at the end of construction. Operational emissions refer to on-road motor vehicle emissions from project buildout. Area Source emissions include stationary combustion emissions of natural gas used for space and water heating, yard and landscape maintenance (assumed to occur throughout the year in Southern California), and consumer use of solvents and personal care products. URBEMIS 2007 computes operational and area source emissions based upon default factors and land use assumptions for each project.

Separate emissions were computed for both summer and winter, as shown in **Tables 5.3-E and 5.3-F**, below.

Table 5.3-E, Estimated Daily Project Operation Emissions (Summer)

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Phase 1	323.92	261.08	1,864.19	1.99	319.70	64.19
Phase 2	411.23	263.10	1,867.79	2.78	440.57	87.41
Phase 3	430.25	230.98	1,749.77	3.17	504.96	99.37
Total	1,165.40	755.16	5,481.75	7.94	1,265.23	250.97
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes

Table 5.3-F, Estimated Daily Project Operation Emissions (Winter)

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Phase 1	326.74	320.02	1,784.77	1.81	320.95	65.42
Phase 2	414.25	327.73	1,781.49	2.50	442.48	89.29
Phase 3	429.80	292.81	1,647.34	2.85	507.07	101.46
Total	1,170.79	940.56	5,213.60	7.16	1,270.50	256.17
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes

Summer and winter emissions of VOC, NO_x, CO, PM-10, and PM-2.5 from project operation will exceed SCAQMD operational thresholds. Since both summer and winter operational emissions will exceed the significance threshold for at least one criteria pollutant, project impacts are considered significant for long-term air quality impacts.

RST Analysis Conclusion

Emissions of all criteria air pollutants, except SO₂ from both project construction (short-term) and project operation (long-term) will exceed the SCAQMD established regional thresholds of significance in one or more analysis years. Therefore, **without consideration of any mitigation measures**, the project will have a **significant** impact to air quality on a regional level.

SCAQMD's Localized Significance Threshold (LST) Analysis

Recently, as part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short-term and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and

are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA).

Methodology

The emissions analyzed under the LST methodology are NO₂, CO, PM-10, and PM-2.5. For attainment pollutants, nitrogen dioxide (NO₂) and CO, the LSTs are derived using an air quality dispersion model to back-calculate the emissions per day that would cause or contribute to a violation of any ambient air quality standard for a particular source receptor area. LSTs for NO₂ and CO are derived by adding the incremental emission impacts from the project activity to the peak background NO₂ and CO concentrations and comparing the total concentration to the most stringent ambient air quality standards. The most stringent standard for NO₂ is the 1-hour state standard of 18 parts per hundred million and for CO it is the 1-hour and 8-hour state standards of 9 parts per million (ppm) and 20 ppm respectively. For PM-10 and PM-2.5, which the SCAB is non-attainment, the LST is derived using an air quality dispersion model to back-calculate the emissions necessary to make an existing violation in the specific source receptor area worse. For PM-10 and PM-2.5, the construction concentration threshold is 10.4 µg/m³.

The LST analysis for the project site was performed using the ISCST3 computer model. For dispersion analysis, ISCST3 has four source types that the user can choose from. The first type is a point source, which refers to stacks, where the pollutants are released from a single point. The second type is an area source, used to simulate the effects of fugitive emissions from sources such as storage piles and slag lumps. The third type is an open pit source, used to stimulate fugitive emissions from below-grade open pits, such as surface coal mines or stone quarries. The fourth type is a volume source, used to simulate the effects of emissions from sources such as building roof monitors and line sources, which include roads. Area and volume sources were modeled in this analysis as directed by the LST methodology.

The project site is located in Source Receptor Area (SRA) 24, which has one monitoring station. However, that station does not monitor NO₂, CO, or SO₂ concentrations. Based on SCAQMD input, when there is not applicable monitoring data for one SRA it is customary to use a neighboring SRA. Background concentrations from the Riverside station in SRA 23 were used instead of SRA 24 for this LST analysis.

The LST analysis for the off-site infrastructure analyzed in the Master Plan EIR and the additional off-site infrastructure, described above, was performed using lookup tables and construction worksheets provided by the SCAQMD. SCAQMD has provided LST lookup tables and construction worksheets to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. For the off-site infrastructure, it was anticipated that an area no larger than five acres would be disturbed at any one time during construction. Therefore, the LST lookup tables (<http://www.aqmd.gov/ceqa/handbook/LST/LST.html>) and worksheets were used for construction emissions. The results are included following the on-site project analysis because of the differences in assumptions and format of the results.

Short-Term Impacts – LST Analysis

For short-term construction emissions, the estimated maximum area to be disturbed was determined using information from personal communication with a grading company and assumed to occur at a rate of 20 acres a day (see Appendix A of AQIA). This location is not fixed due to the overall size of the project and can be assumed to occur in multiple locations within all phases. The closest eExisting sensitive receptors are residences that are generally located south of Ramona Expressway and east of Lakeview Avenue with the residences closest to project site primarily along Hansen Avenue, Mike Lane, Poppy Road and Wolfskill Avenue (Figure 5.3-1, Nutrilite Facility Location). Other sensitive receptors in the area include elementary schools and a middle school with athletic fields (Figure 5.12-5, Nuview Union School District) as well as any childcare centers that may be operated out of private residences. As the project builds out, it may be possible for project-related residences or other sensitive receptors like schools to be adjacent to another phase of project construction. In order to ensure a worst-case analysis, it is assumed that there are sensitive receptors present directly adjacent to the construction area in the location with the highest modeled concentrations during all three phases and the impacts to these sensitive receptors are analyzed. Construction was estimated to occur for only 8 hours per day (between 8 a.m. and 4 p.m.). The input parameters used in the modeling are included in Appendix B of the AQIA.

The emission rates were calculated from the URBEMIS computer program estimated emissions (see Appendix A of AQIA). For NO_x and CO emissions, the maximum on-site emissions were calculated for each phase from the off-road diesel exhaust emissions. According to LST methodology, emissions associated with on-road diesel, vendor trips, and worker trips are mobile source emissions that occur off-site and therefore do not need to be considered. For PM-10 emissions, the maximum emissions occur primarily during grading only. The maximum PM-10 emissions included fugitive dust and off-road diesel exhaust emissions. Emissions of PM-2.5 were derived from the PM-10 emissions estimates.

Combustion processes occurring from equipment yield NO_x emissions, which is a combination of nitric oxide (NO) and nitrogen dioxide (NO₂). The majority of primary emissions are in the form of NO; however the conversion of NO to NO₂ occurs through reaction of NO with ozone (O₃) and the reaction of NO with hydrocarbon radical species. Adverse health effects are associated with NO₂ and not NO, which is why the air quality standard is for NO₂ only.

NO_x emissions are simulated in the air quality dispersion model and the NO₂ conversion rate is treated by a NO₂-to-NO_x ratio, which is a function of downwind distance. According to the LST methodology developed by staff at SCAQMD, at 5,000 meters downwind, 100 percent conversion of NO₂-to-NO_x is assumed.

From **Table 5.3-A**, the maximum 1-hour NO₂ concentration in the last 3 years was 0.08 ppm for the project area. The Ambient Air Quality Standard (AAQS) for NO₂ is a 1-hour maximum concentration of 0.18 ppm. Therefore, the difference in concentrations is 0.10 ppm (189 µg/m³). Based on SCAQMD methodology, the project would be considered to have significant air quality impacts if NO₂ concentrations at the nearest sensitive receptor exceed this amount. Assuming that the nearest sensitive receptor is no closer than 20 meters (approximately 66 feet) away from the construction area, the NO₂-to-NO_x ratio is approximately 0.053. Even if a distance of 50 meters was chosen, the NO₂-to-NO_x ratio is only 0.059. LST methodology indicates that

receptor distances be located 25, 50, 100, 200, and 500 meters from the project boundary. Therefore, the nearest receptor distance of 25 meters was chosen for the analysis. The results are shown in **Table 5.3-G**, below.

Table 5.3-G, Short-Term LST Analysis and Results for NO_x

	Maximum NO _x Concentration	NO ₂ to NO _x Conversion Ratio	NO ₂ Concentration	NO ₂ LST	Exceeds LST?
Phase 1	2,837 µg/m ³	0.053	150.4 µg/m ³	189 µg/m ³	No
Phase 2	2,181 µg/m ³	0.053	116.0 µg/m ³	189 µg/m ³	No
Phase 3	1,740 µg/m ³	0.053	92.2 µg/m ³	189 µg/m ³	No

Note: Figures for each Phase are shown in Appendix B of the AQIA located in Appendix C (CD #3) of this DEIR.

Table 5.3-G shows that at a distance of 25 meters, the sensitive receptors will not be exposed to NO₂ concentrations that exceed the LST.

For carbon monoxide (CO), there is an AAQS for both maximum 1-hour and 8-hour concentrations. From **Table 5.3-A**, the maximum 1-hour CO concentration in the last 3 years was 4 ppm for the project area. The 1-hour AAQS for CO is a maximum concentration of 20 ppm. Therefore, the difference in concentrations is 16 ppm (18,400 µg/m³) and the project will have significant air quality impacts if 1-hour CO concentrations at the nearest sensitive receptor exceed this amount.

Table 5.3-H, Short-Term LST Analysis and Results for 1-Hour CO

	Maximum CO Concentration	CO LST	Exceeds LST?
Phase 1	1,311 µg/m ³	18,400 µg/m ³	No
Phase 2	1,049 µg/m ³	18,400 µg/m ³	No
Phase 3	811 µg/m ³	18,400 µg/m ³	No

Note: Figures for each Phase are shown in Appendix B of the AQIA located in Appendix C (CD #3) of this DEIR.

Table 5.3-H, above, shows that the maximum modeled concentration around the project construction area, regardless of distance, will not be exposed to 1-hour CO concentrations that exceed the LST.

From **Table 5.3-A**, the maximum 8-hour CO concentration in the last 3 years was 2.9 ppm for the project area. The 8-hour AAQS for CO is a maximum concentration of 9 ppm. Therefore, the difference in concentrations is 6.1 ppm (7,015 µg/m³). The project would have significant air quality impacts if 8-hour CO concentrations at the nearest sensitive receptor exceeded this amount.

Table 5.3-I, Short-Term LST Analysis and Results for 8-Hour CO

	Maximum CO Concentration	CO LST	Exceeds LST?
Phase 1	521 µg/m ³	7,015 µg/m ³	No
Phase 2	417 µg/m ³	7,015 µg/m ³	No
Phase 3	322 µg/m ³	7,015 µg/m ³	No

Note: Figures for each Phase are shown in Appendix B of the AQIA located in Appendix C (CD #3) of this DEIR.

Table 5.3-I, above, shows that the maximum modeled concentration around the project construction area, regardless of distance, will not be exposed to 8-hour CO concentrations that exceed the LST.

For PM-10, the basin is in non-attainment, therefore the LST for PM-10 during project construction was developed using a dispersion model to back-calculate the emissions necessary to exceed a concentration equivalent to 50 µg/m³ averaged over five hours, which results in an equivalent concentration for PM-10 LST of 10.4 µg/m³, averaged over 24-hours. Therefore, the project will have significant air quality impacts if 24-hour PM-10 concentrations at the nearest sensitive receptor exceed this amount. For downwind distances from the boundary of the construction area to 100 meters, the following equation describes the change in PM-10 concentrations with distance:

$$C_X = 0.9403 C_0 e^{(-0.0462 X)}$$

Where: C_X is the predicted PM-10 concentration at X meters from the fence line

C_0 is the PM-10 concentration at the fence line as estimated by ISC-ST3

e is the natural logarithm

X is the distance in meters from the fence line

The nearest sensitive receptor is assumed to be no closer than 25 meters from the construction area boundary.

Table 5.3-J, Short-Term LST Analysis and Results for PM-10

	Maximum PM-10 Concentration	Predicted PM-10 Concentration	PM-10 LST	Exceeds LST?
Phase 1	5,503 µg/m ³	1,630 µg/m ³	10.4 µg/m ³	Yes
Phase 2	5,443 µg/m ³	1,613 µg/m ³	10.4 µg/m ³	Yes
Phase 3	5,473 µg/m ³	1,621 µg/m ³	10.4 µg/m ³	Yes

Note: Figures for each Phase are shown in Appendix B of the AQIA located in Appendix C (CD #3) of this DEIR.

Table 5.3-J shows that at a distance of 25 meters, the sensitive receptors will be exposed to PM-10 concentrations that exceed the LST.

For PM-2.5, the basin is also in non-attainment and the SCAQMD recommended construction threshold is also 10.4 µg/m³, averaged over 24-hours. PM-2.5 is a sub-set of PM-10 and as such can be described in terms of percentages. According to staff at SCAQMD, fugitive PM-2.5 represents approximately 21 percent of fugitive PM-10 while PM-2.5 from off-road diesel

equipment represents approximately 92 percent of PM-10. Using the emissions contained in **Table 5.3-C** above and Appendix B of the AQIA, the combined PM-2.5 fraction of PM-10 is approximately 21 percent for all three Phases. This fraction was applied to each of the modeled predicted PM-10 concentration from the modeling output in Appendix B of the AQIA **Table 5.3-J** above. The results are shown in **Table 5.3-K** below.

Table 5.3-K, Short-Term LST Analysis and Results for PM-2.5

	<u>Modeled</u> <u>PM-10 Concentration</u>	<u>Predicted</u> <u>PM-10 Concentration</u>	<u>Predicted PM-2.5</u> <u>Concentration</u>	<u>PM-2.5 LST</u>	<u>Exceeds LST?</u>
Phase 1	4,713.04 1,630 $\mu\text{g}/\text{m}^3$		989.74 342 $\mu\text{g}/\text{m}^3$	10.4 $\mu\text{g}/\text{m}^3$	Yes
Phase 2	4,703.45 1,613 $\mu\text{g}/\text{m}^3$		987.72 339 $\mu\text{g}/\text{m}^3$	10.4 $\mu\text{g}/\text{m}^3$	Yes
Phase 3	4,687.34 1,621 $\mu\text{g}/\text{m}^3$		984.34 340 $\mu\text{g}/\text{m}^3$	10.4 $\mu\text{g}/\text{m}^3$	Yes

Table 5.3-K shows that at a distance of 25 meters, the sensitive receptors will be exposed to PM-2.5 concentrations that exceed the LST.

As described above, the off-site infrastructure short-term construction emissions were estimated using the LST lookup tables and worksheets provided by SCAQMD for construction areas five acres or smaller. The total disturbance area for the sewer pipeline analyzed in the Master Plan EIR was estimated at approximately 16 acres. Although the disturbance area for the sewer pipeline is larger than five acres, it is anticipated that an area no larger than four acres will be disturbed in one day. Therefore, the construction worksheets and lookup tables were used for both pipeline projects. The worksheets are shown in Appendix B of the AQIA. Project-specific information such as construction equipment numbers were input into the worksheets when available.

The LST thresholds are estimated using the maximum daily disturbed area, described above, (in acres) and the distance to the project to sensitive receptors (in meters). The nearest sensitive receptors are existing and adjacent to the area surrounding the majority of both the sewer and water pipeline alignments. Therefore, the worst-case receptor distance of 25 meters, as shown in the LST lookup tables, was used. The results for the sewer pipeline are summarized in the table below.

Table 5.3-L, Short-Term LST Results for Off-site Sewer Pipeline

Pollutant	CO (lbs/day)	NO_x (lbs/day)	PM-10 (lbs/day)	PM-2.5 (lbs/day)
LST Threshold (4 acres)¹	1,346	296	11	7
Pipeline Construction	24.7	49.1	7.4	3.54
Asphalt	16.3	31.7	2.2	2.0
Exceeds Threshold?	No	No	No	No

¹ The LST threshold for 4 acres was calculated using SCAQMD LST Appendix K and shown in Appendix B of the AQIA located in Appendix C (CD #3) of this DEIR.

Table 5.3-L shows that at a distance of 25 meters, the off-site pipeline alignments will not expose existing sensitive receptors to pollutant concentrations which exceed the LST for CO, NO_x, PM-10, or PM-2.5.

Long-Term Impacts – LST Analysis

This project involves the development of residential units, schools, parks, and commercial/retail land uses and its associated on- and off-site infrastructure. As the project will be constructed over 10 to 15 years, construction impacts will be relatively long-term however, actual construction sites will move continuously so no one sensitive receptor or group of receptors will experience any long-term construction impacts.

The majority of the operational emissions are in the form of mobile source emissions, without any stationary sources present. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site; such as warehouse/transfer facilities. The proposed project does not include such uses. Therefore, due the lack of long-term stationary source emissions, no long-term localized significance threshold analysis is needed.

LST Analysis Conclusion

Based on the LST analysis of the proposed project, the short-term construction of the project will result in localized air quality impacts to sensitive receptors in the project vicinity for PM-10 and PM-2.5 during construction of the project. Therefore, because the project will exceed PM-10 and PM-2.5 emissions during the short-term, the localized air quality impacts from the short-term construction of the project are **considered significant without mitigation**.

CO Hot Spot Analysis

Where LOS is negatively impacted, CO can become a localized problem (“hot spot”) requiring additional analysis beyond total project emissions quantification. A CO hot spot is a localized concentration of CO that is above the state or federal 1-hour or 8-hour ambient air quality standards. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The SCAQMD recommends that a CO Hot Spot Analysis (using Caltrans’ *Transportation Project-Level Carbon Monoxide Protocol*) is necessary when an intersection LOS decreases from a LOS C to LOS D or worse.

The traffic study prepared for this project (Webb 2007) is used as a basis for the analysis included herein. The traffic study and this analysis section address three scenarios. The first is referred to as the “Base Case,” which is an evaluation of existing, ambient growth, project-related and cumulative projects’ traffic impacts with respect to the current County of Riverside General Plan Circulation Element. The major differences, as they relate to project, between the three scenarios revolve around Ramona Expressway. In the Base Case, Ramona Expressway is evaluated as a 6- to 8-lane at-grade Expressway, as currently identified on the County Circulation Element (see Figures 3-B1, 3-B2, and 3-B3 of the traffic study for Riverside County General Plan Roadway Classifications).

The other two scenarios follow the complete evaluation of the Base Case. They are presented and analyzed for information purposes resulting from two transportation-related projects that are

underway at the County which could affect the project in the future. Both are reasonably foreseeable and therefore are considered in this analysis. Both are referred to as Alternatives to the Base Case. Alternative 1 refers to a County-led General Plan Amendment (GPA) which includes changes to the classifications of Ramona Expressway and other streets, including Ramona Expressway as a grade-separated Expressway from west of Warren Road in San Jacinto to east of Rider Avenue in Perris. Alternative 2 evaluates Ramona Expressway as a grade-separated freeway pursuant to Riverside County Transportation Commission's (RCTC) plans for the "Mid County Parkway," a 32-mile long freeway connecting Hemet to the I-15 Freeway near Corona. Therefore, in the event one or both of these alternatives are approved and implemented sometime during either the entitlement of THE VILLAGES OF LAKEVIEW project or its buildout, the impacts of the project in relationship to these two proposed circulation system improvement scenarios are considered and analyzed, herein. However, since neither has been approved and are only under consideration, they are simply analyzed as alternatives in the spirit of full disclosure.

The traffic study for the project (Webb 2007) indicates that the study intersections currently operate at LOS ranging from A to F during peak hours. Taking into account the project development as well as area-wide development, the LOS of study intersections will range from A to F at build-out. The County of Riverside has established a countywide target of LOS C along all County-maintained roads and conventional state highways. As an exception, LOS D may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, Expressways, conventional state highways, or freeway ramp intersections. The city of Perris has established a citywide target of LOS D along all city-maintained roads (including intersections) and LOS D along I-215 and SR-74 (including intersections with local streets and roads). An exception to the local road standard is LOS E, at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway or at I-215 Freeway ramps. LOS E may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit-oriented development and walkable communities. The city of San Jacinto has established a peak hour LOS D or better as acceptable for all intersections along the designated street and highway system.

In order to meet the LOS targets set by the County of Riverside, the city of Perris, and the city of San Jacinto, roadway improvements are required for project approval. The LOS of study-area intersections range from LOS A to E with the implementation of the roadway improvements listed in the traffic study, with the exception of the intersection of the I-215 Southbound Ramps and Ramona Expressway in the Phase 3 Base Case scenario which has an LOS of F during the PM peak hour (Webb 2007). While this level of service satisfies the County of Riverside, city of Perris, and the city of San Jacinto LOS targets, the SCAQMD requires that a CO hot spot analysis be conducted on all intersections that are degraded below a LOS C.

The SCAQMD CEQA Air Quality Handbook recommends using CALINE4 (Caltrans 1999) to estimate 1-hour CO concentration from roadway traffic. Input data for this model includes meteorology, street network information, vehicle counts on each link, fleet-average CO emission factors, and receptor locations. CALINE4 can be with user-input meteorological data or default worst-case meteorological data. For this study, user-input meteorological data was used. The average winter temperature and a recommended SCAQMD default humidity were used to represent a worst-case scenario. The link information required for CALINE4 is in the form of Cartesian coordinates (x,y) which define the termini of each link. Up to 20 links can be supplied.

For each link, the vehicle counts for the PM peak traffic period were taken from the project-specific traffic study (Webb 2007). The fleet average emission factors for CO are estimated using the EMFAC2007 computer modeling program (CARB 2006).

The following 59 intersections met the SCAQMD criteria for further study to determine the presence of CO hot spots and were modeled using CALINE4:

- I-215 Southbound Ramps / Ramona Expressway
- I-215 Northbound Ramps / Ramona Expressway
- Perris Boulevard / Ramona Expressway
- Evans Road / Ramona Expressway
- Lake Perris Drive / Ramona Expressway
- Rider Street / Ramona Expressway
- Antelope Road / Ramona Expressway
- Bernasconi Road / Ramona Expressway
- Reservoir Avenue / Ramona Expressway
- Town Center Boulevard / Ramona Expressway
- Park Center Boulevard / Ramona Expressway
- Bridge Street / Ramona Expressway
- Warren Road / Ramona Expressway
- Sanderson Avenue (SR-79) / Ramona Expressway
- Bridge Street / Gilman Springs Road
- Warren Road / Gilman Springs Road
- SR-79 Southbound Ramps / Gilman Springs Road
- SR-79 Northbound Ramps / Gilman Springs Road
- Warren Road / Cottonwood Avenue
- Reservoir Avenue / 9th Street
- Evans Road / Rider Street
- Redlands Avenue / Placentia Avenue
- Evans Road / Mid County Parkway (MCP) Westbound Ramps
- Redlands Avenue / Orange Avenue
- Evans Road / Orange Avenue
- Bradley Road / Orange Avenue
- Foothill Avenue / Orange Avenue
- Antelope Road / Orange Avenue
- Reservoir Avenue / 10th Street
- Lakeview Avenue / 10th Street
- Hansen Avenue / 10th Street - Wolfskill Avenue
- North Drive / Lakeview Avenue
- Hansen Avenue / Contour Avenue
- Murrieta Road / Nuevo Road
- Evans Road / Nuevo Road
- Dunlap Drive / Nuevo Road
- Foothill Avenue / Nuevo Road
- Antelope Road / Nuevo Road
- Menifee Road / Nuevo Road

- Menifee Road (Realigned) / Nuevo Road
- Lakeview Avenue / Nuevo Road
- Menifee Road / San Jacinto Avenue
- Menifee Road / Ellis Avenue
- Menifee Road / Mapes Road
- QQ Street / PP Street
- WW Street / SS Boulevard
- Project Access (PA53-PA57) / SS Boulevard
- SS Boulevard / MM Street
- Town Center Boulevard / Retail Access (PA27)
- SS Boulevard – RR Street / Town Center Boulevard – Park Center Boulevard
- EE Street / Park Center Boulevard
- MM Street / Park Center Boulevard
- Park Center Boulevard/ FF Street
- Park Center Boulevard/ VV Street
- EE Street / FF Street
- OO Street / MM Street
- KK Street/ MM Street
- LL Street/ MM Street
- FF Street / GG Street

Link geometric and activity calculations and CALINE4 output files are included in Appendix C of AQIA.

EMFAC2007 can also provide estimates of emission factors by vehicle speed and vehicle class within the geographic area. The CO hot spot analysis used winter average meteorological conditions (51° F) from the Western Regional Climate Center (WRCC) as these represent the worst-case meteorological scenario. The vehicle emissions were calculated for 2012, 2016, and 2020 (representing the operational year assumed in the traffic study for each phase) by EMFAC2007. In order to ensure a worst-case analysis, the highest emission factor for the speeds of zero to five miles per hour was used for each phase.

Details of modeling assumptions are described in the Air Quality Impact Analysis (AQIA) included in Appendix C of this DEIR. Each intersection with LOS C or worse was run to determine the CO emissions from the existing traffic plus ambient growth plus the project plus cumulative development emissions, which includes anticipated traffic to be generated by other area developments with roadway improvements for the Base Case of each Phase and the proposed Alternative 1 and 2 when applicable. The results are presented in **Table 5.3-M** where the receptor with the highest CO concentration is shown.

Table 5.3-M, CO Hot Spot Analysis Results

Intersection	1-Hour CO Concentration (ppm)							8-Hour CO Concentration (ppm)						
	*Phase 1A ¹	*Phase 1B ²	*Phase 2A ¹	*Phase 2B ²	*Phase 3A ¹	*Phase 3B ²	*Phase 3C ³	*Phase 1A ¹	*Phase 1B ²	*Phase 2A ¹	*Phase 2B ²	*Phase 3A ¹	*Phase 3B ²	*Phase 3C ³
State Threshold	20	20	20	20	20	20	20	9	9	9	9	9	9	9
Federal Threshold	35	35	35	35	35	35	35	9	9	9	9	9	9	9
I-215 SB Ramps / Ramona Exp	7.5	7.5	8.0	7.9	9.0	8.8	8.1	6.2	6.2	6.6	6.6	7.5	7.3	6.7
I-215 NB Ramps / Ramona Exp	7.5	7.5	7.8	7.8	8.4	8.3	7.7	6.2	6.2	6.5	6.5	7.0	6.9	6.4
Perris Blvd / Ramona Exp	7.8	7.8	8.2	8.1	8.8	8.7	8.1	6.5	6.5	6.8	6.7	7.3	7.2	6.7
Evans Rd / Ramona Exp	7.5	7.4	7.9	7.8	9.1	9.0	8.0	6.2	6.1	6.6	6.5	7.6	7.5	6.6
Lake Perris Dr / Ramona Exp	--	--	--	--	8.0	7.9	7.0	--	--	--	--	6.6	6.6	5.8
Rider St / Ramona Exp	7.7	7.7	7.9	--	8.8	8.5	7.5	6.4	6.4	6.6	--	7.3	7.1	6.2
Antelope Rd / Ramona Exp	7.4	7.5	--	DNE	8.0	DNE	DNE	6.1	6.2	--	DNE	6.6	DNE	DNE
Antelope Rd / Ramona WB Ramps	DNE	DNE	DNE	--	DNE	5.8	7.1	DNE	DNE	DNE	--	DNE	4.8	5.9
Bernasconi Rd / Ramona Exp	--	DNE	--	DNE	7.7	DNE	DNE	--	DNE	--	DNE	6.4	DNE	DNE
Bernasconi Rd / Ramona EB Ramps	DNE	DNE	DNE	6.4	DNE	--	6.4	DNE	DNE	DNE	5.3	DNE	--	5.3
Reservoir Ave / Ramona Exp	7.9	DNE	8.3	DNE	8.7	DNE	DNE	6.6	DNE	6.9	DNE	7.2	DNE	DNE
Reservoir Ave / Ramona WB Ramps	DNE	6.4	DNE	6.4	DNE	6.3	6.1	DNE	5.3	DNE	5.3	DNE	5.2	5.1
Reservoir Ave / Ramona EB Ramps	DNE	--	DNE	--	DNE	6.9	--	DNE	--	DNE	--	DNE	5.7	--
Town Center Blvd / Ramona Exp	7.4	DNE	7.9	DNE	8.6	DNE	DNE	6.1	DNE	6.6	DNE	7.1	DNE	DNE
Town Center Blvd / Ramona WB Ramps	DNE	--	DNE	--	DNE	--	6.3	DNE	--	DNE	--	DNE	--	5.2
Town Center Blvd / Ramona EB Ramps	DNE	--	DNE	--	DNE	6.7	--	DNE	--	DNE	--	DNE	5.6	--
Park Center Blvd / Ramona Exp	7.2	DNE	7.8	DNE	8.7	DNE	DNE	6.0	DNE	6.5	DNE	7.2	DNE	DNE
Park Center Blvd / Ramona EB Ramps	DNE	--	DNE	--	DNE	7.0	--	DNE	--	DNE	--	DNE	5.8	--
Bridge St / Ramona Exp	7.1	DNE	7.6	DNE	--	DNE	DNE	5.9	DNE	6.3	DNE	--	DNE	DNE
Warren Rd / Ramona Exp	7.5	7.6	7.9	DNE	--	DNE	DNE	6.2	6.3	6.6	DNE	--	DNE	DNE
Warren Rd / Ramona WB Ramps	DNE	DNE	DNE	6.8	DNE	--	7.2	DNE	DNE	DNE	5.6	DNE	--	6.0

Table 5.3-M, CO Hot Spot Analysis Results

Intersection	1-Hour CO Concentration (ppm)							8-Hour CO Concentration (ppm)						
	*Phase 1A ¹	*Phase 1B ²	*Phase 2A ¹	*Phase 2B ²	*Phase 3A ¹	*Phase 3B ²	*Phase 3C ³	*Phase 1A ¹	*Phase 1B ²	*Phase 2A ¹	*Phase 2B ²	*Phase 3A ¹	*Phase 3B ²	*Phase 3C ³
State Threshold	20	20	20	20	20	20	20	9	9	9	9	9	9	9
Federal Threshold	35	35	35	35	35	35	35	9	9	9	9	9	9	9
Warren Rd / Ramona EB Ramps	DNE	DNE	DNE	7.0	DNE	--	7.2	DNE	DNE	DNE	5.8	DNE	--	6.0
Sanderson Ave (SR-79) / Ramona Exp	7.6	7.6	8.2	8.3	8.5	8.6	DNE	6.3	6.3	6.8	6.9	7.1	7.1	DNE
Sanderson Ave / Ramona EB Ramps	DNE	DNE	DNE	DNE	DNE	DNE	7.5	DNE	DNE	DNE	DNE	DNE	DNE	6.2
Bridge St / Gilman Springs Rd	--	--	6.4	6.3	6.7	6.3	--	--	--	5.3	5.2	5.6	5.2	--
Warren Road / Gilman Springs Rd	DNE	--	DNE	6.7	DNE	6.8	--	DNE	--	DNE	5.6	DNE	5.6	--
SR-79 SB Ramps / Gilman Springs Rd	5.9	5.9	6.4	6.4	--	--	6.5	4.9	4.9	5.3	5.3	--	--	5.4
SR-79 NB Ramps / Gilman Springs Rd	--	--	6.2	6.2	6.2	6.2	--	--	--	5.1	5.1	5.1	5.1	--
Warren Rd / Cottonwood Ave	6.6	6.6	--	--	7.1	7.2	7.0	5.5	5.5	--	--	5.9	6.0	5.8
Reservoir Ave / 9 th St	5.8	5.8	--	--	--	--	--	4.8	4.8	--	--	--	--	--
Evans Rd / Rider St	6.4	6.4	7.2	--	8.2	8.3	7.5	5.3	5.3	6.0	--	6.8	6.9	6.2
Redlands Ave / Placentia Ave	NA	NA	NA	6.0	NA	7.0	6.7	NA	NA	NA	5.0	NA	5.8	5.6
Evans Road / MCP WB Ramps	DNE	DNE	DNE	DNE	DNE	DNE	7.1	DNE	DNE	DNE	DNE	DNE	DNE	5.9
Redlands Ave / Orange Ave	NA	NA	NA	--	NA	7.1	--	NA	NA	NA	--	NA	5.9	--
Evans Rd / Orange Ave	NA	NA	NA	6.8	NA	8.1	7.4	NA	NA	NA	5.6	NA	6.7	6.1
Bradley Rd / Orange Ave	NA	NA	NA	--	NA	7.4	--	NA	NA	NA	--	NA	6.1	--
Foothill Ave / Orange Ave	NA	NA	NA	--	NA	7.7	7.1	NA	NA	NA	--	NA	6.4	5.9
Antelope Rd W / Orange Ave	NA	NA	NA	6.9	NA	--	--	NA	NA	NA	5.7	NA	--	--
Antelope Rd E / Orange Ave	NA	NA	NA	7.1	NA	7.4	--	NA	NA	NA	5.9	NA	6.1	--
Reservoir Ave / 10 th St	--	6.1	7.1	7.1	7.8	7.7	7.1	--	5.1	5.9	5.9	6.5	6.4	5.9
Lakeview Ave / 10 th St	6.5	6.5	6.4	6.7	7.1	7.3	--	5.4	5.4	5.3	5.6	5.9	6.1	--
Hansen Ave / 10 th St-Wolfskill Ave	--	--	6.3	--	7.1	7.2	6.7	--	--	5.2	--	5.9	6.0	5.6

Table 5.3-M, CO Hot Spot Analysis Results

Intersection	1-Hour CO Concentration (ppm)							8-Hour CO Concentration (ppm)						
	*Phase 1A ¹	*Phase 1B ²	*Phase 2A ¹	*Phase 2B ²	*Phase 3A ¹	*Phase 3B ²	*Phase 3C ³	*Phase 1A ¹	*Phase 1B ²	*Phase 2A ¹	*Phase 2B ²	*Phase 3A ¹	*Phase 3B ²	*Phase 3C ³
State Threshold	20	20	20	20	20	20	20	9	9	9	9	9	9	9
Federal Threshold	35	35	35	35	35	35	35	9	9	9	9	9	9	9
North Dr / Lakeview Ave	--	--	--	--	6.1	6.1	--	--	--	--	--	5.1	5.1	--
Hansen Ave / Contour Ave	--	--	--	--	6.4	6.4	6.0	--	--	--	--	5.3	5.3	5.0
Murrieta Rd / Nuevo Rd	--	--	6.9	--	7.2	7.1	6.5	--	--	5.7	--	6.0	5.9	5.4
Evans Rd / Nuevo Rd	--	--	7.9	7.7	8.1	8.1	8.0	--	--	6.6	6.4	6.7	6.7	6.6
Dunlap Dr / Nuevo Rd	--	--	--	7.2	8.2	8.1	7.5	--	--	--	6.0	6.8	6.7	6.2
Foothill Ave / Nuevo Rd	--	--	--	--	8.1	8.0	7.6	--	--	--	--	6.7	6.6	6.3
Antelope Rd / Nuevo Rd	7.1	--	7.6	7.5	8.5	--	7.8	5.9	--	6.3	6.2	7.1	--	6.5
Menifee Rd / Nuevo Rd	7.0	7.0	7.8	7.4	8.5	8.6	8.1	5.8	5.8	6.5	6.1	7.1	7.1	6.7
Menifee Rd (Realigned) / Nuevo Rd	DNE	DNE	DNE	6.7	DNE	7.8	7.3	DNE	DNE	DNE	5.6	DNE	6.5	6.1
Lakeview Ave / Nuevo Rd	--	--	--	--	6.9	6.9	--	--	--	--	--	5.7	5.7	--
Menifee Rd / San Jacinto Ave	6.2	6.2	6.6	6.7	7.3	7.4	7.4	5.1	5.1	5.5	5.6	6.1	6.1	6.1
Menifee Rd / Ellis Ave	--	--	--	6.7	7.1	7.1	--	--	--	--	5.6	5.9	5.9	--
Menifee Rd / Mapes Rd	--	--	--	--	7.0	7.0	7.1	--	--	--	--	5.8	5.8	5.9
QQ St / PP St	--	--	--	--	6.1	--	6.1	--	--	--	--	5.1	--	5.1
WW St / SS Blvd	--	--	6.2	6.5	6.4	--	--	--	--	5.1	5.4	5.3	--	--
Project Access / SS Blvd	--	--	--	--	6.5	--	--	--	--	--	--	5.4	--	--
SS Blvd / MM St	--	--	6.1	6.2	6.8	--	--	--	--	5.1	5.1	5.6	--	--
Town Center Blvd / Retail Access	--	--	--	--	--	6.1	--	--	--	--	--	--	5.1	--
SS Blvd-RR St / Town-Park Center Blvd	--	--	6.5	6.5	6.8	6.8	--	--	--	5.4	5.4	5.6	5.6	--
EE St / Park Center Blvd	DNE	DNE	--	--	6.5	--	6.4	DNE	DNE	--	--	5.4	--	5.3
MM St / Park Center Blvd	DNE	DNE	--	--	6.4	6.4	6.4	DNE	DNE	--	--	5.3	5.3	5.3

Table 5.3-M, CO Hot Spot Analysis Results

Intersection	1-Hour CO Concentration (ppm)							8-Hour CO Concentration (ppm)						
	*Phase 1A ¹	*Phase 1B ²	*Phase 2A ¹	*Phase 2B ²	*Phase 3A ¹	*Phase 3B ²	*Phase 3C ³	*Phase 1A ¹	*Phase 1B ²	*Phase 2A ¹	*Phase 2B ²	*Phase 3A ¹	*Phase 3B ²	*Phase 3C ³
State Threshold	20	20	20	20	20	20	20	9	9	9	9	9	9	9
Federal Threshold	35	35	35	35	35	35	35	9	9	9	9	9	9	9
Park Center Blvd / FF St	DNE	DNE	--	--	6.7	6.4	6.7	DNE	DNE	--	--	5.6	5.3	5.6
Park Center Blvd / VV St	DNE	DNE	--	--	--	--	6.3	DNE	DNE	--	--	--	--	5.2
EE St / FF St	DNE	DNE	--	--	5.9	5.9	--	DNE	DNE	--	--	4.9	4.9	--
OO St / MM St	DNE	DNE	5.7	5.7	6.0	6.1	5.9	DNE	DNE	4.7	4.7	5.0	5.1	4.9
KK St / MM St	DNE	DNE	--	--	--	5.9	--	DNE	DNE	--	--	--	4.9	--
LL St / MM St	DNE	DNE	--	--	--	--	5.7	DNE	DNE	--	--	--	--	4.7
FF St / GG St	DNE	DNE	--	--	6.0	--	5.7	DNE	DNE	--	--	5.0	--	4.7

NOTES: * Analysis includes CO emissions from the following: existing traffic added to the AQMD estimated “baseline” for the project area (5.1 ppm for all phases); project-generated traffic; and cumulative projects within the study area with improvements.

-- Indicating LOS C or better; therefore, intersection was not analyzed.

DNE - Indicating that this intersection does not exist in this scenario.

NA - Indicating that this intersection was not analyzed in this scenario in the traffic study.

¹ A indicates CO emissions from the Base Case scenario of this Phase.

² B indicates CO emissions from the Base Case Alternative 1 scenario of this Phase.

³ C indicates CO emissions from the Base Case Alternative 2 scenario of this Phase.

For all of the intersections modeled, the CO emissions from project-generated traffic are less than significant for each scenario, including cumulative traffic which factors traffic generated by other area development. Therefore, the project will not contribute to an exceedance of either the CAAQS or NAAQS for CO emissions and will not form any CO hot spots in the project area. There are also no cumulative impacts for CO hot spots. Impacts related to CO hot spots are considered **less than significant without mitigation**.

***Threshold C:** 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).*

Criteria Pollutants

The portion of the South Coast Air Basin within which the project is located is designated as a non-attainment area for ozone, PM-10, PM-2.5 under both state and federal standards.

In evaluating the cumulative effects of the project, Section 21100(e) of CEQA states that “previously approved land use documents including, but not limited to, general plans, specific plans, and local coastal plans, may be used in cumulative impact analysis.” In addressing cumulative effects for air quality, the AQMP utilizes approved general plans and, therefore, is the most appropriate document to use to evaluate cumulative impacts of the subject project. This is because the AQMP evaluated air quality emissions for the entire South Coast Air Basin using a future development scenario based on population projections and set forth a comprehensive program that would lead the region, including the project area, into compliance with all federal and state air quality standards. Since the proposed project is not in compliance with the AQMP and project emissions have been found to be significant on both a regional and local level, the project will result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment. The associated health effects from non-attainment criteria pollutant emissions above the identified ambient air quality standards meant to protect human health are stated on pages 5.3-6 and 5.3-7 and include altered respiratory responsiveness and pulmonary function, reduced lung function, lung damage, coughing, sneezing, headaches, weakness, laryngitis, and bronchitis. Therefore, the impact associated health effects from non-attainment criteria pollutant emissions is **considered significant**.

Greenhouse Gases (GHG)

Regarding GHG emissions, a project that shifts the location of where someone lives or works, by itself, may or may not contribute new GHG emissions. For example, someone may move from Northern California to THE VILLAGES OF LAKEVIEW development, and while this would likely increase emissions within the SCAB, it would not necessarily result in the generation of more GHG emissions globally. However, if a person moves from one location, with long commutes and a land use pattern that requires substantial energy use, to a project location that promotes shorter and fewer vehicle trips, more walking and less energy use, the new project could potentially result in a reduction in generation of global GHG emissions.

It should be noted that the release of GHG in general and CO₂ specifically into the atmosphere is not of itself an adverse environmental affect. It is the affect that increased concentrations of

GHG including CO₂ in the atmosphere has upon the Earth's climate (i.e., climate change) and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although air quality modeling can estimate a project's incremental contribution of CO₂ into the atmosphere, it is not feasible to determine whether or how an individual project's relatively small incremental contribution (on a global scale) might translate into physical effects on the environment. Since the Earth's climate is determined by the complex interaction of different components of the Earth and its atmosphere, it is not possible to discern whether the presence or absence of GHG emitted by the project would result in any measurable impact that would cause climate change.

A GHG inventory was prepared for THE VILLAGES OF LAKEVIEW Specific Plan (TVOL or project) by ENVIRON International Corporation (Environ) to identify both the one-time emissions and annual emissions that are expected to occur each year after build-out of the proposed project development (Appendix C (CD #3)). The following analysis is a summary of this report.

In addition to identifying the proposed project's emissions, the report also quantifies a Business as Usual (BAU) scenario. BAU, as used in this analysis, represents the GHG emissions that would occur from a community that would be built today without the project design features and energy reduction commitments made by THE VILLAGES OF LAKEVIEW Specific Plan. This represents the GHG emission inventory if things were continued to be built according to current standards and assuming that no acreage would be preserved as open space and is available for development. The major categories of the GHG emission inventory are considered separately. These include residential and non-residential buildings, mobile sources, municipal lighting, and water sources. The remaining categories include municipal vehicles and area sources. These categories represent a small fraction of the total inventory and do not have appropriate emission factors to quantify the reductions that are likely to occur at TVOL compared to BAU.

The emissions inventory is consistent with the methodologies established by the California Climate Action Registry (CCAR), where possible. When guidance from the CCAR is lacking, methodologies established by the Intergovernmental Panel on Climate Change (IPCC) and best available science was used. In addition to well-established emission factors for certain activities and emission estimates based on similar activities in other representative communities; several emissions estimation software programs are used. These include EMFAC, OFFROAD, URBEMIS, Building America Research Benchmark Definition (BARBD), and Micropas.

This inventory was prepared as a worst-case analysis. For example, it assumes that all emissions from TVOL are "new," in the sense that, absent the development of the project, these emissions would not occur. Given the global nature of GHG emissions, "new" global GHG emissions are those caused by economic growth and population growth (births); local development projects accommodate such growth.

As an example of why these are worst-case emissions, these emissions are estimated assuming that there are no reductions in GHG-generating activities over time. This is clearly unlikely, and presents a conservative analysis, given the expected reductions in GHG emissions from most activities that will take place over the years due to future regulations, greater public awareness and the likely increasing costs of energy.

At the entitlement stage of a development, while the number of homes, the approximate size of commercial areas and the locations of both are known, the exact designs of the homes, businesses and facilities are not. Even so, the types of buildings and the types of facilities at the future project site can be used for developing an estimate of the project's anticipated GHG emissions. Energy used in a building depends in part on the built environment; however, actual future emissions from the site will depend heavily upon the future homeowners' and business owners' habits. Because the actual future occupants and their habits are not yet known, average current behavior is assumed. That assumption is likely to be a "worst-case" assumption. Given the current regulatory environment and the media focus on global climate change, it is likely that the actual future occupants will be more sensitive to the GHG emissions caused by their activities and, therefore, their activities will result in lower GHG emissions than average current behavior shows.

The GHG emissions inventory includes some aspects that are fully within the control of the project, such as grading and the placement of utilities; some aspects that are in control of the individuals building the houses and commercial buildings, such as construction emissions; and some aspects for which control over emissions is shared by the developers and the residents, such as energy use in the built environment and emissions from traffic by the development's future residents and employees in the commercial areas.

In addition, an estimate of "life-cycle" GHG emissions (i.e., GHG emissions from the processes used to manufacture and transport materials used in the buildings and infrastructure) is presented. This estimate is to be used for comparison purposes only and is not included in the final inventory as these emissions would be attributable to other industry sectors under AB 32. The inventory does not consider GHG emissions from most sources outside of TVOL that may indirectly service the residents (e.g., a landfill) or whether the emissions from the development are "new" in the sense that, absent the development, the emissions may not occur. Each aspect of the GHG inventory is described in this section. Actual GHG emissions at full build-out at TVOL are expected to be substantially lower due to regulatory developments; therefore, the GHG emissions reported in this section are a conservative estimate.

The timeframe over which GHGs are emitted varies from category to category, which is taken into consideration in the emissions inventory. For most of the categories, GHGs will be emitted every year that the development is inhabited. For these categories (residential buildings, non-residential buildings, mobile sources, municipal services, area sources, and renewable energy), the inventory includes estimates of annual GHG emissions from ongoing development operations. GHG emissions from two of the categories, construction and changes in vegetation, are one-time events that will not be part of the development's ongoing activity. These one-time emissions can be divided by the estimated lifetime of the project to allow direct comparison of these two emissions classes. The inventory presents estimates of these one-time emissions, converts them to annualized estimates, and integrates them into an annual inventory.

It is important to note that GHG calculations are intended to estimate long-term emissions, while criteria pollutant emission calculations are intended to estimate worst-case daily scenarios. As such, the methodology presented in the GHG inventory and summarized in this section will be different than the approach listed for criteria pollutants in the respective analyses.

The following project activities were analyzed in the GHG inventory by Environ as shown in Appendix C of this DEIR and are summarized below for their contribution to global GHG emissions:

Short-Term (One-Time) Emissions:

Short-term or one-time emissions from the development of this project are associated with vegetation removal and re-vegetation on the project site and construction-related activities. Construction activities also include a life-cycle analysis estimating the GHG associated with the manufacture and transport of building materials and infrastructure. As previously mentioned, this estimate for life-cycle emissions is used for comparison purposes only and is not included in the final inventory as these emissions would be accounted for under AB 32 in other industry sectors.

Vegetation Change

There are both positive and negative GHG emissions associated with vegetation removal and re-vegetation at the TVOL development. The permanent removal of existing vegetation can contribute to net GHG increases by reducing existing carbon sequestration capacity.⁴ Areas that are temporarily disturbed but re-vegetated with the same vegetation type are assumed to have no net impact. Following completion of the TVOL project, many privately owned areas will become re-vegetated with trees, shrubs and other vegetation. These areas could potentially sequester more CO₂ from the atmosphere than was sequestered pre-development. The difference between the total before-development sequestered CO₂ and the after-development sequestered CO₂ is the one-time CO₂ released from clearing the vegetation less the CO₂ sequestered by new plantings.⁵ The overall CO₂ emissions due to vegetation change will result from two processes: 1) the change in the amount of CO₂ sequestered by vegetation, which would lead to a one-time GHG release, and 2) the amount that can be expected to be sequestered by new plantings. Both issues are discussed below.

Table 4-1 of the GHG inventory (Appendix C) shows the effective change in the amount of sequestered CO₂ due to the change in land use of the developed area for each land type. The total equivalent CO₂ emissions attributable to the net change of vegetation are approximately 10,135 tonnes. CH₄ and N₂O are assumed to contribute a negligible amount of global warming potential (GWP) when compared to the CO₂ emissions from vegetation change.

Planting individual trees on residential property and elsewhere in TVOL will sequester CO₂. Changing vegetation as described above results in a one-time carbon-stock change. Planting trees is also considered to result in a one-time carbon-stock change. Based on CO₂ sequestration rates (per tree) provided by the IPCC⁶, a default annual average of 0.035 tonne CO₂ per year per tree can be assumed for trees planted, if the tree type is not known.

⁴ In this section, it is assumed that all mature land-types (at least 20 years old) are at steady-state. See The World Resource Institute (WRI) “Land Use, Land-Use Change, and Forestry Guidance for GHG Project Accounting” protocol available online at: <http://www.ghgprotocol.org/DocRoot/97hb6BCSAAG2bImO7c9d/LULUCF%20Final.pdf>

⁵ In this section we assume that mature ecosystems do not have a net influx or outflux of carbon.

⁶ Species class-specific sequestration values are provided in Table 8.2 of the “2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4.” For species that do not appear in Table 8.2, the species was classified as “miscellaneous” and the average value of all listed data was used. Available at www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.htm.

Urban trees are only net carbon sinks when they are actively growing. The IPCC assumes an active growing period of 20 years. Thereafter, the accumulation of carbon in biomass slows with age, and will be completely offset by losses from clipping, pruning, and occasional death. Actual active growing periods are subject to, among other things, species, climate regime, and planting density. In this report, the IPCC default value of 20 years will be assumed. Note that trees may also be replaced at the end of the 20-year cycle, which would result in additional years of carbon sequestration. However, this would be offset by the potential net release of carbon from the removal of the replaced tree.

Approximately 40,000 new net trees are anticipated to be planted as part of the project, to be conservative. Planting these trees in the community will sequester approximately 28,000 tonnes CO₂. This was calculated by using the average tree sequestration rate described above of 0.035 tonne CO₂ per year per tree and assuming 20 years of growth. This sequestration brings the net CO₂ emissions from vegetation to: 10,135 tonnes (land use changes) – 28,000 tonnes (40,000 net new trees in the community) = -17,865 tonnes (or a net decrease in the amount of CO₂ released. More details showing the net CO₂ emissions from vegetation changes are presented in Table 4-1 through Table 4-4 of the GHG inventory (Appendix C).

Construction-Related Activities

CO₂ emissions associated with different aspects of urban development can be estimated using a combination of software programs. The OFFROAD2007⁷ and the EMFAC2007⁸ models are used to generate emission factor data for construction equipment and motor vehicles, respectively. These values serve as inputs for the URBEMIS⁹ model, which estimates emissions from several different aspects of urban development including from construction sources based on emission factors and information specific to the development.

For diesel construction equipment, the units CO₂ and CO₂e are used interchangeably because CH₄ and N₂O are assumed to contribute a negligible amount of GWP when compared to the CO₂ emissions¹⁰. For worker commuting, CH₄ and N₂O are explicitly calculated and therefore CO₂ and CO₂e for worker commuting are not equal.

Assumptions regarding construction timing, the number, type, and operating hours of equipment are based off the same URBEMIS model output used for the quantification of criteria pollutant emissions from construction shown above in **Table 5.3-C** above. The URBEMIS model estimate does not analyze emissions from construction related electricity or natural gas. Construction related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify.

The following, **Table 5.3-N**, summarizes the output results from Table 4-9 of the GHG inventory by Environ and presents the emissions estimates in metric tonnes of CO₂.

⁷ California Air Resources Board Mobile Source Emissions Inventory Program. December 2006.

<http://www.arb.ca.gov/msei/offroad/offroad.htm>

⁸ Emission Factors (EMFAC2007) model (Version 2.3). November 2006. California Air Resources Board.

http://www.arb.ca.gov/msei/onroad/latest_version.htm

⁹ Urban Emissions Model (URBEMIS) (Version 8.7 – 2002 / Version 9.2.4 – 2008). Jones & Stokes Associates. Prepared for: South Coast Air Quality Management District. <http://www.urbemis.com>

¹⁰ California Climate Action Registry (CCAR). 2008. *General Reporting Protocol*. Version 3.0. ENVIRON estimates these emissions to be less than 1% of total GHG contributions for diesel fueled equipment.

Table 5.3-N, Project Construction Emissions¹

Project Phase	Construction Equipment	Worker Commuting	Vendor Commuting	Demolition Hauling	Total GHG Emissions
	(Tonnes CO ₂ e)				
Phase 1 Dirt Movement	1,584	25	--	--	1,609
Phase 1 Off-Site Water	72	2.7	--	--	75
Phase 1 (2009-2011)	10,257	11,251	3,545	--	25,054
Phase 2 (2012-2015)	11,257	22,389	8,028	1.8	41,675
Phase 3 (2016-2019)	12,584	25,204	10,176	--	47,965
Total	35,755	58,872	21,749	1.8	116,378

Note: ¹ Data taken from Table 4-9 in GHG inventory by Environ (Appendix C)

Evaluation of the table above indicates that an estimated 116,378 tonnes CO₂e emissions from project construction equipment will occur over the course of the minimum construction period of 11 years. If these one-time emissions are annualized assuming a 40-year development life (which is likely low), then the one-time emissions contribute approximately 2,463 tonnes CO₂e emission annually. These annualized emissions are added to the total project-related GHG emissions in **Table 5.3-U, Annual Project Related Operational CO₂e Emissions**.

An estimate of “life-cycle” GHG emissions (i.e., GHG emissions from the processes used to manufacture and transport materials used in the buildings and infrastructure) was also performed by Environ in the GHG inventory and is summarized herein with details provided in Appendix C of this DEIR. As previously stated, this estimate is used for comparison purposes only and is not included in the final GHG inventory as these emissions would be attributable to other industry sectors under AB 32. For instance, the concrete industry is required by law to report emissions and undergo certain early action emission reduction measures under AB 32. Furthermore, somewhat arbitrary boundaries must be drawn to define the processes considered in the life-cycle analysis building materials.¹¹ Recognizing the uncertainties associated with a life-cycle analysis, the California Air Pollution Control Officers Association (CAPCOA) released a white paper which states: “The full life-cycle of GHG emissions from construction activities is not accounted for in the modeling tools available, and the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level.”^{12,,}

Life Cycle Assessment (LCA) emissions vary based on input assumptions and assessment boundaries (e.g., how far back to trace the origin of a material). Assumptions made in the LCA are generally conservative. However, due to the open-ended nature of LCAs, the analysis is also highly uncertain.

¹¹ For instance, in the case of building materials, the boundary could include the energy to make the materials, the energy used to make the machine that made the materials, and the energy used to make the machine that made the machine that made the materials.

¹² CAPCOA. 2008. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. Available online at: <http://www.capcoa.org/ceqa/?docID=ceqa&PHPSESSID=df1348d6f7eff0fc2a8263d19f6d10dd>

The LCA evaluates the life-cycle GHG emissions associated with the building materials for this project. The life-cycle GHG emissions include the embodied energy from the materials manufacture and the energy used to transport those materials to the site. The report then compares the life-cycle GHG emissions to the overall annual project-related emissions. The materials analyzed in the report include materials for 1) residential and non-residential buildings, and 2) site infrastructure.

The LCA estimated the life-cycle GHG emissions for buildings by conducting an analysis of available literature on LCAs for buildings. According to these studies, approximately 75 - 97% of GHG emissions from buildings are associated with energy usage during the operational phase; the other 3 - 25% of the GHG emissions are due to material manufacture and transport. Using the GHG emissions from the operation of buildings, 3% to 25% of building emissions corresponds to approximately 1.1 - 11.4% of the project emissions.

The LCA calculated the life-cycle GHG emissions for certain components of infrastructure (roads, storm drains, utilities, gas, electricity, and cable). The analysis considered the manufacture and transport of concrete and asphalt only, as ENVIRON assumed that other construction materials such as steel would be present in much smaller quantities. Because the manufacture of concrete has a higher CO₂ emission factor and most construction estimates higher quantities of concrete than asphalt, the majority of the emissions for infrastructure result from the manufacture of concrete. Because the asphalt and concrete are locally sourced, the transportation emissions are relatively small. If a 40 year lifespan of the infrastructure is assumed, the total annualized emissions from embodied energy in infrastructure materials are approximately 1.47% of the project emissions.

The overall life-cycle emissions, annualized by 40 years, are 3,421 – 17,385 tonnes CO₂ / year, or 2.5 – 12.9% of the annualized GHG emissions from the TVOL project. The bulk of these emissions (1.1 - 11.4% are from general life cycle analysis studies and do not reflect project-specific information.

Again, the calculations and results presented in the LCA are estimates and are used only for a general comparison to the overall GHG emissions estimated for the proposed project. LCA emissions vary based on input assumptions and assessment boundaries (e.g., how far back to trace the origin of a material). Assumptions made in the GHG report are generally conservative. However, due to the open-ended nature of LCAs, and the fact that literature evaluation, not site specific studies were used to analyze the embodied energy; the analysis should be considered to yield highly uncertain results. Additionally, these estimates likely double count emissions from other industry sectors.

Long-Term Operational (Annual) Emissions:

Long-term operational or annual emissions from the development of this project include GHG emissions from residential and non-residential buildings, mobile sources, municipal sources, and area sources.

Residential Building Emissions

Residential buildings include single-family homes of various sizes, attached homes, apartments, and condominiums.

The amount of energy—and, therefore, the amount of associated GHG emissions emitted per dwelling unit—will vary with the type of residential building. Accordingly, information on the type of residential buildings that are planned for TVOL is required to estimate GHG emissions. The major types of residential buildings for the project are:

- Single-family homes (large lot, conventional, and high-density detached);
- Attached townhomes; and
- Attached condos and apartments

GHGs are emitted as a result of activities in residential buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits CO₂ and other GHGs directly into the atmosphere; when this occurs in a residential building, it is a direct emission source¹³ associated with that building. GHGs are also emitted during the generation of electricity from fossil fuels. When electricity is used in a residential building, the electricity generation typically takes place off-site at the power plant; electricity use in a residential building generally causes emissions in an indirect manner.

While fuel combustion generates CH₄ and N₂O, the emissions of these GHGs typically comprise less than 1% of CO₂e emissions from electricity generation and natural gas consumption.¹⁴ Fuel oil, kerosene, liquefied petroleum gas, and wood can also be used as fuels, but will likely contribute only in small amounts as combustion sources within residential buildings. Wood burning hearths are addressed in the area sources section below. For residential buildings, CH₄ and N₂O are assumed to contribute a negligible amount of GWP when compared to the CO₂ emissions.

Energy use in residential buildings is divided into (1) energy consumed by the built environment, and (2) energy consumed by uses that are independent of the construction of the building, such as plug-in appliances. In California, Title 24 governs energy consumed by the built environment, including the HVAC system, water heating, and some fixed lighting. Non-building or ‘plug-in’ energy use can be further subdivided by specific end-uses (refrigeration, cooking, lighting, etc.). Energy use for each was calculated separately, and is shown in detail in the GHG inventory in Appendix C. The resulting energy use quantities were then converted to GHG emissions by multiplying by the appropriate emission factors, incorporating information on local electricity production and are shown below in **Table 5.3-O**.¹⁵

¹³ California Climate Action Registry (CCAR) General Reporting Protocol (GRP), Version 3.0 (April). Available at: http://www.climateregistry.org/resources/docs/protocols/grp/GRP_V3_April2008_FINAL.pdf, Chapter 8

¹⁴ Ibid. Tables C1 and C2. The methane and nitrous oxide emission factors are negligible compared to the total CO₂ emission factor for electricity generation in California.

¹⁵ The Southern California Edison specific emission factor for electricity deliveries is 641 lbs CO₂/MWh. From the California Climate Action Registry Database: Southern California Edison Company 2006 PUP Report. 2008. Although this emission factor accounts for only CO₂, the emissions associated with N₂O and CH₄ contribute to less than 1% of the electricity generation CO₂e emissions. Available at: <https://www.climateregistry.org/CARROT/public/Reports.aspx>

Table 5.3-O, Annual Residential Energy Usage Emissions¹

Housing Type	Average Square Feet/Unit	No. of Dwelling Units (DU)	Total Tonnes CO₂/DU/year	Total Tonnes CO₂/year
Condos	998	1,530	3.9	5,898
Townhomes	1,336	4,190	4.0	16,744
High-Density Detached	1,805	3,110	5.4	16,661
Conventional	2,489	2,000	6.8	13,686
Large Lot	3,498	520	8.1	4,189
Total	--	11,350	--	57,178

Note: ¹ Data taken from Table 4-14 and Table 4-15 in GHG inventory by Environ (Appendix C)

The total GHG residential energy usage emissions for residential buildings is estimated to be 57,178 tonnes CO₂ per year. This number does not include the numerous energy efficiency measures incorporated within the project design which is described in the summary after mitigation measures and incorporated in **Table 5.3-U, Annual Project Related Operational CO₂e Emissions**. In addition, there are several uncertainties that result in more conservative estimates of the GHG emissions from residential buildings. These are described below.

- Although all buildings in the development will be Title 24 compliant, Title 24 does not specify building dimensions (e.g. size, height, or orientation). Title 24 also provides significant flexibility for window types, window amounts, insulation choice, and other parameters. This uncertainty is not expected to either overestimate or underestimate emissions. Title 24 grants enough flexibility that if a designer puts in more windows than is 'allowed' under the prescriptive measures, the energy efficiency losses can be offset by improving the window quality, or installing a more efficient HVAC system. Although the designs of each residence are not yet known, each home will be Title 24 compliant, and thereby all design features of the home that make it less energy efficient will be offset by design features that make it more energy efficient.
- Energy use estimates for Title 24 compliance were based on the 2007 California Energy Code, Title 24, Part 6, also referred to as the 2005 California Building Energy Efficiency Standards. The project will comply with the new 2008 California Building Energy Efficiency Standards which take effect August 1, 2009. As such, energy use from the homes that will actually be built are anticipated to be lower.
- Energy use will vary considerably depending upon the design of the home. The residential units to be built in TVOL will vary considerably in size, layout, and overall design. The parameters used here are intended to represent the upper range of homes relative to sizes in each category. As such, energy use from the homes that will actually be built in TVOL are anticipated to be lower.
- Built environment energy use will vary considerably depending upon the home owners' habits regarding energy use. For instance, homeowners determine the set point of thermostats, the duration of showers, and the usage of air conditioning, among other things. The project will have little, if any, influence over these choices made by the homeowner. Current median behavior attributes were assumed for this report. To the extent that

individuals are becoming more energy conscious, this will tend to overestimate energy use in the future.

- Plug-in energy use will also vary considerably depending upon the appliances, lights, and other plug-ins installed by the homeowner. The project will have little, if any, influence over these choices made by the homeowner. As above, the current median behavior attributes are represented here. To the extent that individuals are becoming more energy conscious, or appliances are becoming more energy efficient, the estimates provided here will tend to overestimate energy use in the future.

Non-Residential Building Emissions

GHG emissions from non-residential buildings include all structures except residences that may exist in this development such as government, municipal, commercial, retail, and office space.

The amount of energy used, and the associated GHG emissions emitted per square foot of available space vary with the type of non-residential building. For example, food stores are far more energy intensive than warehouses, which have little climate-conditioned space. For developments such as this, the exact types of buildings are typically unknown. As such, not all building categories that may actually be built as part of the project are represented below. However, all of the non-residential building area is accounted for. Section 5.15, Utilities, of this DEIR includes assumption for non-residential uses to estimate utility consumption. For consistency, the same assumptions are used here for the proposed project including 100,000 square feet (SF) of general office uses, 400,000 SF of commercial/retail uses, three K through 8 schools, 20,000 SF of library, and 40,000 SF of public community center. These represent the basis for the assumptions used below to estimate GHG emission. The general types of non-residential buildings analyzed are:

- Mixed-use Office
- Grocery store
- School¹⁶
K through 8 (3)
- Entertainment/Culture
Library
Other Entertainment/Culture

Similar to the case for residential buildings, GHGs are emitted as a result of activities in non-residential buildings for which electricity and natural gas are used as energy sources.

For non-residential buildings, the units CO₂ and CO₂e are used interchangeably because CH₄ and N₂O are assumed to contribute a negligible¹⁷ amount of GWP when compared to the CO₂

¹⁶ Other sections of the Draft EIR for The Villages of Lakeview represent the schools based on the number of students. The methods used in determining energy use from schools required square footage of the buildings. The square footage used to represent the schools is a conservative estimate of the size schools that would hold the number of students. This is not a discrepancy, rather it is a different unit of measure to represent the same buildings.

¹⁷ The Southern California Edison specific emission factor for electricity deliveries is 641 lbs CO₂/MWh. From the California Climate Action Registry Database. Pacific Gas and Electric PUP Report. 2006. Although this emission factor accounts for only CO₂, the emissions associated with N₂O and CH₄ contribute to less than 1% of the electricity generation CO₂e emissions.

emissions from non-residential buildings. While fuel combustion generates CH₄ and N₂O, the emissions of these GHGs typically comprise less than 1% of CO₂e emissions from electricity generation and natural gas consumption.¹⁸ Fuel oil, kerosene, liquefied petroleum gas, and wood can also be used as fuels, but generally contribute only in small amounts as combustion sources within non-residential buildings. As such, these minor emissions are not accounted for here.

Similar to energy use in residential buildings, energy use in non-residential buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as plug-in appliances. The following two steps were performed to quantify the energy use due to non-residential buildings:

- Calculate energy use from systems covered by Title 24¹⁹ (HVAC system, water heating system, and the lighting system).
- Calculate energy use from office equipment, plug-in lighting, and other sources not covered by Title 24.

The resulting energy use quantities were then converted to GHG emissions by multiplying by the appropriate emission factors obtained by incorporating information on local electricity production and are shown below in **Table 5.3-P**.²⁰ Details describing the methodologies employed to estimate these GHG emissions are contained in Appendix C.

Table 5.3-P, Annual Non-Residential Energy Usage Emissions¹			
General Building Type	Area (Square Feet)	Total Tonnes CO₂/SF/year	Total Tonnes CO₂/year
General Office	100,000	5.29E-03	529
Retail - Grocery Store	400,000	1.66E-02	6,659
School - K-8	195,000	5.34E-03	1,041
Entertainment/Culture	60,000	1.18E-02	706
Total	755,000	--	8,936

Note: ¹ Data taken from Table 4-23 in GHG inventory by Environ (Appendix C)

The total GHG emissions for non-residential buildings is estimated to be 8,936 tonnes CO₂ per year. This number does not include the numerous energy efficiency measures incorporated within the project design which is described in the summary after mitigation measures and incorporated in **Table 5.3-U, Annual Project Related Operational CO₂e Emissions**. In addition, there are several uncertainties involved in the estimates of the GHG emissions from non-residential buildings. These are described below.

¹⁸ Ibid., Tables C1 and C2. The methane and nitrous oxide emission factors are negligible compared to the total CO₂ emission factor for electricity generation in California.

¹⁹ Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings. <http://www.energy.ca.gov/title24/>

²⁰ The Southern California Edison specific emission factor for electricity deliveries is 641 lbs CO₂/MWh. From the California Climate Action Registry Database. Southern California Edison PUP Report. 2006.

- The EIA²¹ energy use data for electricity and natural gas end-uses (Table 4-17 and Table 4-18 of the GHG inventory in Appendix C) uses values from all climate zones and buildings built in all years. Data for new buildings broken down by climate zone is not yet available from the EIA. It is not clear that plug-in energy use would change substantially with climate zone; however, the percent of energy represented by plug-in uses will vary with climate zone. To the extent that more energy is used in the built environment in less temperate zones, this may serve to underestimate the plug-in energy use slightly.
- For new developments, the exact type of buildings are typically unknown. As such, not all building categories that may actually exist in TVOL are represented in this analysis. However, all of the commercial building area is accounted for and the best available assessment of the building type composition of TVOL was used.
- Although it is unknown exactly how the buildings will be designed, each building will be Title 24 compliant. Therefore all design features of the building that make it less energy efficient will be offset by design features that make it more energy efficient.
- Energy use estimates for Title 24 compliance were based on the 2007 California Energy Code, Title 24, Part 6, also referred to as the 2005 California Building Energy Efficiency Standards. The project will comply with the new 2008 California Building Energy Efficiency Standards which take effect August 1, 2009. As such, energy use from the non-residential buildings that will actually be built are anticipated to be lower.

Area Source Emissions

Area sources emissions stem from hearths (including gas fireplaces, wood-burning fireplaces, and wood-burning stoves) and small mobile fuel combustion sources such as lawnmowers. Fuel combustion associated with these sources produce direct GHG emissions. Since emissions from natural gas-fired stoves and natural gas heating are already included in the residential sources (**Table 5.3-O** above)²², calculations based on the URBEMIS method for the remaining types of area sources, natural gas fireplaces and lawn maintenance, were performed.

The project will have 11,350 natural gas fireplaces in its residential units. Wood-burning stoves or fireplaces are prohibited in new development pursuant to SCAQMD Rule 445. Direct GHG emissions from these sources were estimated by multiplying the energy use per year by the CO₂ emission factor for natural gas combustion. Annual energy use was determined by the number of fireplaces, the average energy use of each fireplace, and the URBEMIS default fireplace usage rate value of 200 hours/year. In the absence of site-specific energy use values for fireplaces at TVOL, the URBEMIS default values of 20,000 BTU/hour/fireplace for multi-family residences, and 30,000 BTU/hour/fireplace for single-family houses were used. Emission estimates are shown below.

²¹ Table 3a and 3b of: http://www.eia.doe.gov/emeu/cbecs/enduse_consumption/pba.html

²² The methods used to calculate natural gas use for heating, water heating, and cooking described in the residential emission calculations are conservative and may cause slight differences in the natural gas usage determined using URBEMIS as was used in the air quality section of the draft EIR for The Villages of Lakeview. Both methods are appropriate for the purpose of the individual sections. URBEMIS is designed for worst day local emissions of criteria pollutants as opposed to total emissions of GHGs.

Landscaping emissions originate from equipment such as lawn mowers, blowers, trimmers and chain saws.²³ For residential and non-residential areas, landscape-based GHG emissions are directly related to the number of residential or business units, the annual equipment usage rate, and landscape equipment CO₂ emissions factors. URBEMIS default values were employed for the annual usage rate. Emission estimates are shown below.

Table 5.3-Q, Annual Area Source Emissions¹	
Source	Annual CO₂ Emissions (tonne/year)
Hearths – Natural Gas Fireplaces	44.5
Landscaping Equipment	40.1
Total	84.6

Note: ¹ Data taken from Table 4-27 in GHG inventory by Environ (Appendix C)

Table 5.3-Q shows an estimated 84.6 tonnes CO₂ will be generated annually by fuel combustion in natural-gas fireplaces and landscaping equipment.

Municipal Source Emissions

Municipal sources of GHG emissions that were analyzed as part of the GHG inventory include drinking water and wastewater supply and treatment, lighting in public areas, and municipal vehicles.

In general, the majority of municipal sector GHG emissions are related to the energy used to convey, treat and distribute water and wastewater. Thus, these emissions are generally indirect emissions from the production of electricity to power these systems. Additional emissions from wastewater treatment include CH₄ and N₂O, which are emitted directly from the wastewater.

The amount of electricity required to treat and supply water depends on the volume of water involved. According to Table 5.15-E in the Utilities Section, the development would generate a total water demand of 6,584 acre-feet (AF) per year. Of this, 5,864 AF will be potable water supplied by Eastern Municipal Water District²⁴, and 720 AF will be non-potable recycled water. Three processes are necessary to supply potable water to residential and commercial users: (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, the wastewater is treated and reused as reclaimed water. Any reclaimed water produced is generally redistributed to users via pumping.

Indirect emissions resulting from electricity use were determined by multiplying electricity use by the CO₂ emission factor provided by the local electricity supplier, Southern California Edison, (SCE). Energy use for different aspects of water treatment (e.g. source water pumping and conveyance, water treatment, distribution to users) was determined using the stated volumes of water and energy intensities values (i.e., energy use per unit volume of water) provided by reports from the California Energy Commission (CEC) and a report by Robert Wilkinson on

²³ According to Appendix B of the URBEMIS User's Guide, landscaping emissions from non-residential land uses also includes contributions from air compressors, generators and pumps, which are affiliated with commercial applications.

²⁴ Eastern Municipal Water District expects that the water for TVOL will be sourced from the State Water Project and the Colorado River Aqueduct.

energy use for California's water systems²⁵. Using this information, GHG emissions from potable water supply and conveyance were calculated.

Water is typically supplied to communities from several sources including the local underground aquifer, the State Water Project, Colorado River Aqueduct and recycled and reclaimed water. To supply the annual demand for 5,864 acre-feet (AF) of potable water the project will draw upon water from the State Water Project (SWP) and the Colorado River Aqueduct (CRA).²⁶ The energy needed to supply and convey TVOL's water will be used to pump this water from the sources and distribute it throughout the development. Wilkinson estimated that 3,236 kW-hr would be required to extract one AF of water from the State Water Project and 2,000 kW-hr would be required to extract one AF of water from the Colorado River Aqueduct.

Emissions associated with wastewater treatment include indirect emissions necessary to power the treatment process and direct emissions from degradation of organic material in the wastewater.

Indirect GHG emissions from the electricity required to operate a wastewater treatment plant is estimated to be 815 kW-hr per AF.²⁷ Based on the expected amount of wastewater requiring treatment (3,578 AF per year²⁸), this energy intensity factor and the SCE carbon-intensity factor, indirect emissions due to wastewater treatment were calculated as shown in **Table 5.3-R**, below.

Direct emissions from wastewater treatment include emissions of CH₄ and N₂O. A per capita emission factor for these GHG emissions was developed based on a 2005 US GHG inventory for domestic wastewater treatment (25 teragrams CO₂e/year or 25 million tonnes CO₂e/year)²⁹ and the 2005 US population (approximately 296,410,404). Direct emissions from wastewater treatment were calculated using the emission factor developed from this data (0.084 tonnes CO₂e per capita per year) and the projected population at TVOL (34,163 residents from Table 5.11-E) as shown in **Table 5.3-R**, below.

The assumed non-potable recycled water distribution estimates for the project without any enhancements, as described in Section 5.15, will be equal to 720 AF per year, which will be provided from reclaimed water. Once treated at the wastewater treatment plant, this water must be re-pumped through the development to the end users. Estimates of the amount of energy needed to redistribute and, if necessary, treat reclaimed water is described in the GHG inventory in Appendix C.³⁰ The non-potable reclaimed water redistribution emissions are shown in **Table 5.3-R**, below.

²⁵ CEC 2005. California's Water-Energy Relationship. Final Staff Report. CEC-700-2005-011-SF.
CEC 2006. Refining Estimates of Water-Related Energy Use in California. PIER Final Project Report. Prepared by Navigant Consulting, Inc. CEC-500-2006-118. December.

Wilkinson, Robert. 2000. Methodology for Analysis of the Energy Intensity of California's Water Systems, and An Assessment of Multiple Potential Benefits through Integrated Water-Energy Efficiency Measures.

²⁶ The Villages of Lakeview Water Supplies are based on EMWD expected sources for the area. It is estimated that 75% will come from the State Water Project and 25% will come from the Colorado River Aqueduct.

²⁷ CEC 2005. California's Water-Energy Relationship. Final Staff Report. CEC-700-2005-011-SF.

²⁸ Assumed 91% of the water treated is to be reclaimed.

²⁹ USEPA. 2007. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005. #430-R-07-002. April.
<http://epa.gov/climatechange/emissions/downloads06/07Waste.pdf>

³⁰ CEC 2005. California's Water-Energy Relationship. Final Staff Report. CEC-700-2005-011-SF.

Public lighting sources contribute to GHG emissions indirectly, via the production of the electricity that powers these lights. Lighting sources considered in this source category include streetlights, traffic signals, area lighting for parks and lots, and lighting in public buildings. The emission factor for public lighting was obtained from a report by the City of Duluth that shows the amount of electricity demanded for all types of public lighting.³¹ Using this study, the SCE-specific carbon-intensity emission factor and the expected project population of 34,163 from Table 5.11-E, emissions from public lighting were calculated and are shown in **Table 5.3-R** below.

Municipal vehicles result in GHG emissions from the burning of fossil fuels. Municipal vehicles considered in this source category include vehicles such as police cars, fire trucks, and garbage trucks. The emission factor for municipal vehicles was obtained from reports by Medford, MA; Duluth, MN; Northampton, MA; and Santa Rosa, California³². These reports show that the CO₂ emissions from municipal vehicles would be approximately³³ 0.05 tonnes per capita per year.

Using these studies and the expected TVOL population of 34,163 from Table 5.11-E, emissions from municipal vehicles in TVOL were calculated and are shown below in **Table 5.3-R**. Details describing the methodologies employed to estimate these GHG emissions are contained in the GHG report in Appendix C.

Table 5.3-R, Annual Municipal Source Emissions¹

Source	Total Tonnes CO ₂ e/year
SWP Supply (potable)	4,130
CRA Supply (potable)	859
Water Treatment (potable)	790
Water Distribution (potable)	667
Wastewater Treatment (indirect)	848
Wastewater Treatment Plant (direct)	2,881
Recycled Water (non-potable)	84
Public Lighting	1,477
Municipal Vehicles	1,708
Total	13,445

Note: ¹ Data taken from Table 5-9 in GHG inventory by Environ (Appendix C).

In total, all municipal sources including water, wastewater, public lighting and municipal vehicles for TVOL is expected to produce 13,445 tonnes of CO₂e annually.

³¹ Skoog., C. 2001. Public lighting emission factor is 149 kW-hr per capita per year. This factor was calculated by summing the total electricity needs for municipal uses and dividing by the Duluth population. The Duluth population was calculated by dividing the city's reported GHG emissions by its reported per capita emissions.

³² City of Medford. 2001. Climate Action Plan. October. <http://www.massclimateaction.org/pdf/MedfordPlan2001.pdf>
City of Northampton. 2006. Greenhouse Gas Emissions Inventory. Cities for Climate Protection Campaign. June. <http://www.northamptonma.gov/uploads/listWidget/3208/NorthamptonInventoryClimateProtection.pdf>

City of Santa Rosa. Cities for Climate Protection: Santa Rosa. http://ci.santa-rosa.ca.us/City_Hall/City_Manager/CCPFinalReport.pdf

Skoog., C. 2001. Greenhouse Gas Inventory and Forecast Report. City of Duluth Facilities Management and The International Council for Local Environmental Initiatives. October. <http://www.ci.duluth.mn.us/city/information/ccp/GHGEmissions.pdf>

³³ In an effort to be conservative, the largest per capita number from these four reports was used.

The annual emissions estimates from water treatment and distribution, wastewater treatment, and distribution of recycled water do not include the recycled water system enhancements that the project will provide. These are described in more detail in the summary following the mitigation measures and shown in **Table 5.3-U, Annual Project Related Operational CO₂e Emissions**.

The number for public lighting sources is likely a conservative estimate since the project is a master-planned compact community that may require a lower number of lights compared to the assumptions used in **Table 5.3-R**, above.

Mobile Source (Vehicle) Emissions

The mobile source emissions considered for this project will be from the typical daily operation of motor vehicles by residents.

The GHG inventory provided by Environ (Appendix C) estimated GHG emissions based upon all vehicle miles traveled (VMT) by TVOL residents regardless of internal or external destinations or purpose of trip. Traffic patterns, trip rates, and trip lengths are based upon URBEMIS methodology and defaults used for the criteria pollutant analysis in the AQIA for this project (Appendix C).

Mobile source emissions from new residences are considered to be growth, as residences are rarely removed from the housing supply once constructed. There are exceptions, such as when one housing development replaces another, and, in those cases, the replacement residential development need not be considered growth.

However, it is not clear that commercial development should be considered new growth for vehicular travel purposes. To the extent that commercial development serves existing residential development its vehicular travel may not be new. For instance, if the new commercial area serves an area with a high residential/commercial balance, then this new commercial growth will reduce shopping and work trip lengths and will reduce GHG emissions associated with mobile sources. If, however, the new commercial area results in longer trips for its workers and residents than they would have previously made, then it adds GHG emissions. Commercial development that could potentially increase VMT would be facilities that draw trips from far away that otherwise would not be made. A theme park, for example, may be viewed as such a development.

In the GHG inventory report, it is assumed that new non-residential (i.e. office space, retail space, and industrial buildings) area serves an area with a high residential/non-residential balance. Therefore, this new non-residential growth will not, independent of the new residential areas result in new shopping and work trips. Accordingly, new non-residential space in the TVOL development area will not contribute to mobile GHG emissions. However, the emissions from heating and cooling the non-residential areas would be considered to be new, as that would reflect growth in non-residential areas that goes along with growth in residential areas.

Accordingly, GHG emissions from VMT serving non-residential areas will only be counted if the non-residential areas contribute to greater VMT as a result of its location. It should be noted that as TVOL is a mixed use community, this issue does not directly affect TVOL VMT

calculations; all VMT from TVOL residents is calculated regardless of internal or external destinations or purpose of trip.

The CCAR GRP³⁴ recommends estimating GHG emissions from mobile sources at an individual vehicle level, assuming knowledge of the fuel consumption rate for each vehicle as well as the miles traveled per car. Since these parameters are not known for a future development, the CCAR guidance is too specific to use as recommended.

For mobile sources, CH₄ and N₂O are explicitly calculated, multiplied by their respective GWP, and added to the CO₂ emissions, to result in total CO_{2e} emissions from mobile sources.

The general approach used in the GHG inventory by Environ to estimate VMT made by the project's residents is briefly described below. Underlying data for the calculations were taken from the URBEMIS files used in the AQIA for this project (Appendix C).

Traditional traffic models focus upon designing roads and planning a development such that traffic delays will be avoided during peak travel hours. Traditional traffic analyses also provide the total number of daily vehicles on a road which can then be used to calculate toxic or criteria emissions that may have localized health effects. Several steps must be taken to go from a traditional traffic model to a set of calculations that describe VMT made by TVOL residents.

The first step is to disaggregate the traffic information that is contained in the traffic report (Appendix L) into trips made by TVOL residents and into trips made by non-TVOL residents. The second step is to adjust the traffic report trips to account for project design features that reduce trips. As the traditional traffic analysis only predicts weekday driving patterns, this step is to account for differences in weekend and weekday driving patterns. The fourth step accounts for how many of these trips may be taken using modes of transportation other than cars. The final step is to take all of these parameters into account and calculate the final VMT from TVOL residents. Details describing the methodologies employed to estimate these GHG emissions are contained in Appendix C.

The CO₂ emissions from mobile sources were also calculated considering the emission factors for running and starting emissions from EMFAC2007. Details found in Appendix C.

The following tables show the project's vehicular emission with and without implementation of the Pavley standards for light duty cars and trucks.

³⁴ California Climate Action Registry (CCAR). 2008. *General Reporting Protocol*. Version 3.0. April.

Table 5.3-S, Annual Vehicular Emissions without Pavley

Residential Trips	Annual Adjusted VMT	Emission Factor Running(g/mile)	Emission Factor Start (g/start)	Total Annual CO₂e (tonnes)
Phase 1	46,421,277	368	104	18,543
Phase 2	65,767,895	368	104	26,272
Phase 3	84,296,762	368	104	33,673
Total	196,485,934	--	--	78,488

Note: Data taken from Table 4-25 of GHG inventory (Appendix C)

The table above indicates that project-related CO₂ emissions from residential vehicular traffic is approximately 78,488 tonnes of CO₂e annually.

Because it is a reasonably foreseeable regulation at this point in time, the analysis also included the vehicular emissions reductions based on the federal fuel efficiency waiver for light duty cars and trucks. These estimates are shown below.

Table 5.3-T, Annual Vehicular Emissions Including Pavley

Residential Trips	Annual Adjusted VMT	Emission Factor Running(g/mile)	Emission Factor Start (g/start)	Total Annual CO₂e (tonnes)
Phase 1	46,421,277	203	104	10,495
Phase 2	65,767,895	203	104	14,869
Phase 3	84,296,762	203	104	19,057
Total	196,485,934	--	--	44,421

The table above indicates that project-related CO₂ emissions from residential vehicular traffic is approximately 44,421 tonnes of CO₂e annually.

Total Annual Project CO₂ Emissions

As shown in **Table 5.3-U, Annual Project Related CO₂e Emissions**, using all the emissions quantified above, the total annual GHG emissions generated from the project with the design features related to vehicular use and without the project design features or implementation of mitigation measures for energy use is approximately 160,595 tonnes CO₂e per year. The table below indicates that the majority of annual project emissions are from vehicle use followed by residential energy consumption at 49 and 36 percent, respectively. These estimates do not include the Pavley standards.

Several emissions sources were not quantified in the GHG inventory, due to their estimated relatively small³⁵ contribution to GHG emissions. These sources include emissions from recreational sources and refrigeration leaks which are described in more detail below³⁶.

³⁵ Typically less than 1% of the overall inventory based upon previous studies.

³⁶ Black carbon was also not considered. Major sources of black carbon emissions are not present at TVOL.

The Specific Plan includes neighborhood community areas and parks which may also include pools and recreation centers. At the entitlement stage of development, the degree of uncertainty in the potential end-uses of these recreational areas makes a meaningful quantification of GHG emissions difficult. As a result of this uncertainty, the GHG inventory by Environ did not quantify these emissions at this time. Emissions associated with leaks of high global warming potential gases such as from refrigeration leaks were also not quantified for the same reason. In addition, since refrigeration systems will be new, they are likely efficient and should be designed to reduce the amount of leaks of high global warming potential gases.

The inventory also does not consider GHG emissions from sources outside of the project area that may indirectly service project residents (e.g., a landfill). The primary GHG of concern from landfill material is methane. Methane emissions from large landfills are separately regulated and methane gas recovery is a required element of that regulatory program.

Table 5.3-U, Annual Project Related Operational CO₂e Emissions

Source	GHG Emissions		Percentage of Annual CO ₂ e Emissions
Vegetation	Tonnes CO ₂ e total	-17,865	NA
Construction		116,378	NA
Total (one-time emissions)		98,514	NA
Total (annualized emissions)		2,463	NA
Residential	Tonnes CO ₂ e / year	57,178	36%
Non-Residential		8,936	6%
Area		85	0%
Municipal		13,445	8%
Mobile		78,488	49%
Total (annual emissions)		158,132	NA
Annualized Total	Tonnes CO ₂ e / year	160,595	NA

In order to put the GHG emission inventory into context and justify an improvement heading towards meeting the reduction goals set for 2020, it is necessary to compare the GHG emission inventory expected for the project to the GHG emissions that would occur from a community of the same size that would be built today without the project design features and energy reduction measures. This baseline comparison is referred to as Business as Usual (BAU). This scenario is summarized below from the GHG inventory found in Appendix C.

Business as Usual

For the most part, the BAU emissions are equal to the emission estimates discussed above and shown in **Table 5.3-U**, with the exception of mobile source emissions and vegetation emissions. GHG reductions from the proposed project design features and implementation of mitigation measures are quantified and included in the discussion following the mitigation measures section in the summary of impacts after mitigation section. This BAU analysis represents the GHG emission inventory if things were continued to be built according to current land use patterns and building standards. The major categories of the GHG emission inventory are considered

separately. These include residential and non-residential buildings, mobile sources, municipal lighting, and water sources. The remaining categories include municipal vehicles and area sources. These categories represent a small fraction of the total inventory and do not have appropriate emission factors to quantify the reductions that are likely to occur at TVOL compared to BAU.

Vegetation

The project preserves 965 acres of grassland instead of building out in this area according to the current land use designation. In addition, as stated in Section 3.0, Project Description, the project is anticipated to plant as many as 50,000 new trees. To be conservative, only CO₂ emissions from planting 40,000 trees were calculated. The BAU analysis for vegetation assumes that neither of these commitments are taken. The same methodology was used that was presented earlier in this section for the project's vegetation change. The BAU vegetation results in a one-time release of 14,292 tonnes CO₂e, which is shown in Tables 5-2 through 5-5 of the GHG inventory in Appendix C.

Energy Use

As stated above, the BAU emission from energy use in residential and non-residential buildings was presented previously in **Table 5.3-O** and **Table 5.3-P** and also summarized in **Table 5.3-U**. These estimates represent the energy use and GHG emissions from minimally Title 24 compliant buildings of the same size and do not account for the energy efficiency measures that will be required as part of the project for residential and non-residential buildings. The total GHG emissions for residential buildings is estimated to be 57,178 tonnes CO₂ per year. The total GHG emissions for non-residential buildings is estimated to be 8,936 tonnes CO₂ per year.

Municipal

The BAU comparison for water and wastewater treatment and distribution was based on a community that would use approximately 6,584 acre-feet of water annually with 5,864 acre-feet of potable water and 720 acre-feet of recycled water and 3,578 acre-feet of wastewater. These numbers are based on not implementing project design features and not creating additional recycled water for use in the region. These estimates are the same as those previously shown in **Table 5.3-R** above. Table 5-9 of the GHG inventory (Appendix C) shows the calculations for the BAU scenario. **Table 5.3-R** shows the CO₂e emissions for water and wastewater for the BAU scenario as 10,259 tonnes CO₂e per year.

The BAU comparison for public lighting assumes that energy efficient street lights will not be used, as shown in **Table 5.3-R** above. **Table 5.3-R** shows the CO₂e emissions for public lighting for the BAU scenario as 1,477 tonnes CO₂e per year.

Transportation

Vehicle emissions will be reduced in the future regardless of the development location, as the implementation of AB 32 will require improvements in vehicle mileage, increased use of public transit, and the incorporation of low-carbon fuels into the transportation fuel supply³⁷. Transportation emissions presented here are based upon EMFAC2007 values, which are based upon past vehicle emission trends and do not incorporate the known regulatory actions as

³⁷ The Low Carbon Fuel Standard (LCFS) mandated under Governor Schwarzenegger's Executive Order S-01-07 and currently being developed by the California Air Resources Board (ARB) requires a reduction in carbon intensity of California's transportation fuels by at least 10% by 2020.

described above. In fact, on a VMT basis, EMFAC2007 assumes that CO₂ emissions in 2030 are slightly higher than they are currently. This is clearly unlikely, given the mandates of AB 32 and the likelihood of federal regulation.

The Environ report estimated the trip rates for a BAU scenario assuming that no project design features including mixed use, local serving retail, and bicycle/pedestrian friendliness. In addition it was assumed that the same 11,350 dwelling units would be developed on a larger footprint that would include the current proposed footprint plus an additional 965 acres of land that would not be preserved in the absence of the project. Following the URBEMIS methodology for adjusting ITE trip generation rates, the increased footprint that the 11,350 dwelling units are spread over and removal of other project design features increases the trip rates associated with these 11,350 dwelling units and therefore the number of trips as indicated in Table 5-6 of the GHG inventory (Appendix C). These modified trip rates were applied to the same methodology outlined for the traffic calculations including the weekend trip rate adjustment. Table 5-7 of the GHG inventory shows a total VMT for the BAU scenario as 275,026,357 miles per year. In addition the BAU scenario would release 109,862 tonnes of CO₂e per year. Table 5-8 of the GHG inventory shows that this is 24,231 miles per dwelling unit. TVOL represents a 29% reduction in VMT and CO₂e emissions per year compared to BAU.

Additionally, there has been no reduction taken for anticipated changes in vehicle emissions anticipated from current regulations. If the reduction in vehicle emissions anticipated with Pavley waiver are considered, Table 5-8 of the GHG inventory shows that TVOL represents a 60% reduction in CO₂e emission per year compared to BAU. It is appropriate to incorporate the reductions from the implementation of the AB 1493 standards since the Pavley waiver necessary to implement AB 1493 is expected to be granted.

GHG Conclusions

Because the project will include numerous energy efficiency measures and design features that will reduce project emissions by 28.6% below BAU, as discussed in the summary of impacts after mitigation section, significance findings for the cumulative environmental impact of global climate change are included in that discussion.

Threshold D: *Expose sensitive receptors which are located within one mile of the project site to project substantial point source emissions.*

The proposed project consists of a mixed use town center with residential uses and parks. While exact commercial tenants in the mixed use town center are unknown, the project itself is not a substantial point source emitter such as an industrial or manufacturing facility nor would it attract a substantial amount of heavy-duty truck traffic. However, any delivery trucks servicing the project area will be subject to CARB's ATCM limiting idling from diesel powered commercial vehicles. In the event that the commercial uses such as dry cleaners and gasoline dispensing stations are developed as part of the project, CARB and SCAQMD have guidelines and regulations to govern their operation such as CARB's Air Quality and Land Use Handbook providing recommendations for siting new sensitive land uses near dry cleaners and gas stations (CARB 2005), CARB's ATCM regulating dry cleaner operations and benzene from gas stations and SCAQMD's Rule 1421 which controls dry cleaning emissions. The pollutant of concern

with dry cleaner operations is perchloroethelene or Perc. As part of SCAQMD Rule 1421, new facilities are prohibited from operating a Perc dry cleaning system as of January 2003. Also, SCAQMD Rule 1401 and 1402 control new and existing sources of TACs, including Perc from dry cleaners and Benzene from gas stations. Additionally, SCAQMD Rule 461 applies to gasoline transfer and dispensing. Therefore, because future uses such as dry cleaners and gas stations are heavily regulated by state and local standards as described above, the project will not expose sensitive receptors within one mile of the project site to substantial point source emissions and the impact is considered **less than significant**.

Threshold E: *Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter, specifically:*

- *Expose sensitive receptors to a toxic air contaminant, at a level that exceeds 10 excess cancer cases per one million people. (Cancer Health Risks, below)*
- *Expose sensitive receptors to a hazard index of 1.0 or greater using a reference exposure level for chronic non-cancer risks associated with TACs. (Non-Cancer Health Risks)*

Health risk assessments are commonly used to estimate the health risks to the surrounding community from projects that significantly increase the number of the emissions of Toxic Air Pollutants (TACs) in the area. Two facilities exist now (or are proposed) which could result in future residents of THE VILLAGES OF LAKEVIEW to be exposed to TACs, the Nutrilite facility and the Ramona Expressway. Ten other existing facilities were considered for evaluation and determined to not result in substantial point source emissions. Reasons why these operations were not considered mainly revolve around the land use such as a dairy or farming operation or a lack of published TAC emissions data. To evaluate the potential TAC impacts from the two selected facilities, two separate Health Risk Assessments were prepared to estimate the health risks to the residents of the project from the operations of a nearby manufacturing facility (Nutrilite Facility HRA) and the number of diesel vehicles operating on the Ramona Expressway in 2020 which bisects the project (Ramona Expressway DPM HRA). The following information was derived from both HRA's which are found in Appendix C on CD #3.

Although schools are a part of the project, their exact siting will be at the discretion of the school district. Therefore, no specific HRA was prepared for any proposed school site.

Cancer Health Risks

Ramona Expressway Diesel Emissions Related to Cancer Risk

The risk assessment guidelines established by SCAQMD and followed here in this analysis are designed to produce conservative (high) estimates of the risks posed by DPM. The conservative nature of the analysis is due to the following factors:

- The ARB-adopted diesel exhaust unit risk factor of 300 per million per $\mu\text{g}/\text{m}^3$ is based upon the upper 95 percentile of estimated risks for each of the epidemiological studies reviewed and used to develop this unit risk factor. Consequently, this risk factor is already a conservative estimate of the risk posed by DPM.
- The residents at the sensitive receptor locations are assumed to remain outdoors at home for 24 hours a day, 365 days a year, for 70 continuous years.

- As a conservative measure, the SCAQMD does not recognize indoor adjustments for residents. However, a study by Lloyd and Cackette in 2001 (Lloyd & Cackette) shows 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. In addition, people that reside indoors without an indoor source of diesel exhaust are expected to have lower levels of DPM. A DPM exposure assessment showed that the average indoor concentration is $2.0 \mu\text{g}/\text{m}^3$, compared with an outdoor concentration of $3.0 \mu\text{g}/\text{m}^3$.
- The ISCST3 air dispersion model as applied in this study is designed to provide conservative estimates of air pollutant concentrations.

Cancer risks are based upon mathematical calculations which estimate the probability of the number of people who will develop cancer after 24-hour a day, 365 days a year exposure to DPM at the same concentration for a period of 70 years. This is an extremely conservative assumption for modeling purposes.

The probability (the equations for which are found in the Health Risk Assessment (HRA) for the Ramona Expressway) is usually expressed in terms of the number of people who will develop cancer per one million people who are also exposed. It is important to understand that this cancer risk represents the probability that a person develops some form of cancer; the estimated risk does not represent actual mortality rates.

The Ramona Expressway currently has three build-out scenarios for the year 2020. The first is referred to as the “Base Case,” which is an evaluation of project-related and cumulative projects’ traffic impacts with respect to the current County of Riverside General Plan Circulation Element. The major differences, as they relate to THE VILLAGES OF LAKEVIEW, between the three scenarios revolve around Ramona Expressway. In the Base Case, Ramona Expressway is evaluated as a 6- to 8-lane at-grade Expressway (134-foot roadway width), as currently identified on the County Circulation Element (see Figures 3-B1, 3-B2, and 3-B3 of the Traffic Study for Riverside County General Plan Roadway Classifications). The Base Case is used as the basis for evaluation of project impacts in accordance with CEQA Guidelines.

The other two scenarios follow the complete evaluation of the Base Case in the Traffic section of this DEIR. They are presented and analyzed for information purposes resulting from two transportation-related projects that are underway at the County which could affect the project in the future. Both are reasonably foreseeable and therefore are considered in this DEIR. Both are referred to as Alternatives to the Base Case. Alternative 1 refers to a County-led General Plan Amendment (GPA) which includes changes to the classifications of Ramona Expressway and other streets, including Ramona Expressway as a grade-separated Expressway from west of Warren Road in San Jacinto to east of Rider Avenue in Perris. Alternative 2 evaluates Ramona Expressway as a grade-separated freeway pursuant to Riverside County Transportation Commission’s (RCTC) plans for the “Mid County Parkway,” a 32-mile long freeway connecting Hemet to the I-15 Freeway near Corona. Therefore, in the event one or both of these alternatives are approved and implemented sometime during either the entitlement of THE VILLAGES OF LAKEVIEW project or its buildout, the impacts of the project in relationship to these two proposed circulation system improvement scenarios are considered and analyzed, herein. However, since neither has been approved and are only under consideration, they are simply analyzed as alternatives in the spirit of full disclosure.

Each build-out scenario was analyzed using two separate truck mixes since the project specific traffic study did not include ~~any~~ itemized truck information. The truck mix information was obtained from the Riverside County Department of Public Health's Office of Industrial Hygiene (County Mix) and the California Department of Transportation (Caltrans Mix). The County Mix provides a truck mix consisting of eight percent trucks with three percent medium-duty trucks (MDT) and five percent heavy-duty trucks (HDT). Ultimately, the Ramona Expressway will more closely resemble a freeway (Mid County Parkway), thus a truck mix from Caltrans was also used. Since the Ramona Expressway is not a state route, a similar roadway was used as a comparable facility. State Route 74 runs parallel to and is approximately seven miles south of the Ramona Expressway. The truck mix of approximately 12 percent at the junction of SR 74 with State Route 79 South was used because it has the most conservative truck mix (with the largest percentages of HDT) and appears to relate more closely to the future Ramona Expressway. The Caltrans mix is split by axle number so for the purposes of this analysis, it was assumed that 2-axle trucks correspond to light-duty trucks (LDT), 3-axle trucks correspond to MDT, and trucks with 4 +-axles (four or more axles) correspond to HDT emission factors. The specific calculations and assumptions used to determine the cancer risks are included in the Ramona Expressway Diesel Particulate Matter (DPM) HRA located in Appendix C of this DEIR document. The following information provides a summary of the results under worst-case conditions. All modeled scenarios were found to be significant and are available in the Ramona Expressway DPM HRA located in Appendix C.

The Ramona Expressway DPM HRA indicates that under the Base Case expressway scenario with cumulative projects' traffic and without the project-generated traffic in 2020, cancer risks to sensitive receptors located within approximately 270 meters south and 120 meters north of Ramona Expressway in the project boundary are exposed to cancer risks above the 10 in one million SCAQMD threshold. The maximum cancer risk at the modeled sensitive receptor locations for the future with no project scenario in 2020 ranged from 4.1 to 19.8 in one million within 630 meters of the Ramona Expressway.

When the Base Case expressway scenario with the project generated traffic and the cumulative projects are considered for 2020, sensitive receptors located within approximately 400 meters to the south and 200 meters to the north of Ramona Expressway will be exposed to cancer risks greater than 10 in one million. Additionally, some areas within approximately 125 meters to the south of the Ramona Expressway show cancer risks above the 25 in one million. The maximum cancer risk reported for the Base Case scenario with project and cumulative traffic ranged from 6.5 to 28.3 in one million within 630 meters of the Ramona Expressway.

Comparison of without and with project traffic above indicates that the project traffic alone in 2020 on the Ramona Expressway accounts for cancer risk between 2.4 and 8.5 in one million. These risk levels resulting from the project alone do not exceed the 10 in one million threshold and would be less than significant if taken alone. Other than project traffic will exist on the highway however and 8.5 out of a maximum of 28.3 in one million represents 30 percent of the total cumulative with project risks which is substantial and considered **cumulatively significant**.

Avoidance of impacts from Ramona Expressway would involve complete redesign and change in land uses for the project, limiting sensitive receptors located within one-quarter mile south and approximately one-eighth of a mile north of Ramona Expressway. Such a design is considered in project Alternative 5, Section 8.0. Alternative 5 would avoid these impacts from Ramona

Expressway by introducing commercial/industrial uses north of Ramona and in what is called the Mixed Use Town Center Village of the project's plan, and by eliminating residential uses at the eastern end of the project site. This approach would limit sensitive receptors adjacent to Ramona Expressway, but would bring more heavy trucks to the Lakeview area and allow them further into the site, potentially causing greater health/cancer risks to existing and proposed residents.

When the Base Case Alternative 1 freeway scenario is considered for the project and cumulative (area-wide) traffic for 2020, sensitive receptors located within approximately 560 meters to the south and 200 meters to the north of Ramona Expressway will be exposed to cancer risks greater than 10 in one million. Additionally, it can be consistently shown within approximately 180 meters to the south of the Ramona Expressway, cancer risks are above the 25 in one million. The maximum cancer risk reported for the future freeway scenario with project and cumulative traffic ranged from 7.0 to 37.5 in one million within 630 meters of the Ramona Expressway.

When the Base Case Alternative 2 freeway scenario is considered for the project and cumulative (area-wide) traffic for 2020, sensitive receptors located within approximately 680 to 890 meters to the south and 310 meters to the north of Ramona Expressway will be exposed to cancer risks greater than 10 in one million. Additionally, it can be consistently shown within approximately 290 meters to the south and up to 110 to the north of the Ramona Expressway, cancer risks are above the 25 in one million. The maximum cancer risk reported for the future freeway scenario with project and cumulative traffic ranged from 10.2 to 54.9 in one million within 630 meters of the Ramona Expressway.

In conclusion, all modeled scenarios are above the SCAQMD threshold of significance set at 10 in one million. The Base Case expressway scenario with and without the project results in lower excess cancer risks compared to the Base Case Alternative 1 and 2 freeway scenarios. The impacts associated with exposure of sensitive receptors to TACs are considered **significant** with respect to Ramona Expressway.

Nutrilite Facility Emissions Related to Cancer Risk

The specific calculations and assumptions used to determine the cancer risks are included in the Nutrilite Facility HRA located in Appendix C of this DEIR document.

The Nutrilite Facility HRA was performed using the HotSpots Analysis and Reporting Program (HARP) version 1.3, a software program available through the California Air Resources Board.

According to the HARP output, that the maximum cancer risk to the nearest exposed resident over a 70 year lifetime is 3.92 in one million. This location is 100 meters directly south of the modeled emission source. This HARP generated estimate is below the SCAQMD 10 in one million significance threshold.

As long as the Nutrilite facility does not increase the production of TACs significantly in the future, the cancer risk is expected to remain relatively stable. If the Nutrilite facility does increase its reported emissions through the addition of new equipment or new land acquisition etc., it will have to abide by the SCAQMD's rules for new sources and apply for the applicable permits. In addition, if required by the SCAQMD, the Facility will have to submit their own health risk assessment to re-evaluate the potential cancer risks caused by the Facility operations. Therefore, impacts related to TACs emitted from the Nutrilite facility are less than significant.

Non-Cancer Health Risks

The non-cancer risks can be described as acute (short-term, generally 1-hour peak exposures) or chronic (long-term exposure, defined as 12 percent of a lifetime or about 8 years for humans) health impacts. OEHHA has developed acute and chronic reference exposure levels (REL) for determining the non-cancer health impacts of toxic substances. Exceeding the acute or chronic REL does not necessarily indicate that an adverse health impact will occur; however, levels of exposure above the REL have an increasing but undefined probability of resulting in an adverse health impact, particularly in sensitive individuals.

Ramona Expressway Diesel Emissions Related to Non-Cancer Risk

For DPM, there is no value for the acute REL and the chronic REL is $5 \mu\text{g}/\text{m}^3$. Since the hazard index is the ratio between the DPM concentration at each receptor (estimated using ISCST3) and the chronic REL, then non-cancer health risks are significant if the hazard index exceeds 1.0. This threshold for significance is recommended by SCAQMD and CARB explicitly to determine the non-cancerous health impacts attributable to diesel exhaust emissions in an area.

The relationship for the non-cancer health effects of DPM is given by the following equation:

$$HI_{DPM} = C_{DPM} / REL_{DPM}$$

where,

HI_{DPM} Hazard Index; an expression of the potential for non-cancer health effects.

C_{DPM} Annual average DPM concentration in $\mu\text{g}/\text{m}^3$.

REL_{DPM} Reference exposure level (REL) for DPM; the DPM concentration at which no adverse health effects are anticipated.

Using the maximum DPM concentration of all the modeled scenarios, $0.214 \mu\text{g}/\text{m}^3$ occurs within the project boundary under the Phase 3 Alternative 2 scenario. Using the equation above, the hazard index is 0.043, which is approximately 4 percent of the allowed threshold. Based on this, non-cancer risks from the Ramona Expressway's DPM emissions are considered **less than significant**.

Nutriline Facility Emissions Related to Non-Cancer Risk

The Nutrilite facility did not report maximum 1-hour concentrations for any of the reported TACs. Therefore, acute non-cancer risks could not be evaluated. The HARP program generated the chronic non-cancer hazard index for each of the modeled TACs using the respective default REL provided in the HARP database.

The HARP generated output, found in Appendix A of the Nutrilite HRA, indicates that the total chronic non-cancer hazard index is 0.005. The SCAQMD threshold indicates hazard indexes greater than 1.0 are significant. Therefore, the chronic non-cancer hazard index is approximately 0.5 percent of the allowed threshold.

As long as the Nutrilite facility does not increase the production of TACs significantly in the future, the non-cancer risk is expected to remain below the threshold. If the Nutrilite facility does increase its reported emissions through the addition of new equipment or new land acquisition etc., it will have to abide by the SCAQMD's rules for new sources and apply for the applicable permits. In addition, if required by the SCAQMD, the Facility will have to submit their own health risk assessment to re-evaluate the potential non-cancer risks caused by the Facility operations. Based on this, non-cancer risks from the Nutrilite facility TAC emissions are considered **less than significant**.

Threshold F: Create objectionable odors affecting a substantial number of people.

The project presents the potential for generation of objectionable odors in the form of diesel exhaust during construction in the immediate vicinity of the project site. Impacts of construction related odors cannot be quantified because it is subjective to each person's sensitivity to smell. Recognizing the short-term duration of construction of any specific portion of the property, the project will not expose substantial numbers of people to objectionable odors. Impacts from short-term project construction odors are considered **less than significant**.

The project also allows for the operation of a composting facility located in Planning Area 77, which is no less than 1000 feet east of the rest of the project site. Typical compost facilities can include grinding of feedstock (such as green waste and/or wood waste) will generate noise and odor, which will be a cause for concern to the future residents. Processing equipment involved in this type of facility will be permitted through SCAQMD. New facilities will also be subject to compliance with regulatory requirements set forth in Title 14 of the California Code of Regulations. If such a facility is constructed, the Zoning Ordinance of Specific Plan 342 requires that a Conditional Use Permit (CUP) be acquired. Other County of Riverside CUP's for composting facilities have included conditions of approval that addressed odors such as, but not limited to: requiring the project to post a sign at the entrance to the property with contact information so the public can access site personnel on a 24-hour basis in case offensive odor emits from the site; monthly inspections of the facility by the Environmental Health Department; maintaining an "Odor Impact Minimization Plan" that describes methods for preventing and mitigating nuisance level odors that may be produced by the composting operation. Further analysis at this time would be speculative and unnecessary as the CUP will require further CEQA analysis.

The existing agricultural land uses, which include the Nutrilite facility operations, around the project site may be a source of odor. However, to help viable agricultural enterprises continue as urbanization approaches, the County of Riverside adopted Ordinance 625. This ordinance is known as the "Right to Farm" ordinance. The purpose of the ordinance is to allow agricultural facilities protection from nuisance complaints generated from new non-agricultural land uses. Ordinance 625 applies to new land divisions, and requires notice to owners of newly divided land that agricultural zoning exists within 300 feet of their property. The Ordinance restricts property owners from filing a nuisance grievance on "normal" operating activities of the neighboring agricultural properties including odor producing activities and livestock keeping.

Odors will also be generated by the on-site regional sewerage lift station proposed to be located at the northwest corner of Ramona Expressway and Reservoir Avenue. Following construction, Easter Municipal Water District (EMWD) will own and operate this facility. The lift station will

be constructed to EMWD standards which include an odor containment structure/system. The nearest proposed homes will be located on the east side of Reservoir Avenue within the Resort Village area of the Specific Plan. Existing homes and businesses are located south of Ramona Expressway. **Figure 5.15-8, Proposed Sewer Lift Station**, illustrates that the facility will be sited approximately 200 feet from proposed homes and over 360 feet from any existing uses south of Ramona Expressway. Therefore, because an odor containment system will be installed, proposed homes will be over 200 feet away, and existing uses are located across the highway and over 360 feet away, the potential impacts from odors at the future sewerage lift station are considered **less than significant**.

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to reduce or eliminate impacts.

In addition to compliance with SCAQMD Rule 403(see page 5.3-33) for project construction, the following mitigation measures recommended by the SCAQMD shall be implemented:

MM Air 1: During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the Department of Building and Safety. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the Department of Building and Safety.

MM Air 1a: All project developers funded privately rather than publicly (public funding requires that the winning proposal go to the lowest responsible bidder) shall provide preference to qualified grading contractor proposals that include the use of construction equipment that demonstrates early compliance for off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) – and/or – meets or exceeds Tier 3 standards with available CARB verified or U.S. EPA-certified technologies or use of alternative fueled off-road construction equipment. Proof of preference shall be reviewed by the Department of Building and Safety's Grading Division prior to issuance of a grading permit.

MM Air 2: Where economically and physically feasible, electricity from power poles shall be used instead of temporary diesel- or gasoline powered generators to reduce the associated emissions. Feasibility shall be determined by the contractor and approved by the Department of Building and Safety's Grading Division prior to issuance of grading permits.

MM Air 3: To reduce construction vehicle (truck) idling while waiting to enter/exit the site, prior to issuance of grading permits, the contractor shall submit a traffic control plan that will describe in detail safe detours to prevent traffic congestion to the best of the project's ability, and provide temporary traffic control measures during construction activities that will allow both construction and on-street traffic to move with less than 5-minute idling times. Additional traffic control measures may include, but are not limited to:

- require construction parking to be configured such that traffic interference is minimized,
- provide dedicated turn lanes for movement of construction trucks and equipment on- off-site,

- schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable,
- reroute construction trucks away from congested streets or sensitive receptor areas, and improve traffic flow by signal synchronization.

MM Air 3a: To reduce fugitive dust emissions, the developer shall provide the County of Riverside with sufficient proof of compliance with Rule 403 and other dust control measures including, but not limited to:

- requiring the application of non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain),
- requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered,
- suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per hour,
- post contact information outside the property for the public to call if specific air quality issues arise,
- use SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials, replace ground cover in disturbed areas as quickly as possible.

MM Air 3b: In order to improve air quality by reducing VOC emissions associated with the application of architectural coating, homebuilders shall apply coatings and solvents with a VOC content lower than required under Rule 1113 as amended July 13, 2007 to residential dwelling units. In addition, homebuilders are encouraged to consider the use of pre-coated construction materials and materials that do not require painting. Construction specifications shall be included in the building specifications that assure these requirements are implemented. The specifications shall be reviewed by the County of Riverside's Building and Safety Department for compliance with this mitigation measure prior to issuance of a building permit.

In order to reduce both criteria pollutant and GHG emissions from project operation, the following mitigation measures shall be implemented. Some items below appear as part of the Project Design Considerations, above, however they are listed as mitigations because they can be quantified within the air modeling and should be mentioned to assure the project complies:

MM Air 4: In order to reduce energy consumption from proposed project development, applicable plans (e.g., electrical plans, improvement maps, etc.) submitted to the County shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable Department (e.g., Department of Building and Safety or Department of Transportation) prior to conveyance of applicable streets.

MM Air 5: In order to reduce energy consumption from the proposed project development, construction of large residential buildings, large public buildings (library, public community center, schools, and joint-use facilities), large private recreation buildings owned by the Homeowners' Association (HOA) and large commercial buildings (retail and office) ~~all homes and businesses~~ shall exceed the 2007 California Energy Code - Title 24, Part 6 energy efficiency standards by 35% (schools and joint-use facilities are subject to Nuview Union School District

approval). Submission of a Title 24 worksheet with building plans shall be required by the Department of Building and Safety in order to obtain a building permit. The worksheet shall include both the calculations showing the minimum Title 24 compliance requirements and calculations demonstrating that the project will ~~increase~~ reduce energy ~~efficiency~~ consumption 35% ~~beyond~~ below Title 24. Compliance is determined by comparing the energy ~~efficiency~~ use of the proposed development to a minimally Title 24 compliant development. The calculations must be from an energy analysis computer program approved by the California Energy Commission in accordance with Title 24, Part 1, Article 1, Section 10-109. These approved programs include, as of February 2009, EnergyPro and Micropas 7 for residential buildings and EnergyPro, Perform 2005, and eQuest/D2Comply for non-residential buildings. (Note: “large” is defined as the primary residence, main private recreation building, main public community center building, retail space with an anchor, etc.; “large” excludes a shed in a residential yard, small utility buildings, small pool buildings, trash enclosures, etc.)

MM Air 6: In order to reduce energy consumption from the proposed project development, THE VILLAGES OF LAKEVIEW homebuilders shall, if installing major appliances such as dishwashers, washing machines, and refrigerators in homes, install Energy Star-rated models. Major appliances installed in large public buildings (library, public community center, schools, and joint-use facilities) and large private recreation buildings owned by the HOA shall be Energy Star-rated (schools and joint-use facilities are subject to Nuvview Union School District approval). Proof of compliance will be required by the Department of Building and Safety in order to obtain a Final Inspection. (Note: “large” is defined as the primary residence, main private recreation building, main public community center building, retail space with an anchor, etc.; “large” excludes a shed in a residential yard, small utility buildings, small pool buildings, trash enclosures, etc.)

MM Air 6a: In order to increase renewable energy sources and reduce greenhouse gas emissions, large public buildings (library, public community center, schools, and joint-use facilities) and large private recreation buildings owned by the HOA shall be installed with solar panels, photovoltaic cells, solar thermal systems or other renewable energy generating technology (schools and joint-use facilities are subject to Nuvview Union School District approval). Homebuilders are required to: 1) offer to home buyers solar panels, photovoltaic cells, solar thermal systems or other renewable energy generating technology as part of the homebuilder’s option program, or 2) be consistent with the Governor’s Million Solar Roofs plan. Proof of compliance shall be shown on the panel of plans or the homebuilder’s option package and be required by the Department of Building and Safety in order to obtain a building permit. (Note: “large” is defined as the primary residence, main private recreation building, main public community center building, retail space with an anchor, etc.; “large” excludes a shed in a residential yard, small utility buildings, small pool buildings, trash enclosures, etc.)

MM Air 7: Because THE VILLAGES OF LAKEVIEW residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouses gases such as carbon dioxide, THE VILLAGES OF LAKEVIEW will provide a transit center, including a bus stop opportunity and park–n-ride lot to facilitate carpooling and/or use of public transportation. Proof of compliance will be required prior to the issuance of the 2,632st building permit.

MM Air 8: Because THE VILLAGES OF LAKEVIEW residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouses gases such as

carbon dioxide, THE VILLAGES OF LAKEVIEW will designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required prior to the approval of the Plot Plan for each of the projects listed above.

MM Air 9: Adequate bicycle parking (one space per 20 car spaces) shall be provided at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required prior to approval of the Plot Plan for each implementing project.

MM Air 10: Because THE VILLAGES OF LAKEVIEW residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouse gases such as carbon dioxide, public information shall be provided to residents about opportunities to utilize walking, public transportation, carpooling, and bicycles. This effort will be implemented through signage and information posted at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required prior to issuance of the building permit for each of the above facilities.

MM Air 11: Because THE VILLAGES OF LAKEVIEW residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouse gases such as carbon dioxide, a community vehicle shall be provided by the Homeowners Association (or like entity) for resident transport. It shall be an electric or alternative fuel vehicle. Proof of compliance will be required prior to the issuance of the 9,551st building permit.

MM Air 12: Because THE VILLAGES OF LAKEVIEW residents will be adding additional sources of solid waste to nearby landfills and thereby indirectly contributing to methane emissions, in addition to mitigation measures found in Section 5.15 (**MM Util 9** through **11**) separate recycling and waste receptacles will be provided at all public garbage bins along sidewalks and at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required prior to issuance of a building permit. Signage and information regarding the recycling bins and acceptable recyclable materials shall be posted at the transit center, library, public community center, Central Park parking area, and in commercial areas. Proof of compliance will be required by the Department of Building and Safety prior to the Plot Plan Final Inspection of each the above-listed facilities.

MM Air 13: Because THE VILLAGES OF LAKEVIEW residents will be adding additional car trips, and therefore contributing indirectly to both criteria pollutants and greenhouse gases such as carbon dioxide, THE VILLAGES OF LAKEVIEW will coordinate with the transportation department and with local and regional agencies where possible in order to maximize integration of the project with local transportation planning and implementation efforts. These efforts include the possibility of extending the Riverside Transit Agency's Bus Rapid Transit System into the area and bus connections to proposed Metrolink stations along the Perris Valley Line. Proof of coordination shall be provided to the County Transportation Department prior to the issuance of the 2,632nd, 6,771st, and 11,350th building permits which correspond with the completion of each Phase of development, respectively. Coordination materials shall include a Staff Report or Meeting Minutes.

MM Air 14: Within the Central Park's campus of public facilities, which includes a public community center and a library, up to 5 parking spaces (in excess of standard parking

requirements) shall be dedicated for the installation of an EV charging facility or for a car sharing program.

Summary of Project-Specific Environmental Effects After Mitigation Measures are Implemented

In an effort to reduce estimated emissions, the mitigation measures listed above were considered. **MM Air 1** through **3** are associated with reduction in construction related emissions for all criteria pollutants and CO₂. **MM Air 3a** reduces fugitive dust emissions during construction. **MM Air 3b** is associated with a reduction in VOC emissions from architectural coating and painting. **MM Air 4** through **6a** are mainly associated with reductions in CO₂ through energy efficiency and conservation. **MM Air 7** through **11**, **MM Air 13** and **MM Air 14** aim to reduce vehicle trips and increase alternative transportation which reduces both criteria and CO₂ emissions. **MM Air 12** aims to reduce the amount of solid waste transported to local landfills and decrease the amount of methane emissions, a GHG gas. Additionally, **MM Util 9** and **10** from Section 5.15, Utilities, focuses on reducing the amount of solid waste in landfills. **MM Util 9** addresses construction debris recycling and reuse to achieve a reduction in construction waste. These efforts to reuse waste on-site can reduce not only landfill impacts, but also reduce hauling trips to the landfills, which reduce traffic, air, noise, and greenhouse gas (GHG) emissions. **MM Util 10** establishes green waste recycling through its yard maintenance. Grass recycling (where lawn clippings from a mulching-type mower are left on the lawn) and on- or off-site composting shall be implemented to reduce green waste going to landfills.

Although implementation of mitigation measures **MM Air 1** through **4**, **6**, **6a**, and **12**, **13** and **14** will reduce project-generated emissions, there are no distinct quantitative reductions associated with them; therefore to be conservative, there is no change in the estimated emissions of the project from those mitigation measures. The project's short-term construction and long-term operational emissions after implementation of those mitigation measures will exceed the SCAQMD significance thresholds and are considered **significant**.

Criteria Pollutants

Mitigation measure **MM Air 5** originally required utilizing energy efficiency 15 percent beyond Title 24, as specified in the Specific Plan development standards. The tables below evaluate this level of energy efficiency for Criteria Pollutants. Implementation of this 15 percent greater efficiency than Title 24, and mitigation measures **MM Air 7** through **11** will reduce project-generated operational emissions at buildout by approximately two percent for VOC, seven percent for NO_x, five percent for CO, five percent for SO₂, five percent for PM-10, and five percent for PM-2.5 in summer and approximately three percent for VOC, six percent for NO_x, five percent for CO, five percent for SO₂, five percent for PM-10, and five percent for PM-2.5 in winter. Also contributing to the reductions described above are vehicle trip reduction credits from having a mix of residential and non-residential uses on-site (known as Mix of Uses in URBEMIS) and from having retail within a ½ mile radius of the project site (known as Local Serving Retail in URBEMIS) which are part of the project design. Additional emissions reductions resulting from vehicle trip reduction that are not included in the following tables, but are expected to occur relate to the transit center and bus stops, which are also a part of the project. The following tables show the mitigated project-generated operational emissions.

**Table 5.3-V, Estimated Daily Project
Operation Emissions with Mitigation (Summer)**

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Phase 1	314.79	242.64	1,755.02	1.89	300.74	60.37
Phase 2	402.83	244.80	1,770.80	2.63	417.73	82.88
Phase 3	422.52	214.22	1,663.96	3.01	480.15	94.49
Total	1,140.14	701.66	5,189.78	7.53	1,198.62	237.74
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes

**Table 5.3-W, Estimated Daily Project
Operation Emissions with Mitigation (Winter)**

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Phase 1	316.27	299.06	1,678.09	1.70	301.99	61.60
Phase 2	404.72	307.34	1,687.60	2.38	419.64	84.76
Phase 3	421.06	274.37	1,564.54	2.73	482.26	96.58
Total	1,142.05	880.77	4,930.23	6.81	1,203.89	242.94
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes

Even with implementation of the previously discussed mitigation measures, there is no change after mitigation in terms of exceeding the SCAQMD thresholds of significance related to long-term operational emissions. The project's long-term operational emissions will still exceed the SCAQMD significance thresholds and are considered **significant and unavoidable with mitigation**.

Subsequent to the completion of the above analysis, **MM Air 5** was changed to utilize a 35 percent improvement from Title 24 energy efficiency standards to bring the project into compliance with the Goals of AB 32 with respect to GHG. Because vehicle trips account for the majority of operational emissions, the increase in energy efficiency from 15 percent to 35 percent beyond Title 24 will not have effect capable of changing the significance findings with respect to Criteria Pollutant emissions even though they would result in lower emissions than shown above.

Toxic Air Contaminants

Avoidance of potential modeled impacts from Ramona Expressway would involve complete redesign and change in land uses for the project. Limiting sensitive receptors located within one-quarter mile south and approximately one-eighth of a mile north of Ramona Expressway. Such a design is considered in project Alternative 5, Section 8.0. Alternative 5 would avoid the health/cancer risk impacts from Ramona Expressway by introducing commercial/industrial uses north of Ramona and in what is called the Mixed Use Town Center Village of the project's plan, and by eliminating residential uses at the eastern end of the project site. This approach would limit sensitive receptors adjacent to Ramona Expressway, but would bring more heavy trucks to the Lakeview area and allow them further into the site, potentially causing greater health/cancer risks to existing and proposed residents. Alternative 3 which includes no development north of Ramona Expressway would eliminate these potential significant impacts in that area.

The analysis of TACs required by SCAQMD is extremely conservative. As stated above the modeling assumes residents at the sensitive receptor locations remain outdoors at home for 24 hours a day, 365 days a year, for 70 continuous years. As a conservative measure, the SCAQMD does not recognize indoor adjustments for residents. However, a study by Lloyd and Cackette in 2001 (Lloyd & Cackette) shows 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. In addition, people that reside indoors without an indoor source of diesel exhaust are expected to have lower levels of DPM. A DPM exposure assessment showed that the average indoor concentration is $2.0 \mu\text{g}/\text{m}^3$, compared with an outdoor concentration of $3.0 \mu\text{g}/\text{m}^3$. Therefore, to be extremely conservative, **impacts are considered significant** because they exceed this threshold, but in reality, no people will actually experience this level of exposure.

Summary of Cumulative Environmental Effects After Mitigation Measures Are Implemented

Since the project emissions exceed standards substantially for all criteria pollutants except SO_2 both regionally and locally during both the construction and operation of the proposed project, and the portion of the SCAB within which the proposed project is located is designated as a non-attainment area for ozone, PM-10, and PM-2.5 under both state and federal standards, the project is considered **cumulatively significant**.

Greenhouse Gases (GHG)

Implementation of mitigation measures **MM Air 5** (at 35%) and **7** through **11** will reduce annual project-generated GHG emissions from energy use and vehicle trips. Below is a summary list of the concepts detailed in the project-design features and/or mitigation measures that contribute both quantitatively and qualitatively to an overall reduction in GHG emissions from the project as reported by the Environ GHG inventory (Appendix C).

Quantified Emission Reductions

- A 32-mile network of bicycle lanes, trails and, paseos will connect schools, libraries, parks, open space, bus stops, and commercial areas. (SP342)
- The compact building design approach to be used at TVOL will reduce its footprint and allow for transportation and open space corridors. (SP342)
- The Town Center Village will be centrally located and walkable. (SP342)
- The circulation system has been designed to encourage residents to make multiple stops per trip. (SP342)
- 965 acres of habitat will be conserved, including a wildlife corridor measuring 1,500 feet wide. (SP342)
- Up to 50,000 trees will live within The Villages of Lakeview. (SP342)
- The Villages of Lakeview will use recycled water whenever and wherever possible. (SP342)
- Space will be provided for a recycled water tank to improve the current system. (SP342)
- Homeowners will be required to use recycled water in their yards. (SP342)
- Turf will not occupy more than 33% of the landscaped area in the home lots. (SP342)
- These measures will reduce potable water demand for residential landscaping by roughly 86%. (SP342)
- Homes and businesses will exceed the 2007 Standards for Title 24 Part 6 energy efficiency standards by at least 35%. (**MM Air 5**)
- Where appliances are offered by homebuilders, Energy Star appliances will be installed. (**MM Air 6**)
- Public buildings will use solar panels and sky-lighting techniques to improve energy efficiency. (SP342)
- Energy efficient street lighting will be used. (**MM Air 4**)
- Wood-burning fireplaces are prohibited.³⁸

Qualitative Emission Reductions

These project design features will likely result in emission reductions although they were not quantified as part of the GHG inventory.

- A transit center with a park-and-ride lot and a bus stop will encourage carpooling and the use of public transportation. (**MM Air 7**)
- Electric or alternative fuel vehicles will be provided for community uses, such as resident shuttling, community services, and event promotion. (**MM Air 11**)
- HOV and ridesharing vehicles will be granted priority parking at community facilities. (**MM Air 8**)

³⁸ Pursuant to SCAQMD Rule 445.

- Bicycle parking will be provided at community facilities. (**MM Air 9**)
- Outreach efforts will be used to educate residents on options other than driving. (**MM Air 10**)
- Home builders will offer solar panels. (SP342)

The following tables show the mitigated project-generated annual GHG emissions with and without the Pavley vehicle standards. Details regarding these reductions and assumptions are shown in the GHG inventory in Appendix C.

Table 5.3-X, Mitigated Annual Project-Related GHG Emissions Before Pavley

Source	GHG Emissions		Percentage of Annual CO ₂ e Emissions
Vegetation	Tonnes CO ₂ e total	-17,865	NA
Construction		116,378	NA
Total (one-time emissions)		98,514	NA
Total (annualized emissions)		2,463	NA
Residential	Tonnes CO ₂ e / year	39,528	29%
Non-Residential		6,647	5%
Area		85	0%
Municipal		10,425	8%
Mobile		78,488	58%
Total (annual emissions)		135,174	NA
Annualized Total	Tonnes CO ₂ e / year	137,637	NA

Note: Data taken from Table 4-29 in GHG inventory by Environ (Appendix C)

Table 5.3-Y, Mitigated Annual Project-Related GHG Emissions Including Pavley

Source	GHG Emissions		Percentage of Annual CO ₂ e Emissions
Vegetation	Tonnes CO ₂ e total	-17,865	NA
Construction		116,378	NA
Total (one-time emissions)		98,514	NA
Total (annualized emissions)		2,463	NA
Residential	Tonnes CO ₂ e / year	39,528	39%
Non-Residential		6,647	7%
Area		85	0%
Municipal		10,425	10%
Mobile		44,421	44%
Total (annual emissions)		101,106	NA
Annualized Total	Tonnes CO ₂ e / year	103,569	NA

Note: Data taken from Table 4-30 in GHG inventory by Environ (Appendix C)

In order to put the GHG emission inventory into context and justify an improvement heading towards meeting the reduction goals set for 2020, it is necessary to compare the GHG emission inventory expected for TVOL to the GHG emissions that would occur from a community that would be built pursuant to Business as Usual (BAU). This represents the GHG emission inventory if things were continued to be built according to current standards.

Accordingly, the proposed project has incorporated numerous greenhouse gas emissions reductions measures for construction and operational activities. Under the BAU scenario, emissions are estimated to result in approximately 192,771 tonnes CO₂e/year representing 0.0402% of California's 2004 total CO₂ emissions. Emissions reductions measures and project design features are estimated to reduce emissions by 28.6% below BAU as shown in **Table 5.3-Z, Comparison of Mitigated Project-to BAU Before Pavley**. With implementation of emissions reduction measures, CO₂e. greenhouse gas emissions would be reduced to approximately 137,637 tonnes CO₂e/year, representing 0.0287% of California's 2004 total CO₂ emissions. This 28.6% reduction is consistent with the goals of AB 32, ARB's Recommended Approaches for Setting Interim Significance Thresholds and SCAQMD's Draft Staff Greenhouse Gas Significance Threshold guidance to reduce emissions levels to 1990 by 2020.

By reducing the proposed project's emissions approximately 28.6% below BAU, the proposed project mitigates its cumulative greenhouse gas emissions impacts as specified in AB 32 in compliance with section 15064(h). This greenhouse gas cumulative mitigation obligation imposed by the lead agency is more than double the 11% target set forth for the new residential and commercial development sector in the ARB Scoping Plan.

Table 5.3-Z, Comparison of Mitigated Project to BAU Before Pavley

Source	GHG Emissions (tonnes CO ₂ e / year		Percentage Improvement over BAU
	BAU	TVOL	(%)
Vegetation	14,292	-17,865	225%
Construction	116,379	116,378	0%
Total (one-time emissions)	130,672	98,514	25%
Total (annualized emissions)	3,267	2,463	
Residential	57,178	39,528	31%
Non-Residential	8,936	6,647	26%
Area	85	85	0%
Municipal	13,445	10,425	22%
Mobile	109,862	78,488	29%
Total (annual emissions)	189,504	135,174	28.7%
Annualized Total	192,771	137,637	28.6%

Note: Data taken from Table 5-11 in GHG inventory by Environ (Appendix C)

Because it is a reasonably foreseeable regulation at this point in time, the analysis also included the vehicular emissions reductions based on the federal fuel efficiency waiver for light duty cars and trucks. Emissions reductions with the waiver in place are estimated to reduce emissions by 46% below BAU as shown in **Table 5.3-AA, Comparison of Mitigated Project-to BAU Including Pavley**. With implementation of these vehicle emissions reduction measures, CO₂e. greenhouse gas emissions would be reduced to approximately 103,569 tonnes CO₂e/year, representing 0.0216% of California's 2004 total CO₂ emissions. This 46% reduction exceeds the goals of AB 32, ARB's Recommended Approaches for Setting Interim Significance Thresholds and SCAQMD's Draft Staff Greenhouse Gas Significance Threshold guidance to reduce emissions levels to 1990 by 2020.

Table 5.3-AA Comparison of Mitigated Project to BAU Including Pavley

Source	GHG Emissions (tonnes CO ₂ e / year		Percentage Improvement over BAU
	BAU	TVOL	(%)
Vegetation	14,292	-17,865	225%
Construction	116,379	116,378	0%
Total (one-time emissions)	130,672	98,514	25%
Total (annualized emissions)	3,267	2,463	
Residential	57,178	39,528	31%
Non-Residential	8,936	6,647	26%
Area	85	85	0%
Municipal	13,445	10,425	22%
Mobile	109,862	44,421	60%
Total (annual emissions)	189,504	101,106	47%
Annualized Total	192,771	103,569	46%

Note: Data taken from Table 5-12 in GHG inventory by Environ (Appendix C)

In considering the determination of whether a project may have a significant impact on the environment, CEQA Guidelines Section 15064(h)(3) provides 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." Under section 15064(h)(3), a qualifying mitigation plan or program must be either "specified in law" or adopted by the public agency with jurisdiction over the affected resource through a public review process. The overall reduction goal of AB 32 – reducing California's 2020 greenhouse gas emissions to 1990 levels– is specified in law, and thus serves as the cumulative impact mitigation standard for climate change analysis as authorized by section 15064(h)(3). The ARB has determined that absent AB 32 and other California climate change laws and mandates, California's projected 2020 greenhouse gas emissions would be 596 million metric tonnes carbon dioxide equivalent (MMTCO₂E). ARB has also determined that California's 1990 greenhouse gas emissions were 427 MMTCO₂E. Accordingly, California needs

to reduce its 2020 emissions by 169 MMTCO₂E, or 28.3 percent below the BAU 2020 projection, to meet the AB 32 greenhouse gas reduction mandate specified in law.

ARB estimates that the overwhelming majority (over 85%) of California's greenhouse gas emissions derive from combustion of fossil fuels, and the ARB "Scoping Plan" for developing regulations to assure compliance with the 2020 greenhouse gas target makes clear that the single most important source of greenhouse gas reductions – comprising 18 percent of the necessary greenhouse gas reductions is increasing fuel efficiency for light duty cars and trucks, which will in turn result in fewer greenhouse gas emissions per vehicle mile traveled (VMT). Implementation of this vehicular fuel efficiency measure requires a federal waiver under the Clean Air Act. As discussed in Related Regulations on page 5.3-31, it appears likely that the waiver will be granted which will lead to substantial greenhouse gas emissions across the state.

ARB has also identified more than two dozen sectors of economic activity that comprise California's other major sources of greenhouse gas emissions, and the Scoping Plan sets out compliance targets for each of these sectors. Increasing electric and natural gas efficiency, for example, have targets of 15.2 MMTCO₂E and 4.3 MMTCO₂E, respectively. Increasing the number of solar systems on rooftops would yield another 2.1 MMTCO₂E of greenhouse gas reductions, and systems for increased water efficiency, use of reclaimed water, and similar water reduction measures result in another 2 MMTCO₂E of targeted greenhouse gas reductions.

The sole measure exclusively aimed at new residential and commercial development is targeted to achieve reductions of 5 MMTCO₂E in the ARB Scoping Plan, comprising approximately 3% of the total targeted 169 MMTCO₂E reduction for greenhouse gas reductions as of 2020. Other sector requirements that apply to both existing and new buildings overlap with the energy efficiency standards, water utilization and system efficiency standards, transportation sector improvements, and waste recycling and reduction measures. The ARB Scoping Plan groups many of these types of measures, as applied to retrofits of existing built structures as well as newly constructed structures, as "Green Building" standards, and targets reductions of 26 MMTCO₂E from these practices. Although existing structures are and will continue to vastly outnumber new structures through the 2020 AB 32 compliance date, this EIR conservatively assumes that half of these Green Building reductions - 13 MMTCO₂E, or approximately 8% of the 167 MMTCO₂E target - must be achieved from newly constructed buildings. Using this conservative methodology for allocating 8% of greenhouse gas reductions to new buildings, and 3% to land use and transportation features of new commercial buildings, both as described above under the ARB Scoping Plan, collectively approximately 11% of the greenhouse gas reductions required to achieve the AB 32 target has been allocated to the new residential and commercial development sector.

Because the regulations implementing the Scoping Plan have not yet been adopted, and the federal fuel efficiency waiver for light duty cars and trucks has not yet been granted, reliance on ARB's Scoping Plan as a section 15064(h) regulatory plan that parses out differential compliance obligations under AB 32 between various economic sectors based on the economic and technical feasibility factors and other applicable greenhouse gas reduction allocation standards set forth in AB 32 is not yet supported by substantial evidence.

Even though THE VILLAGES OF LAKEVIEW project will fully meet the 28.3% greenhouse gas reduction standard specified in law, it will also be necessary for many third party agencies – including but not limited to ARB, EPA, regional transportation planning authorities, local

agencies, and local air districts – to adopt and fully implement the ARB Scoping Plan and achieve corresponding greenhouse gas reduction requirements applicable to numerous other economic sectors. As the lead agency for this EIR, the County lacks the authority to compel these third party agencies to adopt or implement these AB 32 Scoping Plan components. However, the County concludes that the adoption and implementation of these requirements is within the responsibility and jurisdiction of these other public agencies, and these requirements can and should be adopted and implemented by these other agencies.

Notwithstanding the absence of any formal criteria for determining the level of significance of a project's cumulative contribution to climate change impacts at this time, the VILLAGES OF LAKEVIEW project will be implementing mitigation measures **MM Air 4** through **142**, which address energy conservation and community-wide efficiency measures. Additionally, the project has been developed with relatively high-density residential and mixed uses, which incorporate features like pedestrian oriented design that aim to reduce vehicle trips and trip length in turn reducing GHG emissions. Thus, the County concludes that project greenhouse gas emissions are considered **cumulatively considerable**, and therefore **significant**, based on the need for third party agency regulatory action to achieve the goals of AB 32 and the proposed project's total greenhouse gas emissions in anticipation of stringent thresholds to be adopted by the agencies.

Toxic Air Contaminants

Comparison of without and with project traffic indicates that the project traffic alone in 2020 on the Ramona Expressway accounts for cancer risk between 2.4 and 8.5 in one million. These risk levels resulting from the project alone do not exceed the 10 in one million threshold and would be less than significant if taken alone. Traffic, other than project traffic, will exist on the highway however, and 8.5 out of a maximum of 28.3 in one million represents 30 percent of the total cumulative with project risk which is substantial and considered **cumulatively significant**.

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

5.4 BIOLOGICAL RESOURCES

The focus of the following discussion and analysis is related to the potential adverse impacts related to endangered or threatened species, sensitive or special status species, or on riparian habitat or other sensitive natural community or federally protected wetlands from implementation of the proposed project, THE VILLAGES OF LAKEVIEW Specific Plan. Additionally, the project's potential impact on the movement of fish or wildlife and compliance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and other local policies or ordinances, will be discussed.

In addition to other references, the following references were used in the preparation of this section of the DEIR:

- Albert A. Webb Associates, *Preliminary Regional Water Quality Management Plan for The Villages of Lakeview*, May 2007, revised August 2008. (Appendix H (CD #3))
- California Native Plant Society, *The CNPS Ranking System*, 2008 (Available at <https://cnps.org/cnps/rareplants/ranking.php>, accessed March 25, 2008.)
- Center for Biological Diversity, *Principles of Wildlife Corridor Design*, Monica Bond, October 2003. (Available at <http://www.biologicaldiversity.org/swcbd/PROGRAMS/sprawl/wild-corridors.pdf>, accessed February 22, 2008.)
- County of Riverside, *County of Riverside General Plan, Lakeview/Nuevo Area Plan*, adopted October 7, 2003. (Available at Riverside County Planning Department, Central Files Section or at <http://www.rctlma.org/genplan/content/ap2/lnap.html>, accessed February 18, 2008.)
- County of Riverside, *Western Riverside County Multiple Species Habitat Conservation Plan*, adopted June 17, 2003. (Available for review at the County of Riverside Planning Department or at <http://www.rctlma.org/mshcp/index.html>, accessed February 18, 2008 and August 7, 2008.)
- County of Riverside, *Western Riverside County MSHCP Final Environmental Impact Report/Environmental Impact Statement*, adopted June 17, 2003. (Available at the County of Riverside Planning Department or at <http://www.rctlma.org/mshcp/index.html>, accessed August 7, 2008.)
- ENVIRA, Philippe Vergne, letter regarding RCA Questions and Requested Clarifications of October 3, 2007 Villages at Lakeview LAPM Report, March 7, 2008. (Appendix D.3 (CD #3) of this DEIR as 1st Addendum Letter.)
- Environmental Protection Agency, *National Management Measures to Control Nonpoint Source Pollution from Hydromodification*, July 2007 (Available at www.epa.gov/nps/hydromod/#guide, accessed February 18, 2008.)
- Geosyntec Consultants, *Hydromodification Technical Report*, July 2008. (Appendix I (CD #4))
- Glenn Lukos Associates, Inc., *MSHCP Compliance Report for The Villages of Lakeview*

Specific Plan, Located in the Lakeview/Nuevo Area of Western Riverside County, December 19, 2007. (Appendix D (CD #3))

- Glenn Lukos Associates, Inc., Letter, *Second Addendum to MSHCP Compliance Report for The Villages of Lakeview Specific Plan*, addressed to Michael Richard, March 7, 2008. (Appendix D (CD #3))
- Glenn Lukos Associates, Inc., Letter, *Third Addendum to MSHCP Compliance Report for The Villages of Lakeview Specific Plan*, addressed to Michael Richard, May 21, 2008. (Appendix D (CD #3))
- Glenn Lukos Associates, Inc., *The Villages of Lakeview SP 342, HANS 313 General Biological Report*, June 4, 2008, including Glenn Lukos Associates, Inc., *Jurisdictional Delineation Report for The Villages of Lakeview Specific Plan, Lakeview/Nuevo Area of Western Riverside County, California*, January 5, 2007. (Appendix D (CD #3))
- U.S. Department of Agriculture, Natural Resources Conservation Service, *Soil Survey Geographic (SSURGO) database*. (Available at <http://websoilsurvey.nrcs.usda.gov/app/>, accessed February 18, 2008.)
- U.S. Department of the Interior Fish and Wildlife Service, *Final Environmental Impact Statement and Environmental Impact Report, Section 10 (a) Permit to Allow Incidental Take of the Endangered Stephens' Kangaroo Rat in Riverside County, California, Volume 1*, March 1990. (Available at the Riverside County Habitat Conservation Agency or at www.skrplan.org)
- U.S. Department of Transportation Federal Highway Administration, Caltrans, and the Riverside County Transportation Commission, *Draft Environmental Impact Report/Environmental Impact Statement and Section 4(f) Evaluation Volumes I through III (EA 08-OF3200)*, October 2008. (Available at <http://www.midcountyparkway.org/>, accessed January 17, 2009.)

The following discussion is a summary of the General Biological Report (“Biological Report”) prepared for the proposed project by Glenn Lukos Associates, Inc. (“Glenn Lukos”), dated June 4, 2008.

Setting

THE VILLAGES OF LAKEVIEW Specific Plan comprises approximately 2,800 acres. The Specific Plan Area is located in the Lakeview/Nuevo area and west of the city of San Jacinto in Western Riverside County. The project footprint (“area of development”) comprises 1,840 acres and includes areas of proposed grading, fuel modification zones, and existing facilities. The northern, central, and eastern portions of the project site are extremely flat and support a mix of agricultural and industrial operations associated with the Nutrilite manufacturing facility, an existing chicken ranch, and additional private agricultural operations. The southwestern portion of the property is also flat and contains a combination of uses including rural residential, agriculture, and an equestrian (thoroughbred) farm. The southern portion of the project site gradually slopes upward towards the Lakeview Mountains and also predominately supports agricultural operations. A substantial portion of the Lakeview Mountains comprises the

southeastern portion of the overall project site, the majority of which is proposed as open space. The Colorado River Aqueduct, a Metropolitan Water District (MWD) facility, is located underground and extends east/west through the center of the property.

A large portion of the project site is heavily disturbed due to long standing agricultural activities and development. The majority of the project site consists of agricultural lands, disturbed/developed areas, and ruderal vegetation areas, but does include some areas of native habitats. Farming is presently occurring on approximately 45 percent of the project site. The remaining portion of the project site is part of the Lakeview Mountains. This area supports a number of native vegetation communities, including Riversidean sage scrub, disturbed Riversidean sage scrub, and chamise chaparral.

Vegetation

During vegetation mapping of the project site, Glenn Lukos identified twelve different vegetation types in the Specific Plan Area. Refer to **Figure 5.4-1, Vegetation Map**, for the location of vegetation community types in the project site and Figure 6 of the 2008 Glenn Lukos General Biological Report. They include agriculture, chamise chaparral, disturbed/developed areas, Riversidean sage scrub, ruderal vegetation, ornamental vegetation, disturbed Riversidean sage scrub, non-native grassland, Riversidean sage scrub/cholla, tamarisk scrub, riparian herb, and disturbed alkali playa vernal pools.

The agricultural areas are located on the majority of land north of Ramona Expressway, as well as land in the central, southern, and northeastern portions of the project area and consists of approximately 1,270 acres. These multi-use agricultural areas include active crops (including crops such as alfalfa (*Medicago sativa*), broccoli (*Brassica oleracea* var. *italica*), mint (*Mentha piperita*)) and disked fallow fields.

Chamise chaparral, a shrub-dominated habitat composed primarily of chamise (*Adenostoma fasciculatum*), is located in the eastern portion of this area, primarily within the conservation area in the Lakeview Mountains, and consists of approximately 650 acres. Additional species include California sagescrub (*Artemisia californica*), white sage (*Salvia apiana*), yellow bush-penstemon (*Keckiella antirrhinoides*), branching phacelia (*Phacelia ramosissima*), and desert brittlebush (*Encelia farnosa*).

A chicken farm, a materials stockyard, compost piles, private residences, disked fields, disturbed roadside areas, and other disturbed areas make up the disturbed/developed areas of the proposed project. Disturbed and developed areas comprise approximately 352 acres.

A disturbed alkali playa habitat area occurs in the northwest portion of the project area and consists of approximately 0.10 acre. The vegetation associated with the vernal pools includes non-sensitive plant species commonly associated with vernal pools in the San Jacinto Valley, including wire-stem popcorn flower (*Plagiobothrys leptocladus*) and toad rush (*Juncus bufonius*). During surveys conducted in 2004, it was determined that this area met the definition of a vernal pool. However, during surveys conducted in 2005, evidence of disturbance from agricultural operations was observed, and the area did not exhibit ponding features or vegetation

identified in previous surveys and is thereby considered an atypical vernal pool situation. However, the proposed project will avoid the vernal pool area, including its associated watershed as part of its proposed conservation areas within the floodplain of the San Jacinto River.

Non-native grassland areas mainly occur in the southeastern and eastern portions of the site, adjacent to agricultural areas and the Lakeview Mountains and consist of approximately 19 acres. Vegetation associated with non-native grassland includes wild oat (*Avena* sp.), brome grasses (*Bromus* sp.), barley (*Hordeum* sp.), filaree (*Erodium* sp.), black mustard (*Brassica nigra*), summer mustard (*Hirschfeldia incana*), totalote (*Centaurea melitensis*), annual burweed (*Ambrosia acanthicarpa*), fascicled tarweed (*Deinandra fasciculata*), Kellogg's tarweed (*Deinandra kelloggii*), rancher's fireweed (*Amsinckia menziesii*), and Russian thistle (*Salsola tragus*).

Ornamental vegetation is located throughout the central portion of the site, in association with disturbed/developed areas, and in the northwestern portion of the site and consists of approximately 27 acres. Ornamental vegetation includes gum trees (*Eucalyptus* sp.), salt cedar (*Tamarix ramosissima*), Mediterranean olive (*Olea europea*), oleander, and other ornamental trees and shrubs associated with various residential and industrial areas. Mapped ornamental vegetation includes several windrows of salt cedar and gum trees.

A very small area of riparian herb vegetation is located in the extreme northwest corner of the site, associated with the San Jacinto River and in the proposed conservation area located within the northwestern portion of the Resort Village. Riparian herb areas comprise approximately 0.29 acre.

Riversidean sage scrub is located in the southern and eastern boundary of the proposed development area and in the proposed conservation area identified in the TVOL Specific Plan in the Lakeview Mountains and consists of approximately 289 acres. Riversidean sage includes California sagebrush (*Encelia californica*), California buckwheat (*Eriogonum fasciculatum*), yellow bush penstemon (*Keckiella antirrhinoides*), desert brittlebush (*Encelia farinosa*), California brittlebush (*Encelia californica*), California brickellbush (*Brickellia californica*), white sage (*Salvia apiana*), Mexican elderberry (*Sambucus mexicanas*), branching phacelia (*Phacelia ramosissima*), California wishbone bush (*Mirabilis californicus*), sticky-leaved monkey flower (*Mimulus aurantiacus*), sugar bush (*Rhus ovata*), black sage (*Salvia mellifera*), bush mallow (*Malacothamnus fasciculatus*), linear-leaved stillingia (*Stillingia linearifolia*), and coastal prickly pear (*Opuntia littoralis*). A few patches of valley cholla (*Opuntia parryi*) are intermixed with the Riversidean sage scrub along the northern base of the Lakeview Mountains. Areas of disturbed Riversidean sage scrub are intermixed with unvegetated areas and ruderal vegetation along the southern and eastern portions of the proposed development area adjacent to the Lakeview Mountains.

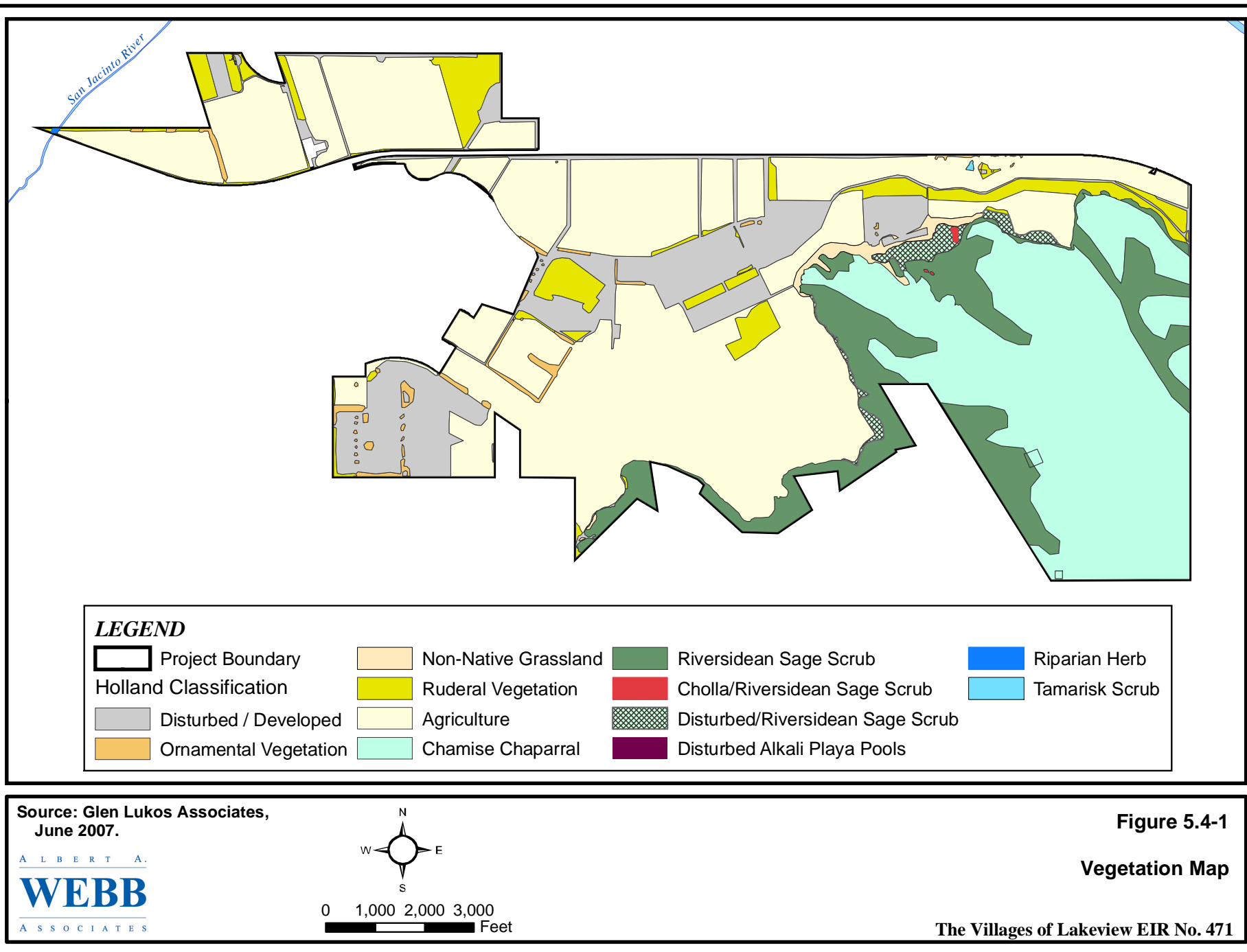
Riversidean sage scrub/cholla is located within Riversidean sage scrub vegetation. Three patches of valley cholla (*Opuntia parryi*) associated with Riversidean sage scrub are located within the eastern portion of the property at the northern base of the Lakeview Mountains. Riversidean sage scrub/cholla areas comprise approximately 0.92 acre.

Disturbed Riversidean sage scrub include areas that once supported more substantial amounts of Riversidean sage scrub but as a result of long-standing disturbances now support sparse amounts of scrub vegetation intermixed with ruderal vegetation and unvegetated areas. Disturbed Riversidean sage scrub areas occur within the southern and eastern portion of the project site adjacent to the Lakeview Mountains. Disturbed Riversidean sage scrub areas comprise approximately 29 acres.

Ruderal vegetation occurs throughout the Specific Plan Area within and adjacent to agricultural areas, roadsides, around developed areas, and other areas of past disturbance that allowed the establishment of non-native and native ruderal species. Ruderal vegetation areas comprise approximately 153 acres. Plants associated with ruderal areas include: black mustard, summer mustard, filaree, lamb's quarters (*Chenopodium album*), cheeseweed (*Malva parviflora*), Russian thistle, London rocket (*Sisymbrium irio*), five-hook bassia (*Bassia hyssopifolia*), annual burweed (*Ambrosia acanthicarpa*), Bermuda grass (*Cynodon dactylon*), rancher's fireweed, western sunflower (*Helianthus annuus*), pineapple weed (*Chamomilla suaveolens*), giant pineapple weed (*Oncosiphon piluliferum*), wild radish (*Raphanus sativus*), tocalote, riggut brome (*Bromus diandrus*), horseweed (*Conyza* sp.), wild oat, broad-leaved peppergrass (*Lepidium latifolium*), fascicled tarweed, Kellogg's tarweed, paniculate tarplant, and telegraph weed (*Heterotheca grandiflora*).

A small area of tamarisk scrub, comprised of patches of shrubby salt cedar (*Tamarix ramosissima*), are located in the eastern portion of the site south of Ramona Expressway within a former campground site. Tamarisk scrub areas comprise approximately 0.46 acre.

For a complete list of plant species observed on site see Appendix D (CD #3), Glenn Lukos General Biological Report.



Wildlife

Glenn Lukos biologists observed a variety of animal species during on-site surveys. Avian species directly observed include: great egret (*Ardea alba*), great blue heron (*Ardea herodias*), cattle egret (*Bubulcus ibis*), black-crowned night-heron (*Nycticorax nycticorax*), white-faced ibis (*Plegadis chihi*), turkey vulture (*Cathartes aura*), northern pintail (*Anas acuta*), mallard (*Anas platyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), American kestrel (*Falco sparverius*), chukar (*Alectoris chukar*), California quail (*Callipepla californica*), American coot (*Fulica americana*), killdeer (*Charadrius vociferus*), black-necked stilt (*Himantopus mexicanus*), American avocet (*Recurvirostra americana*), whimbrel (*Numenius phaeopus*), California gull (*Larus californicus*), ring-billed gull (*Larus delawarensis*), rock dove (*Columbia livia*), mourning dove (*Zenaida macroura*), greater roadrunner (*Geococcyx californianus*), barn owl (*Tyto alba*), great horned owl (*Bubo virginianus*), Anna's hummingbird (*Calypte anna*), Costa's hummingbird (*Calypte costa*), Allen's hummingbird (*Selasphorus sasin*), northern flicker (*Colaptes auratus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), western kingbird (*Tyrannus verticalis*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), cliff swallow (*Petrochelidon pyrrhonota*), northern rough-winged swallow (*Stelgidopteryx serripennis*), violet-green swallow (*Tachycineta thalassina*), bushtit (*Psaltiriparus minimus*), canyon wren (*Catherpes mexicanus*), rock wren (*Salpinctes obsoletus*), Bewick's wren (*Thryomanes bewickii*), Mountain kingbird (*Sialia currocoides*), wrentit (*Chamaea fasciata*), northern mockingbird (*Mimus polyglottos*), California thrasher (*Toxostoma redivivum*), European starling (*Sturnus vulgaris*), American pipit (*Anthus rubescens*), yellow-rumped warbler (*Dendroica coronata*), orange-crowned warbler (*Vermivora celata*), lark sparrow (*Chondestes grammacus*), Lincoln's sparrow (*Melospiza lincolni*), California towhee (*Pipilo crissalis*), spotted towhee (*Pipilo maculatus*), chipping sparrow (*Spizella passerina*), white-crowned sparrow (*Zonotrichia leucophrys*), red-winged blackbird (*Agelaius phoeniceus*), Brewer's blackbird (*Euphagus cyanocephalus*), hooded oriole (*Icterus cucullatus*), western meadowlark (*Sturnella neglecta*), Lawrence's goldfinch (*Carduelis lawrencei*), lesser goldfinch (*Carduelis psaltria*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*).

Reptile and amphibian species seen on site include California chorus frog (*Pseudacris cadaverina*), Pacific chorus frog (*Pseudacris regilla*), western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), coastal western whiptail (*Aspidoscelis tigris multiscutatus*), racer (*Coluber constrictor*), coachwhip (*Masticophis flagellum*), gopher snake (*Pituophis melanoleucus*).

Common small mammals that were either observed directly or indirectly through tracks or droppings include: Virginia opossum (*Didelphis virginiana*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), brush mouse (*Peromyscus boylii*), cactus mouse (*Peromyscus eremicus*), deer mouse (*Peromyscus maniculatus*), western harvest mouse (*Reithrodontomys megalotis*), feral dog (*Canis familiaris*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), long-tailed weasel (*Mustela frenata*), striped skunk (*Mephitis mephitis*), feral cat (*Felis catus*), bobcat (*Lynx rufus*), feral horse (*Equus caballus*), and Barbary sheep (*Ammotragus lervia*). For a complete list of animal species observed on site, see Appendix D (CD #3), Glenn Lukos General Biological Report.

Special-Status Plant Species

Special status plant species include those classified as endangered or threatened, proposed for listing as endangered or threatened, candidates species for listing by a federal (U.S. Fish and Wildlife Service) or state (California Department of Fish and Game) resource agency, considered a federal Species of Concern or state Species of Special Concern. In addition, plants included on Lists 1, 2, 3, or 4 of the California Native Plant Society (CNPS) Inventory are also considered special-status.

The site contains four special-status plant species: Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Paniculate tarplant (*Deinandra paniculata*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and Thread-leaved brodiaea (*Brodiaea filifolia*). Species with the potential to occur on site due to the presence of suitable habitat and/or marginally suitable habitat are listed in **Table 5.4-A**, below, along with their status and relative occurrence potential.

Special-Status Wildlife Species

Special-status or sensitive wildlife species include those that are state or federally listed as threatened or endangered, are proposed for listing as threatened or endangered, have been designated as state or federal candidates for listing, state or federal species of concern, or California Fully Protected.

Twenty-six special-status wildlife species were detected on or immediately adjacent to the Specific Plan Area including: the granite spiny lizard (*Sceloporus orcuttii orcuttii*), orange-throated whiptail (*Cnemidophorus hyperythrus beldingi*), coastal western whiptail (*Cnemidophorus tigris multiscutatus*), red-diamond rattlesnake (*Crotalus ruber*), western burrowing owl (*Athene cunicularia hypugaea*), Bell's sage sparrow (*Amphispiza belli belli*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Cooper's hawk (*Accipiter cooperi*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), loggerhead shrike (*Lanius ludovicianus*), northern harrier (*Circus cyaneus*), prairie falcon (*Falco mexicanus*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), California horned lark (*Eremophila alpestris actia*), great blue heron (*Ardea herodias*), black-crowned night heron (*Nycticorax nycticorax*), white-faced ibis (*Plegadis chihi*), California gull (*Larus californicus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), Stephen's kangaroo rat (*Dipodomys stephensi*), Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego desert woodrat (*Neotoma lepida intermedia*), bobcat (*Lynx rufus*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). Refer to **Figure 5.4-2, Sensitive Species**, for locations where sensitive species were observed within the Specific Plan Area. Species with the potential to occur on site, due to the presence of suitable habitat and/or marginally suitable habitat are listed in **Table 5.4-B**, below, along with their status and relative occurrence potential.

Table 5.4-A
Special-Status Plant Species with the Potential to Occur On Site

Species Name	Status	Habitat Requirements	Occurrence on Site
California Orcutt grass <i>Orcuttia californica</i>	Federal: FE State: SE CNPS: List 1B.1 MSHCP: Covered	Vernal pools.	Low
Chaparral sand verbena <i>Abronia villosa</i> var. <i>aurita</i>	Federal: None State: None CNPS: List 1B.1 MSHCP: Not covered	Sandy soil in chaparral and coastal sage scrub.	Moderate, Lakeview Mountains
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CNPS: List 1B.1 MSHCP: Covered	Playas, vernal pools, marshes and swamps (coastal salt).	Present
Davidson's saltscale <i>Atriplex serenana</i> var. <i>davidsonii</i>	Federal: None State: None CNPS: List 1B.2 MSHCP: Covered (CAPSSA Number 3)	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Low
Intermediate mariposa lily <i>Calochortus weedii</i> var. <i>intermedius</i>	Federal: None State: None CNPS: List 1B.2 MSHCP: Covered	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Moderate, Lakeview Mountains
Little mousetail <i>Myosurus minimus</i> ssp. <i>apus</i>	Federal: FSC State: None CNPS: List 3.1 MSHCP: Covered (CAPSSA Number 3)	Valley and foothill grassland, vernal pools (alkaline soils).	Low
Long-spined spineflower <i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Federal: None State: None CNPS: List 1B.2 MSHCP: Covered	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Moderate, Lakeview Mountains
Many-stemmed dudleya <i>Dudleya multicaulis</i>	Federal: None State: None CNPS: List 1B.2 MSHCP: Covered	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Low
Mud nama <i>Nama stenocarpum</i>	Federal: None State: None CNPS: List 2.2 MSHCP: Covered (CAPSSA Number 3)	Marshes, swamps, vernal pools, and stockponds (assorted freshwater).	Low
Munz's onion <i>Allium munzii</i>	Federal: FE State: ST CNPS: List 1B.1 MSHCP: Covered	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands	Low

Species Name	Status	Habitat Requirements	Occurrence on Site
Palmer's grapplinghook <i>Harpagonella palmeri</i>	Federal: None State: None CNPS: List 4.2 MSHCP: Covered	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Low
Parish's brittlescale <i>Atriplex parishii</i>	Federal: None State: None CNPS: List 1B.1 MSHCP: Covered (CAPSSA Number 3)	Chenopod scrub, playas, vernal pools.	Low
Paniculate tarplant <i>Deinandra paniculata</i>	Federal: None State: None CNPS: List 4.2 MSHCP: Not Covered	Coastal sage scrub, and valley and foothill grasslands (usually vernal mesic), and disturbed ruderal areas.	Present
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	Federal: None State: None CNPS: List 3.2 MSHCP: Covered	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Moderate, Lakeview Mountains
Plummer's mariposa lily <i>Calochortus plummerae</i>	Federal: None State: None CNPS: List 1B.2 MSHCP: Covered	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley, and foothill grassland.	Low
Round-leaved filaree <i>Erodium macrophyllum</i>	Federal: None State: None CNPS: List 2.1 MSHCP: Covered	Clay soils in cismontane woodland, valley and foothill grassland.	Low
Salt spring checkerbloom <i>Sidalcea neomexicana</i>	Federal: None State: None CNPS: List 2.2 MSHCP: Not covered	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Moderate, Lakeview Mountains, Northwest
San Diego ambrosia <i>Ambrosia pumila</i>	Federal: FE State: None CNPS: List 1B.1 MSHCP: Covered (NEPSSA Number 3)	Chaparral, coastal sage scrub, valley, and foothill grassland, vernal pools. Often in disturbed habitats.	Low
San Jacinto Valley crownscale <i>Atriplex coronata</i> var. <i>notaior</i>	Federal: FE State: None CNPS: List 1B.1 MSHCP: Covered	Alkaline soils in chenopod scrub, valley and foothill grassland, vernal pools.	Low
Slender-horned spineflower <i>Dodecahema leptoceras</i>	Federal: FE State: SE CNPS: List 1B.1 MSHCP: Covered (NEPSSA Number 3)	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Low
Smooth tarplant <i>Centromadia pungens</i> ssp. <i>laevis</i>	Federal: None State: None CNPS: List 1B.1 MSCHP: Covered	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Present

Species Name	Status	Habitat Requirements	Occurrence on Site
	(CAPSSA Number 3)		
South coast saltscale <i>Atriplex pacifica</i>	Federal: None State: None CNPS: List 1B.2 MSHCP: Not covered	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Low
Spreading navarretia <i>Navarretia fossalis</i>	Federal: FT State: None CNPS: List 1B.1 MSHCP: Covered	Vernal pools, playas, chenopod scrub, marshes and swamps (assorted shallow freshwater).	Low
Thread-leaved brodiaea <i>Brodiaea filifolia</i>	Federal: FT State: SE CNPS: List 1B.1 MSHCP: Covered (CAPSSA Number 3)	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Present
Vernal barley <i>Hordeum intercedens</i>	Federal: None State: None CNPS: List 3.2 MSHCP: Covered	Coastal dunes, coastal sage scrub, valley, and foothill grassland (saline flats and depressions), vernal pools.	Low
Wright's trichocoronis <i>Trichocoronis wrightii</i> var. <i>wrightii</i>	Federal: None State: None CNPS: List 2.1 MSHCP: Covered	Alkaline soils in meadows and seeps, marshes and swamps, riparian scrub, vernal pools.	Low

Federal

FE – Federally Endangered

FT – Federally Threatened

State

SE – State Endangered

ST – State Threatened

CNPS List

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 more information is needed.

List 4 – Plants of limited distribution.

CNPS Threat Code Extensions

0.1 – Seriously endangered in California.

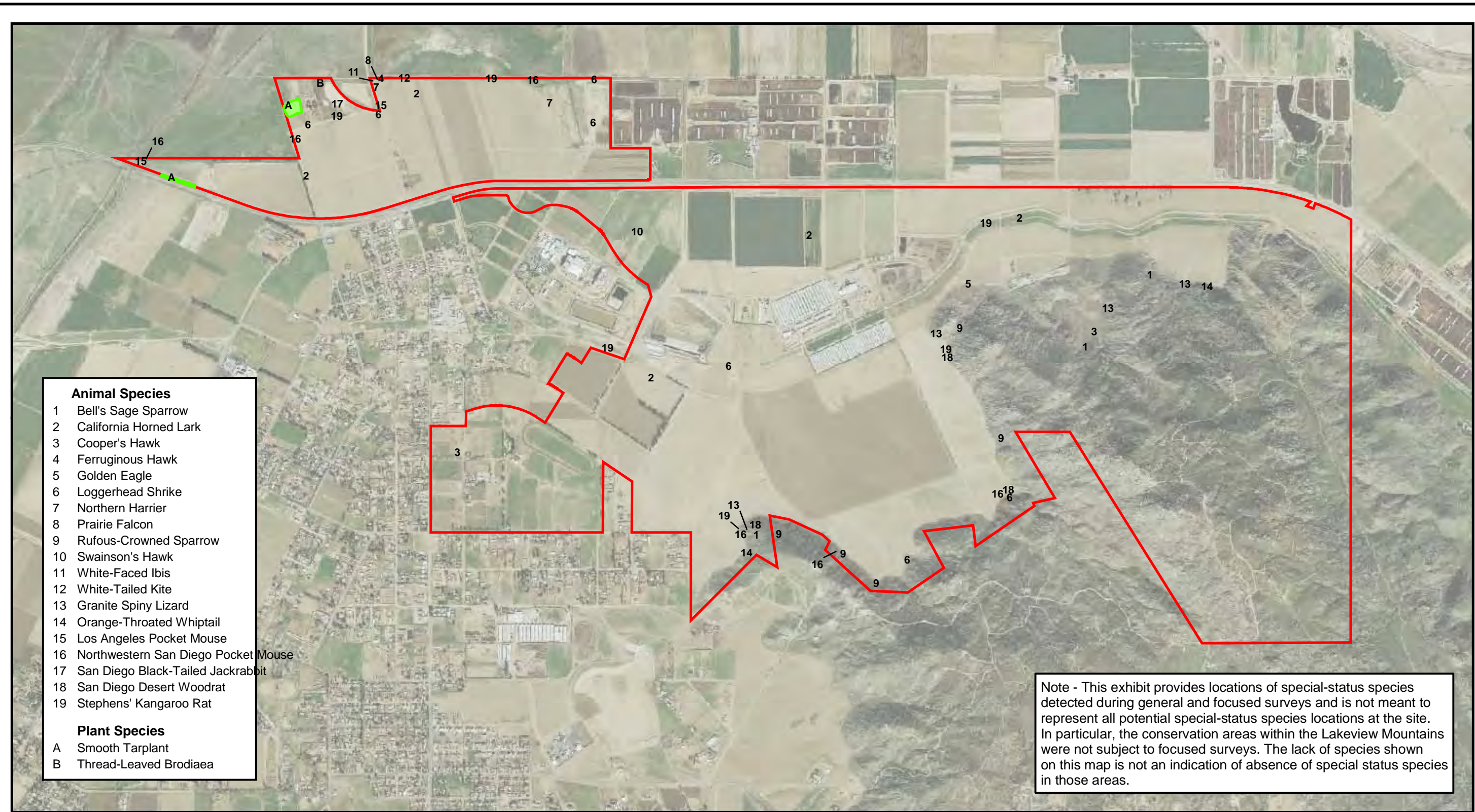
0.2 – Fairly endangered in California.

0.3 – Not very endangered in California.

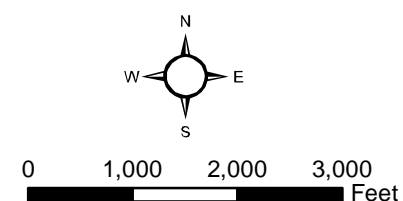
MSHCP

NEPSSA – Narrow Endemic Plant Species Survey Area

CAPSSA – Criteria Area Plant Species Survey Area



Sources: Glenn Lukos Associates, June 2008;
Digital Globe, March 2008.



LEGEND

- Project Boundary
- Coulter's Goldfields

Figure 5.4-2
Sensitive Species

The Villages of Lakeview EIR No. 471

Table 5.4-B
Special-Status Wildlife Species with the Potential to Occur On Site

Species Name	Status	Habitat Requirements	Occurrence Potential
Invertebrates			
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	Federal: FE State: None MSHCP: Covered	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Does not occur
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Federal: FT State: None MSHCP: Covered	Seasonal vernal pools.	Does not occur
Amphibians			
Western spadefoot <i>Spea hammondi</i>	Federal: FSC State: None CDFG: CSC MSHCP: Covered	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Low
Reptiles			
Belding's orange-throated whiptail <i>Aspidoscelis hyperythra beldingi</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	Present
Coast patch-nosed snake <i>Salvadora hexalepis virgulata</i>	Federal: None State: None CDFG: CSC MSHCP: Not Covered	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Moderate, Lakeview Mountains
Coastal western whiptail <i>Aspidoscelis tigris stejnegeri</i>	Federal: None State: None CDFG: None MSHCP: Covered	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Present
Granite spiny lizard <i>Sceloporus orcuttii</i>	Federal: None State: None CDFG: None MSHCP: Covered	Chaparral, scrub, and riparian habitats, but closely tied to fractured granodiorite rock outcrops.	Present
Northern red-diamond rattlesnake <i>Crotalus ruber</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Moderate, Lakeview Mountains
Rosy boa <i>Charina trivirgata</i>	Federal: None State: None CDFG: None MSHCP: Not covered	Coastal sage scrub, chaparral, or mixed habitats, commonly with rocky soils and outcrops. Also in oak woodlands and riparian areas bordering scrub habitats.	Moderate, Lakeview Mountains
San Bernardino ringneck snake <i>Diadophis punctatus modestus</i>	Federal: None State: None CDFG: None MSHCP: Not Covered	Moist habitats including woodlands, forest, grasslands, chaparral, farms, and gardens.	Moderate, Lakeview Mountains
San Diego banded gecko <i>Coleonyx variegatus abbotti</i>	Federal: None State: None CDFG: None MSHCP: Covered	Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.	Moderate, Lakeview Mountains
San Diego horned lizard <i>Phrynosoma coronatum blainvillei</i>	Federal: None State: None CDFG: CSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian	Moderate, Lakeview Mountains

Species Name	Status	Habitat Requirements	Occurrence Potential
	MSHCP: Covered	woodlands.	
Silvery legless lizard <i>Anniella pulchra pulchra</i>	Federal: FSC State: None CDFG: CSC MSHCP: Not Covered	Occurs primarily in areas with sandy or loose organic soil, or where there is plenty of leaf litter. Associated with coastal sage scrub, chaparral, coastal dunes, valley/foothill grasslands, oak woodlands, and pine forests.	Moderate, Lakeview Mountains
Southwestern pond turtle <i>Clemmys marmorata pallida</i>	Federal: None State: CSC MSHCP: Covered	Inhabits slow moving permanent or intermittent streams, small ponds, small lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and sewage treatment lagoons	Does not occur
Birds			
Bald eagle (migrant/wintering) <i>Haliaeetus leucocephalus</i>	Federal: FT State: SE MSHCP: Covered	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Low
Bell's sage sparrow <i>Amphispiza belli belli</i>	Federal: FSC State: None CDFG: CSC MSHCP: Covered	Chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains.	Present
Black-crowned night heron (rookery site) <i>Nycticorax nycticorax</i>	Federal: None State: None MSHCP: Covered	Requires marshes, ponds, reservoirs, and estuaries for foraging and also occurs along the margins of lacustrine, large riverine, and fresh and saline emergent habitats. In inland areas, most colonies are associated with large wetlands.	Observed as wintering migrant – no rookeries present
Burrowing owl <i>Athene cunicularia hypugaea</i>	Federal: FSC State: None CDFG: CSC MSHCP: Covered	Shortgrass prairies, grasslands, lowland scrub, agricultural land, coastal dunes, desert floors, and some artificial, open areas as a yearlong resident.	High
California gull <i>Larus californicus</i>	Federal: None State: None CDFG: CSC (nesting only) MSHCP: Not covered	Common winter gull of the west coast, breeding inland across the western U.S. Breeds near large bodies of water.	Observed as winter migrant – no nesting occurs on site
California horned lark (nesting/foraging) <i>Eremophila alpestris actia</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Occupies a variety of open habitats, usually where trees and large shrubs are absent.	Present
Coastal cactus wren <i>Campylorhynchus brunneicapillus couesi</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Moderate
Coastal California gnatcatcher <i>Poliophtila californica californica</i>	Federal: FT State: None CDFG: CSC MSHCP: Covered	Low elevation coastal sage scrub and coastal bluff scrub.	Moderate
Cooper's hawk (foraging/nesting) <i>Accipiter cooperi</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Primarily occurs in riparian areas and oak woodlands, most commonly in montane canyons. Known to use urban areas, occupying trees among residential and	Present

Species Name	Status	Habitat Requirements	Occurrence Potential
		commercial.	
Ferruginous hawk (wintering/roosting/foraging) <i>Buteo regalis</i>	Federal: FSC State: None CDFG: CSC MSHCP: Covered	Open, dry country, perching on trees, posts, and mounds. In California, wintering habitat consists of open terrain and grasslands of the plains and foothills.	Present
Golden eagle (roosting) <i>Aquila chrysaetos</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Present
Great blue heron (rookery site) <i>Ardea herodias</i>	Federal: None State: None MSHCP: Covered	Breeds most commonly in isolated areas, such as wooded swamps or predator-free islands.	Observed as wintering migrant – no rookeries present
Least Bell's vireo <i>Vireo bellii pusillus</i>	Federal: FE State: SE CNDDDB: G5T2S2 MSHCP: Covered	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Low
Loggerhead shrike <i>Lanius ludovicianus</i>	Federal: FSC State: None CDFG: CSC MSHCP: Covered	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	Present
Long-eared owl (nesting) <i>Asio otus</i>	Federal: None State: None CDFG: CSC MSHCP: Not Covered	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Moderate
Merlin (wintering) <i>Falco columbaris</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Open woodland and grassland, cultivated fields, marshes, estuaries, and rarely in open deserts and heavily wooded areas.	Moderate, Lakeview Mountains
Mountain plover (wintering) <i>Charadrius montanus</i>	Federal: FSC State: None CDFG: CSC MSHCP: Covered	Does not nest in California. Occurs within the state only during the wintering season. Largest numbers winter among grasslands and agricultural areas within the interior areas of the state.	High – potential to occur on site for winter foraging.
Northern harrier (nesting) <i>Circus cyaneus</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Observed as winter migrant – no nesting occurs on site
Peregrine falcon (nesting) <i>Falco peregrinus anatum</i>	Federal: FSC State: SE CDFG: CFP MSHCP: Covered	Although part of its historic breeding range, this species does not breed in southern California. In the west, breeding habitat consists of high cliffs along the coast.	Moderate
Prairie falcon (nesting) <i>Falco mexicanus</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Breeds in mountainous regions and shortgrass prairies, nesting on cliff ledges.	Observed as winter migrant – no nesting occurs on site

Species Name	Status	Habitat Requirements	Occurrence Potential
Sharp-shinned hawk (nesting) <i>Accipiter striatus</i>	Federal: None State: None CDFG: CSC (nesting) MSHCP: Covered	Breeds in young coniferous forests with high canopy associations. Habitats that they are documented to use include ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine.	Moderate – potential to occur as winter forager, no potential to breed on site.
Short-eared owl (nesting) <i>Asio flammeus</i>	Federal: None State: None CDFG: CSC MSHCP: Not Covered	Open areas with few trees, such as annual and perennial grasslands, prairies, tundra, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands. Requires dense vegetation and tall grasses, brush, ditches, and wetlands are used for resting and roosting cover.	Moderate
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Grass covered hillsides, coastal sage scrub, and chaparral.	Present
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	Federal: FE State: SE MSHCP: Covered	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur
Swainson's hawk (nesting) <i>Buteo swainsoni</i>	Federal: None State: ST MSHCP: Covered	Uses open desert, sparse shrub lands, grassland, or cropland containing scattered, large trees or small groves. During migration movements, they rest and feed in grasslands and harvested fields.	Low – observed during migratory activity, area not within breeding range.
Tricolored blackbird (nesting colony) <i>Agelaius tricolor</i>	Federal: FSC State: None CDFG: CSC (nesting) MSHCP: Covered	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	High
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Federal: FC State: SE MSHCP: Covered	Dense, wide riparian woodlands with well-developed understories.	Does not occur
White-faced ibis (rookery site) <i>Plegadis chihi</i>	Federal: FSC State: None CDFG: CSC MSHCP: Covered	Winter foraging occurs in wet meadows, marshes, ponds, lakes, rivers, and agricultural fields. Requires extensive marshes for nesting.	Observed as foraging species – no nesting occurs on site
White-tailed kite (nesting) <i>Elanus leucurus</i>	Federal: FSC State: None CDFG: CFP MSHCP: Covered	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Observed as foraging species – no nesting occurs on site
Yellow-breasted chat <i>Icteria virens</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Low
Yellow warbler <i>Dendroica petechia</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Breeds in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Low
Mammals			

Species Name	Status	Habitat Requirements	Occurrence Potential
American badger <i>Taxidea taxus</i>	Federal: None State: None CDFG: CSC MSGCP: Not Covered	Occurs in drier shrub, forest, and herbaceous habitats. Needs open, uncultivated ground and friable soils for digging burrows. Preys on burrowing rodents.	High
Bobcat <i>Lynx rufus</i>	Federal: None State: None MSHCP: Covered	Widespread throughout western Riverside County, but most closely associated with rocky and brushy areas near springs or other perennial water sources, primarily in foothills comprised of chaparral habitats.	Present
Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Fine, sandy soils in coastal sage scrub and grasslands.	Moderate
Mountain lion <i>Puma concolor</i>	Federal: None State: None MSHCP: Covered	Rocky areas, cliffs, and ledges that provide cover within open woodlands and chaparral, as well as riparian areas that provide protective habitat connections for movement between fragmented core habitat.	Low
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Present
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	Federal: FE State: CSC MSHCP: Covered	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Low
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	Federal: None State: None CDFG: CSC MSHCP: Covered	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Present
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Federal: None State: None CDFG: CSC CNDDB: G5T3S3 MSHCP: Covered	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Present
Southern grasshopper mouse <i>Onychomys torridus ramona</i>	Federal: None State: None CDFG: CSC MSHCP: Not Covered	Coastal sage scrub and grasslands.	Moderate
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	Federal: FE State: ST CDFG: None MSHCP: Covered	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Present
Western mastiff bat <i>Eumops perotis californicus</i>	Federal: None State: None CDFG: CSC MSHCP: Not Covered	Occurs among rock features within a variety of habitats including desert scrub, chaparral, oak woodland, and mixed conifer forests.	Moderate within Lakeview Mountains
Western yellow bat <i>Lasiurus xanthinus</i>	Federal: None State: None CDFG: None MSHCP: Not Covered	Western yellow bats are thought to be non-colonial. Individuals usually roost in trees, hanging from the underside of a leaf.	High

Federal

FE – Federally Endangered
FT – Federally Threatened
FPT – Federally Proposed Threatened
FSC – Federal Species of Concern

State

SE – State Endangered
ST – State Threatened

CDFG

CSC – California Species of Concern
CFP – California Fully-Protected Species

Jurisdictional Resources

Pursuant to Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (ACOE) regulates the discharge of dredged and/or fill material into waters of the United States. The term “waters of the United States” is defined in the ACOE regulations at 33 CFR 328.3(a) as:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- (2) All interstate waters including interstate wetlands;*
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
 - (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
 - (ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or*
 - (iii) Which are used or could be used for industrial purpose by industries in interstate commerce...*
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition;*
- (5) Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;*
- (6) The territorial seas;*
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.*
- (8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.*

In the absence of wetlands, the limits of the ACOE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark (OHWM) which is defined in 33 CFR 328.3(e) as: *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes*

in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider characteristics of the surrounding area.

The term “wetlands” (a subset of “waters of the United States”) is defined in 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support ... a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the ACOE published the Wetland Delineation Manual, a manual to guide its field personnel in determining jurisdictional wetland boundaries. The delineation of features within the Specific Plan Area was performed using, where appropriate, the 1987 Wetland Delineation Manual, the standard protocol at the time of the Notice of Preparation of this Environmental Impact Report and at the time of site evaluations (November 2003, March, August, and October 2004, and November 2005). In December 2006, the ACOE issued a special public notice of availability of the Arid West Supplement to the 1987 Wetlands Delineation Manual. This supplement served as an interim document to be tested for one year before finalization. The supplement was to be used during wetland delineations effective 30 days from the date of the public notice. The Arid West Supplement is still under consideration by the ACOE. Field data collected for wetland delineations using the 1987 Manual prior to the effective date will be grandfathered.

The methodology set forth in the 1987 Wetland Delineation Manual generally requires that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit, at least minimal hydric characteristics. A wetland should normally meet each of the following three criteria:

- More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands, Reed, P.B., Jr. 1988, U.S. Fish and Wildlife Service Biological Report 88(26.10);
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year.

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the California Department of Fish and Game (CDFG) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife. CDFG defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFG’s definition of “lake” includes “natural lakes or man-made reservoirs.”

CDFG jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. CDFG Legal Advisor has prepared the following option:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects, and riparian vegetation will be treated like natural waterways...
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFG] as natural waterways...
- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

CDFG jurisdiction closely mirrors that of the ACOE. Exceptions include CDFG's exclusion of isolated wetlands (those not associated with a river, stream, or lake), the addition of artificial stock ponds and irrigation ditches constructed in uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetlands status.

The project site contains 14 drainage features, Labeled A through N, that ultimately connect to the San Jacinto River (a water of the United States), and are therefore considered to be waters of the United States, themselves. This includes a very small portion of the San Jacinto River, located in the extreme western portion of the plan area, and 13 other drainage features that are ultimately hydrologically connected to the San Jacinto River, either through direct flows, or by sheet flows. In addition, the project site contains disturbed alkali playa vernal pools, portions of which at one time met the criteria for vernal pools. Specifically, these areas had previously exhibited all three parameters for an ACOE-defined wetland and supports vernal pool indicator plants, but due to farming disturbances, no longer exhibits all of the parameters. These features are not directly connected to another water of the United States; however, due to their proximity to the San Jacinto River, the vernal pools were identified as adjacent wetlands subject to the jurisdiction of the ACOE. The project site contains a total of 1.86 acres of waters of the United States, of which 0.10 acre consists of jurisdictional wetlands from the vernal pool area. Refer to **Figure 5.4-3, Jurisdictional Features**, for the location of ACOE and CDFG jurisdictional features located within the project site.

The San Jacinto River, labeled Drainage A, occurs in the extreme western tip of the project site, where the river flows under the Ramona Expressway and supports ACOE jurisdictional wetlands. Drainages B, C, and the majority of D are in the northern portion of the project site, north of Ramona Expressway. These drainages do not exhibit the parameters to meet ACOE jurisdictional wetland requirements. Drainage B is an unvegetated roadside drainage ditch that runs along Marvin Road. Drainage C consists of small portions of a man-made agricultural ditch that is vegetated with predominately non-native, ruderal plant species. Drainage D is a man-made drainage ditch that originates south of, and crosses Ramona Expressway through a pipe culvert, extending north through agricultural areas before joining Drainage C. Drainage D is unvegetated in some areas and supports a dominance of ruderal species in other areas.

Drainage E originates in the southern project area. Drainage E does not support ACOE jurisdictional wetlands. Drainage E consists of a linear ephemeral drainage that conveys sheet flows from the Lakeview Mountains, extending north through agricultural areas, along the McAnally egg farm and into an agricultural field associated with the Nutrilite facility. This drainage is primarily unvegetated with the exception of non-native upland species. Drainages F, G, H, I, and J originate south of the project area in the Lakeview Mountains. These drainages terminate in agricultural areas, where flows continue on as non-jurisdictional sheet flows. These drainages do not exhibit the parameters to meet ACOE jurisdictional wetland requirements. Drainage K originates east of the project site, extending approximately 100 feet into the project area before proceeding as sheet flows through an agricultural field. Drainage K does not exhibit the parameters to meet ACOE jurisdictional wetland requirements and is vegetated predominately with ruderal species.

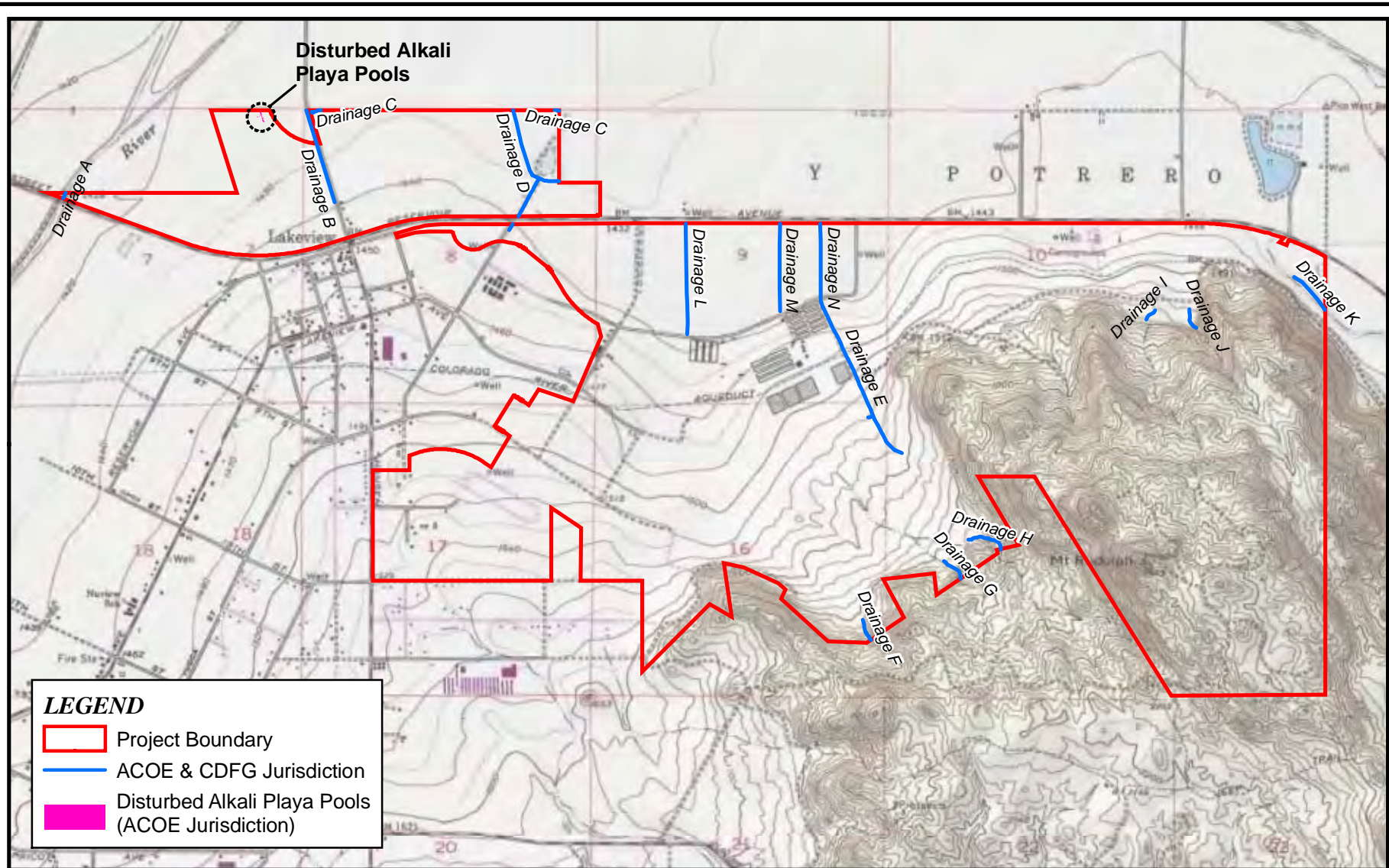
Drainages L, M, and N are located in the central portion of the project area, south of the Ramona Expressway. These features consist of unvegetated flow areas that are artificially constrained by man-made berms in order to divert sheet flows from adjacent agricultural fields. The flows are conveyed to Ramona Expressway where they continue off site as unconfined sheet flows along the roadway. Drainage N conveys flows from Drainage E. Although, if not for the artificial berms, the flows conveyed by Drainages L, M, and N may otherwise exist only as sheet flows, the ACOE has identified these drainage features as jurisdictional waters of the United States since the flows within these features do create physical indicators of an OHWM and since these features are hydrologically connected to other waters of the United States.

The project site contains a total of 1.86 acres of waters of the United States of which 1.76 acres is CDFG jurisdiction, none of which supports riparian vegetation, and includes the majority of areas within ACOE jurisdiction. The 0.10 acre disturbed alkali playa area does not exhibit a bed, bank, and channel, and it is not considered a lake as required under Section 1600 of the Fish and Game Code and is therefore not subject to CDFG jurisdiction.

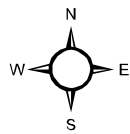
Existing Site Drainage Patterns

THE VILLAGES OF LAKEVIEW Specific Plan Area is located at the base of the Lakeview Mountains in eastern Riverside County. The majority of the site currently drains to the north toward the San Jacinto River. The site is generally transected into upland and lowland areas by Ramona Expressway and the Colorado River Aqueduct. The upland areas gently slope away from the toe of the Lakeview Mountains where overland flow and small ravines convey runoff from the on-site properties and rugged, mountainous upland areas. On-site drainage from the lowland areas is generally contained by berms placed around the perimeter of the fields while upland runoff is generally routed around fields by roadside ditches and earthen bermed conveyances.

Culverts crossing beneath Ramona Expressway convey the majority of runoff that makes it down to this low end of the catchment. However, closed depressions exist at many locations along the south side of Ramona Expressway east of Fifth Street, where runoff generally appears to pond and infiltrate except during large storm events where the roadway may be overtopped.



Sources: Glen Lukos Associates,
June 2007; ESRI/USGS.



0 1,000 2,000 3,000
Feet

Figure 5.4-3

Jurisdictional Features

The Villages of Lakeview EIR No. 471

Runoff that makes it to the north side of Ramona Expressway east of Fifth Street is either conveyed to the west by roadside ditches or is discharged to the off-site dairy farms north of the project area. Runoff that makes it north of Ramona Expressway west of Fifth Street is conveyed to the northwest on-site agricultural fields where it either infiltrates or is routed by earthen berms toward the northwest corner of the project site. Frequent tillage of these fields and berms appear to regularly change the on-site drainage characteristics. However, all of the on-site fields north of Ramona Expressway and east of Davis Road appear to generally drain north to Marvin Road where runoff is then conveyed west of the roadside to a 12-inch culvert that crosses under Marvin Road approximately 100–200 feet east of Davis Road.

The Lakeview Dam is located south of the project site and intercepts surface runoff from over 7 square miles of the Lakeview Mountains. Discharges from the dam enters an unstabilized drainage ditch that turns west at Brown Street and then traverses in a northwest direction across several off-site private parcels to Wolfskill Avenue. The drainage ditch continues west on Wolfskill Avenue and then turns north on the east side of Hansen Avenue where it eventually crosses under Ramona Expressway through a 24-inch culvert and continues along Davis Road to the San Jacinto Wildlife Area.

East of Bridge Street the project site and off site areas on the northeast facing slope drains to two large culverts under Ramona Expressway. These culverts discharge to a detention pond that appears to overflow to a perennial lake, both of which are located on the Pastime Lakes Dairy property on the north side of Ramona Expressway.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of 146 species and their associated habitats in Western Riverside County. The MSHCP will enhance and maintain biological diversity and ecosystem processes while allowing future growth. The MSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as amended, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The MSHCP will result in an MSHCP Conservation Area in excess of 500,000 acres.

The MSHCP Conservation Area is made up of Criteria Area, Public/Quasi-Public Lands, Rural Mountainous Designations, and American Indian Lands. The Conservation Area is comprised of a variety of existing and proposed Cores, extensions of Existing Cores, Linkages, Constrained Linkages, and Noncontiguous Habitat Blocks. The Specific Plan Area is located within Section 3.3.8, Lakeview/Nuevo Area Plan of the MSHCP. The northwest and southeast portions of the project site are located within the MSHCP Criteria Area. Portions of the project site are located within independent Criteria Cells 2161, 2252, 2253, 2254, and 2255, as well as Criteria Cells 2258, 2259, 2355, 2356, 2357, 2451, 2452, 2453, 2556, 2557, and 2558 of Cell Group L. Refer to **Figure 5.4-4, MSHCP Criteria Area**. The project site is located south of and adjacent to Existing Core H (Lake Perris Recreation Area and San Jacinto Wildlife Area), and partially within Proposed Noncontiguous Habitat Block 5 (Lakeview Mountains). Proposed Constrained Linkage 20 coincides with the northeast corner of the site.

Section 6.0 of the MSHCP outlines the implementation structure of the plan including the protection of certain species and additional survey needs and procedures. Portions of the project site are located within the Narrow Endemic Plant Species Survey Areas (Area 3: California orcutt grass, spreading navarretia, and Wright's trichocoronis), Criteria Area Species Survey Areas (Area 3: Coulter's goldfields, Davidson's saltscale, little mousetail, Parish's brittlescale, prostrate navarretia, San Jacinto Valley crowscale, smooth tarplant, and thread-leaved brodiaea.), the Burrowing Owl Survey Areas, and the Mammal Species Survey Areas (Los Angeles pocket mouse). Refer to **Figure 5.4-5, MSHCP Survey Area**.

Areas Surrounding Specific Plan Area

Off-Site Improvements

Phase 1 of the project requires off-site infrastructure to be installed prior to occupancy including off-site water, sewer, and storm drain infrastructure. Other off-site infrastructure is needed in the future for other phases of the project. Some roadway improvements may also be needed off site such as traffic signals, and widening, as described in the Traffic section (Section 5.14) of this DEIR. See Section 3, Project Description, and **Figures 3-2 and 3-3** for additional information.

San Jacinto Wildlife Area/Mystic Lake

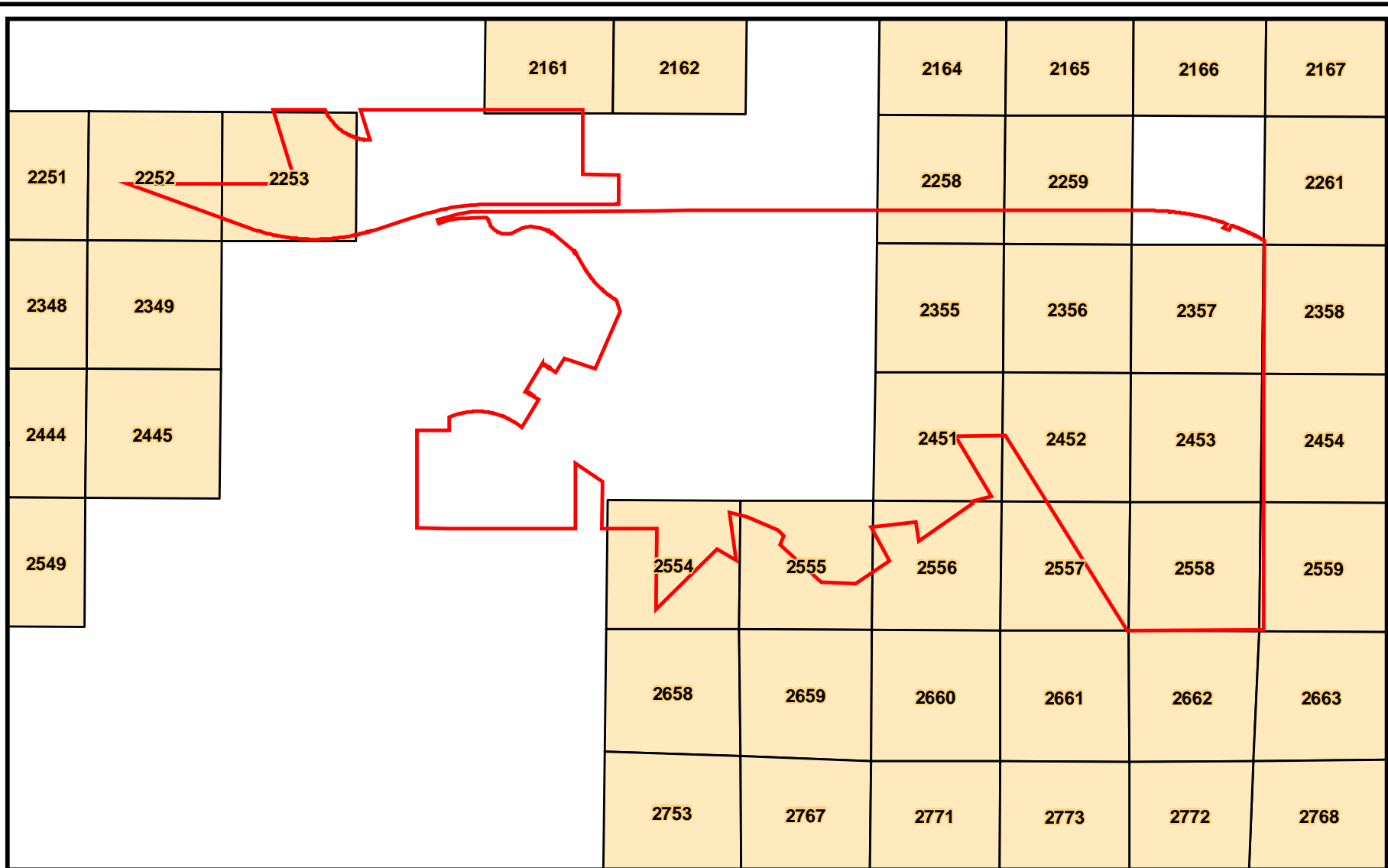
The San Jacinto Wildlife Area (SJWA) is a 7,400,000-acre ecological reserve located north and west of the Specific Plan Area. The SJWA was initiated in response to the Davis-Dolwig Act of 1961, which states that the SWP facilities be constructed "in a manner consistent with the full utilization of their potential for enhancement of fish and wildlife and to meet recreational needs" and requires the State to restore wildlife resources in response to the unavoidable impacts resulting from construction of the State Water Project.¹ The SJWA contains several habitat areas, including wetlands, restored riparian habitat, grasslands, sage scrub, and marshes and provides habitat for the several threatened and endangered species including the San Jacinto Valley crowscale, Stephens' kangaroo rat, Swainson's hawk, and the bald eagle. The SJWA provides a key link in a wildlife corridor stretching from Lake Perris (seven miles west of the project site) to the Badlands (0.5 mile north of the project site) and contains an important inland wetland which provides habitat for many wetland vegetation and wildlife species including birds and fish. Mystic Lake, a large crescent-shaped, intermittent water body within the reserve area, serves as a significant wetland habitat for numerous birds and plants. Seasonal upland game hunting is allowed within the SJWA and Lake Perris State Recreation Area, and other uses of the SJWA include wildlife observation, nature study, fishing, hiking, photography, field trials, hunting dog training classes, and conservation of wildlife and wildlife habitat.

Lakeview Mountains

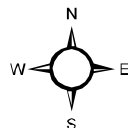
Approximately 900 acres of the Lakeview Mountains are located within the Specific Plan Area. The Mountains, which are dotted with picturesque rock outcroppings, gently slope west to the valley that contains the San Jacinto River. The Lakeview Mountains contain Riversidean sage scrub and chaparral habitats within the Specific Plan Area. Special status species found within

¹ http://www.lao.ca.gov/2009/rsr/Reforming_Davis-Dolwig/Davis-Dolwig_030909.pdf

this area include Bell's sage sparrow, Southern California rufous crowned sparrow, Stephens' kangaroo rat, Northwestern San Diego pocket mouse, San Diego desert woodrat, San Diego black-tailed jackrabbit, granite spiny lizard, orange-throated whiptail, and coastal western whiptail.



Source: County of Riverside GIS, 2006.



0 1,000 2,000 3,000
Feet

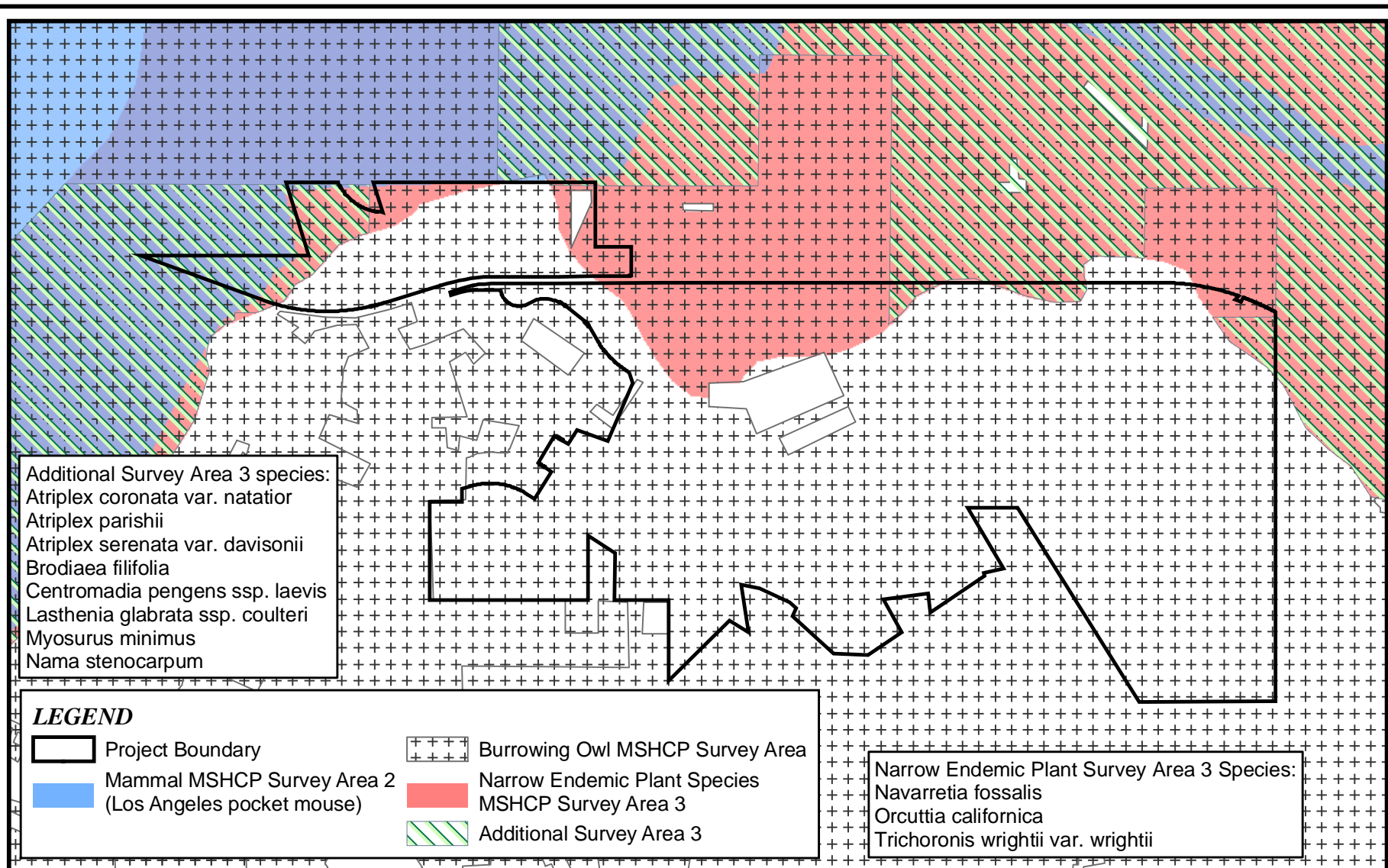
LEGEND

- Project Boundary
- MSHCP Criteria Cells

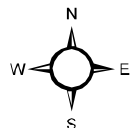
Figure 5.4-4

MSHCP Criteria Area

The Villages of Lakeview EIR No. 471



Source: County of Riverside GIS, 2006.



0 1,000 2,000 3,000 Feet

Figure 5.4-5

MSHCP Survey Area

The Villages of Lakeview EIR No. 471

San Jacinto River

The San Jacinto River, with wide bends, travels in a general east to west path across Western Riverside County. The San Jacinto River is located north and northwest of the Specific Plan Area and spans the extreme northwest corner of the Specific Plan Area. The San Jacinto River supports several habitat types including alkali playas, riparian scrub, and riparian herb. Species found along the San Jacinto River include spreading navarretia, San Jacinto Valley crowscale, thread-leaved brodiaea, and slender-horned spineflower as well as the San Bernardino kangaroo rat.

Lake Perris

The Lake Perris State Recreation Area is located northwest of the Specific Plan Area. It is approximately 8,800 acres in size and is a part of the California State Park system. It features Lake Perris, a 2,000-acre reservoir created by construction of the Perris Dam. The park includes a large recreational area with camping and RV facilities, as well as a substantial habitat reserve, including grassland, riparian, and scrub habitat. The bald eagle has been detected here as a wintering visitor. The Bernasconi Hills serve as the mountainous border around the lake and its recreational facilities.

Thresholds of Significance

Riverside County has not established local CEQA significance thresholds as described in Section 15064.7 of the CEQA Guidelines. However, the Riverside County's "Environmental Assessment Form: Initial Study" (Environmental Assessment Number: 39816) which is part of the Notice of Preparation for the subject project (see Appendix A (CD #3) of this document) indicates that biological resource impacts may be considered potentially significant if the project would:

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan.
- Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12).
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Due to the nature of the information and analysis presented herein, the thresholds regarding effects on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12), or on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service, above, will be combined and analyzed simultaneously based on threshold B. All thresholds analyzed are listed below:

- A. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan.*
- B. *Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12) or on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service.*
- C. *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites.*
- D. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service.*
- E. *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*
- F. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

Related Regulations

Federal Regulations

Federal Endangered Species Act of 1973

The Federal Endangered Species Act of 1973 (16 U.S.C. 1531-1543) and subsequent amendments provide for the conservation of endangered and threatened species and the habitats on which they depend. A federally endangered species is one facing extinction throughout all or a significant portion of its geographical range. A federally threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a site generally imposes severe constraints on development; particularly if development would result in a “take” of the species or its habitat. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history.

Federal Clean Water Act

Pursuant to Section 404 of the Clean Water Act, the United States Army Corps of Engineers (ACOE) regulates discharges of dredged and/or fill material into waters of the United States. “Waters of the United States” are defined in ACOE regulations at 33 C.F.R. Part 328.3(a). Navigable waters of the United States are those waters of the United States that are navigable in the traditional sense. Waters of the United States is a broader term than navigable waters of the United States and includes adjacent wetlands and tributaries to navigable waters of the United States and other waters where the degradation or destruction of which could affect interstate or foreign commerce.

Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA), 50 C.F.R. Part 10, prohibits take of migratory birds. Under the MTBA, it is unlawful to “pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product.” Implementation of the proposed project will be required to comply with the MTBA, which prohibits the take of migratory bird species that are considered to utilize the site and their nests or eggs. In addition, Sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

State Regulations

California Endangered Species Act

California Endangered Species Act (Fish and Game Code 2050, et seq.) (CESA) establishes that it is the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that state agencies should not approve projects which

would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. CESA requires state lead agencies to consult with the California Department of Fish and Game (CDFG) during the CEQA process to avoid jeopardy to threatened or endangered species.

California Fish and Game Code

The California Department of Fish and Game (CDFG), under Section 1600 of the Fish and Game Code, regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake, which supports fish or wildlife. CDFG defines a stream, including creeks and rivers, as “a body of water that flows at least periodically or intermittently through a bed or channel having surface or subsurface flow that supports or has supported riparian vegetation.” Lakes under the jurisdiction of CDFG may also include man-made features.

Local Regulations

Riverside County Integrated Plan (RCIP), Multiple Species Habitat Conservation Plan (MSHCP)

On June 17, 2003 the Riverside County Board of Supervisors approved the MSHCP, certified the EIR/EIS for the Plan, and authorized the Chairman to sign the Implementing Agreement. The County of Riverside, a signatory to the Implementing Agreement (IA), is required to comply with all applicable policies and requirements of the MSHCP.

As outlined in Section 6 of the MSHCP, “Payment of the mitigation fee and compliance with the requirements of Section 6.0 are intended to provide full mitigation under the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), Federal Endangered Species Act, and California Endangered Species Act for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the U.S. Fish and Wildlife Service, the California Department of Fish and Game and/or any other appropriate participating regulatory agencies and as set forth in the Implementing Agreement for the MSHCP.”

Riverside County Ordinance No. 810.2

On July 22, 2003, the Riverside County Board of Supervisors adopted Ordinance Amendment 810.2, an amendment to Ordinance No. 810, which establishes the Western Riverside County Multiple Species Habitat Conservation Plan Mitigation Fee. At the time of this writing, the fee schedule is as follows:

Single-family residential	\$1,651/per dwelling
Residential (8.1-14 dwelling units/acre)	\$1,057/per dwelling
Residential (>14.1 dwelling units/acre)	\$ 859/per dwelling
Commercial	\$5,620 per acre
Industrial	\$5,620 per acre

Stephens' Kangaroo Rat Habitat Conservation Plan

The proposed project is located within the boundary of the adopted Habitat Conservation Plan (HCP) for the endangered Stephens' kangaroo rat (SKR) implemented by the Riverside County Habitat Conservation Agency (RCHCA). The SKR HCP mitigates impacts from development on the SKR by establishing a network of preserves and a system for managing and monitoring them. Through implementation of the SKR HCP, more than \$45 million has been dedicated to the establishment and management of a system of regional preserves designed to ensure the persistence of SKR in the plan area. This effort has resulted in the permanent conservation of approximately 50% of the SKR occupied habitat remaining in the HCP area. Through direct funding and in-kind contributions, SKR habitat in the regional reserve system is managed to ensure its continuing ability to support the species. The proposed project is located within the SKR HCP area and will be required to comply with applicable provisions of this plan.

Riverside County Ordinance No. 663.10

The Riverside County Board of Supervisors adopted Ordinance Amendment 663.10, an amendment to Ordinance No. 663, establishing the Riverside County Stephens' Kangaroo Rat Habitat Conservation Plan Fee Assessment Area and Setting Mitigation Fees. The mitigation fees are as follows: All applicants for development permits within the boundaries of the Fee Assessment Area who cannot satisfy mitigation requirements through on-site mitigation as determined through the environmental review process shall pay a Mitigation Fee of \$500.00 per gross acre of parcels proposed for development. However, for single-family residential development, wherein all lots within the development are greater than one-half (1/2) acre in size, a Mitigation Fee of \$250.00 per residential unit shall be paid; and for agricultural development which requires a development permit excluding the construction of single-family residences in connection with said agricultural development, a Mitigation Fee of \$100.00 or one percent (1%) of the valuation of the buildings to be constructed, whichever is greater shall be paid, provided that at no time shall such fee exceed the amount required to be paid if a fee of \$500.00 per gross acre were applied to the parcel proposed for agricultural development. The determination of value or valuation of an agricultural building shall be made by the building official.

Riverside County General Plan

Chapter 5 of the Riverside County General Plan contains policies that are intended to ensure the preservation of sensitive species, soils, and habitats within the County. See Threshold F and Appendix N (CD #4) for further discussion of these General Plan Policies.

LNAP 13.1 Conserve the existing intact upland habitat block in the Lakeview Mountains for the benefit of raptors, burrowing owl, and cactus wren.

LNAP 13.2 Conserve clay soils intermixed with or near vernal pools occurring in the middle reaches of the San Jacinto River supporting core populations of thread-leaved brodiaea.

LNAP 13.3 Conserve wetland habitats along the San Jacinto River including existing vernal playas, vernal pools, and associated watersheds. Maintain watershed processes that contribute to and enhance water quality and the hydrologic regime.

LNAP 13.4 Conserve Willow-Domino-Travers soils that support sensitive plants such as spreading navarretia, San Jacinto Valley crowscale, Coulter's goldfields, Parish's brittlescale, and Davidson's saltbrush.

LNAP 13.5 Maintain and enhance linkage value of the San Jacinto River for wildlife movement and live-in habitat.

LNAP 13.6 Conserve grasslands adjacent to coastal sage scrub habitats as foraging habitat for raptors.

Project Design Considerations

Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts to biological resources through the design of the project.

The Specific Plan has been modified through the HANS process to minimize impacts to sensitive species. The following areas have been excluded from the area of development and/or will be avoided and/or not included in the areas of development and grading: approximately 964.4 acres of the Specific Plan Area are designated as conservation including approximately 29.1 acres located within the 100-year floodplain of the San Jacinto River, and 932.9 acres located within the Lakeview Mountains. Sensitive resources, including a stretch of the San Jacinto River, alkali playa pools, and the Lakeview Mountains are located in the conservation areas and would be avoided and preserved through project implementation. Additional open space includes 116.8 acres of open space within the 100-year floodplain, 94.8 acres associated with the MWD aqueduct alignment, and 29 acres located at the southern portion of the project site as fuel modification zones. The fuel modification zones, which are located outside the conservation area, will provide an additional buffer between development and the proposed conservation areas and will be maintained through routine clearing of vegetation.

The Specific Plan includes development standards and conceptual designs for features that directly reduce potential impacts to wildlife at the urban/wildlife interfaces within the project. Such features include hooded street lights, fencing between the SJWA and the project to deter wildlife and human trespass, a 500-foot setback between residences and the SJWA to discourage casual trespass and reduce light spill and noise potential, and over 200 feet between active park uses and SJWA.

Environmental Impacts Before Mitigation

***Threshold A:** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan.*

Project Relationship to the Western Riverside County MSHCP

THE VILLAGES OF LAKEVIEW Specific Plan area occurs within the Lakeview/Nuevo Area Plan of the overall MSHCP planning area. The Lakeview/Nuevo Area Plan is divided into two subunits:

San Jacinto River – Middle Reach (Subunit 1) and Lakeview Mountains – West (Subunit 2). Portions of the project site occur within both subunits, including three Criteria Area Cells of Subunit 1 (2161, 2252, and 2253) and 14 Criteria Cells of Subunit 2 (2258, 2259, 2260, 2355, 2356, 2357, 2451, 2452, 2453, 2556, 2557, 2558, 2554, and 2555). The majority of the Subunit 2 Criteria Cells is associated with Cell Group L. Proposed development within the Criteria Area is subject to review under the HANS process. The portions of the Criteria Area associated with the Lakeview Mountains (Subunit 2) are part of the Proposed Noncontiguous Habitat Block 5, and also include the southernmost portions of Proposed Constrained Linkage 20. The proposed linkage is intended to connect Proposed Noncontiguous Habitat Block 5 with Existing Core H. Areas identified in THE VILLAGES OF LAKEVIEW Specific Plan as conservation open space have been presented to and reviewed by the HANS committee.

The Master Developer completed the HANS process and received a Habitat Evaluation and Acquisition Negotiation Strategy (HANS) determination letter from the Environmental Programs Department (EPD) dated, July 2, 2008. The Determination Letter states the HANS determination for the proposed project property was sent to the Regional Conservation Authority (RCA) for Joint Project Review (JPR) pursuant to Section 6.6.2 of the MSHCP. The RCA found that the project is consistent with both the Criteria and other Multiple Species Habitat Conservation Plan requirements. The HANS determination letter is contained in its entirety in Appendix D of this EIR (CD #3).

The RCA found that the project will provide adequate partial conservation for the above-listed core, habitat block, linkage, and cells. Additionally, the project was found to be compliant with Sections 6.1.2, 6.1.3, 6.3.2, and 6.1.4 of the MSHCP. According to the RCA, the project demonstrates compliance with Section 6.1.2 of the MSHCP, as no riparian vegetation will be impacted by the project and the on-site vernal pool area and associated watershed will be protected by the proposed Conservation Area. The project demonstrated compliance with Section 6.1.3 of the MSHCP, as required biological surveys were conducted and no Narrow Endemic Plant Species Survey Area species (Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis) were found. A more detailed presentation of compliance with each of these MSHCP sections is presented below.

The project is located in a Criteria Area Species Survey Area (CASSA) for San Jacinto Valley crownscale, Davidson's saltbush, Parish's saltscale, thread-leaved brodiaea, smooth tarplant, round-leaved filaree, Coulter's goldfields, little mousetail, and mud nama as well as in an Additional Species Survey area for burrowing owl and Los Angeles pocket mouse. Of the CASSA species, only Coulter's goldfields, smooth tarplant, and thread-leaved brodiaea were found. Ninety to 100 percent of the areas where these species were found will be avoided because they are located within Conservation Areas. No sign of burrowing owls were detected on the project site. The project site includes 6 acres of Los Angeles pocket mouse habitat. Ninety-two (92) percent of the habitat area will be avoided by the project. Based on conservation proposed by the project, the project is in compliance with Section 6.3.2. of the MSHCP, as discussed in greater detail below.

In order to be in compliance with Section 6.1.4 of the MSHCP, the RCA findings include recommended conditions of approval. It is the County of Riverside's policy, as a permittee, to require the RCA-recommended conditions of approval of the project. Therefore, the MSHCP-related conditions of approval for this project are:

- Incorporate measures to control the quantity and quality of runoff from the site entering the MSHCP Conservation Area. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into MSHCP Conservation Areas.
- Land uses in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts, such as manure, that are potentially toxic or may adversely affect wildlife species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Areas. The greatest risk is from landscaping fertilization overspray and runoff.
- Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation is not increased.
- Proposed noise-generated land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards.
- Consider the invasive, non-native plant species listed in Table 6-2 if the MSHCP in approving landscape plans to avoid the use of invasive species for the portions of the project that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography, and other features.
- Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate, in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping into the MSHCP Conservation Areas. Such barriers may include native landscaping, rocks/boulders, fencing walls, signage, and/or other appropriate mechanisms.
- Manufactured slopes associated with the proposed site development shall not extend into the MSHCP Conservation Area.

Below is a detailed description of how project design and mitigation measures meet the Section 6.1.4 requirements and the above conditions of approval.

Project Relationship to Cores and Linkages

Existing Core H is comprised of the Lake Perris State Recreation Area, San Jacinto Wildlife Area (SJWA), private lands, and lands with pre-existing conservation agreements. Core H provides live-in habitat for sensitive species, contains soils suitable for sensitive plants, supports vernal pool complexes, and may provide a connection to Core Areas in the Badlands and the middle reach of the San Jacinto River. The project site is located immediately adjacent to Existing Core H (SJWA) at the northern site boundary. The proposed project will not place development immediately adjacent to the SJWA. Proposed development is not located within the 100-year floodplain of the San Jacinto River, creating an approximate 145-acre buffer between residences and the SJWA, with a minimum setback of 500 feet. Proposed land uses within this open space buffer between residences and the SJWA will include conservation areas, drainage facilities, water quality basins, and parks. In addition, measures proposed pursuant to Section 6.1.4, Guidelines Pertaining to the Urban/Wildlife Interface, of the plan will ensure that edge effects adjacent to Core H are minimized.

Proposed Noncontiguous Habitat Block 5 consists of the Lakeview Mountains. This habitat block is to be connected to other MSHCP conserved lands via Proposed Constrained Linkage 20. Proposed Noncontiguous Habitat Block 5 consists primarily of private lands a few small parcels of Public/Quasi-Public Lands. This is a large habitat block which has a low perimeter-to-area ratio and supports a key population of Bell's sage sparrow. The proposed project will conserve approximately 930 acres of Proposed Noncontiguous Habitat Block 5, the majority of which is contiguous open space which consists of high quality scrub habitat and scattered disturbed habitats, roads, and trails. The proposed development will be buffered from this habitat block by open space fuel modification zones along the perimeter of the development footprint. In addition, measures proposed pursuant to Section 6.1.4, Guidelines Pertaining to the Urban/Wildlife Interface, of the plan will ensure that edge effects to this habitat block are minimized.

Proposed Constrained Linkage consists of a connection between Existing Core H in the north with the Proposed Noncontiguous Habitat Block 5 in the south. This linkage is important to reduce the likelihood of species extirpation as a result of population isolation for species occurring in the Lakeview Mountains. On site, this linkage pertains to the movement of wildlife. The proposed project will provide a 4,000-1,500-foot-wide corridor west of Bridge Street in the location of the MSHCP Proposed Constrained Linkage 20. This corridor is intended to connect the Lakeview Mountains to the Ramona Expressway, which is part of the overall plan for Proposed Constrained Linkage 20 to connect the Lakeview Mountains to the San Jacinto Wildlife Area. The placement of this corridor coincides with a wildlife under-crossing proposed as part of the future County of Riverside's Mid County Parkway project. Connection to existing Core H would occur via the San Jacinto River. The MSHCP acknowledges that the existing linkage is constrained due to existing agriculture and proposed road projects, however, the corridor proposed as part of this project combined with the proposed under crossing, relieves existing and future constraints for this linkage south of Ramona Expressway.

Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

Under Section 6.1.2 of the MSHCP, an assessment and mapping of the riparian/riverine areas and vernal pools is required. Riparian/Riverine areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soil, vegetation, and hydrology) during the wetter portion of the growing season, but normally lack wetlands indicators of hydrology and/or vegetation during the drier portions of the growing season.

The MSHCP does not consider artificially created drainage features (including wetlands) as riparian/riverine areas. The MSHCP states the following regarding artificially created features: “With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters, or from the alteration of natural stream courses, areas demonstrating characteristics as described [in MSHCP definitions for riparian/riverine areas and vernal pools] which are artificially created are not included in these definitions.”

If riparian/riverine areas or vernal pools occur on site and, project implementation does not completely avoid these areas, a Determination of Biologically Equivalent or Superior Preservation (DPESP) must be made. If the habitat assessment identifies suitable habitat for least Bell’s vireo, southwestern willow flycatcher, yellow-billed cuckoo, Riverside, Santa Rosa Plateau, or vernal pool fairy shrimp and the project design does not incorporate avoidance, focused surveys shall be conducted, and avoidance and minimization measures implemented in accordance with the species-specific objectives for the species occurring on site.

The project site contains MSHCP riverine areas, including a small stretch of the San Jacinto River, and ephemeral and riparian drainages located within the Lakeview Mountains. In addition, the site contains a number of man-made ephemeral roadside ditches and agricultural channels that redirect the historic hydrology connecting the Lakeview Mountains to the floodplain of the San Jacinto River, however; these artificial features are not considered to be MSHCP riverine areas. The project site contains an area of remnant, disturbed alkali playa, approximately 0.1 acre, which exhibits ponding areas meeting the MSHCP definition of a vernal pool.

None of the riverine features occurring within the proposed development area provide suitable habitat for any of the special-status riparian animal species, including the least Bell’s vireo, southwestern willow flycatcher, and/or the western yellow-billed cuckoo. Focused surveys for listed fairy shrimp were conducted for both the 2003/2004 and the 2004/2005 wet seasons. No listed fairy shrimp were identified during focused surveys.

The proposed project will result in impacts to a minor amount of natural riverine features, but will not result in the loss of riparian habitat. The purpose of the MSHCP riparian/riverine procedures is to ensure that the biological functions and values of these areas throughout the plan area are maintained. Although the natural riverine features will be impacted, the project’s

drainage plan will ensure that the net flows across the property will be maintained, such that any resources located downstream of the project site will not be deprived of necessary hydrology. In addition, the implementation of a Water Quality Management Plan (WQMP) and Best Management Practices (BMPs) will ensure that this project will not have any adverse water quality impacts on site or to any downstream resources. To assess potential adverse water quality impacts, a hydromodification study was conducted for this project, as discussed in detail under *Threshold B*, below. As a result of these measures, the project will not result in the loss of the biological functions associated with the on-site riverine areas. As such, impacts to these features would not be subject to a DBESP. The stretch of San Jacinto River and the alkali playa pools are located within proposed conservation areas of the project and will be avoided. Therefore, DBESPs for these areas are not required. With avoidance of the on-site vernal pools, and by maintaining the riverine functions of the on-site drainage areas, the proposed project is in compliance with Section 6.1.2 of the MSHCP.

Section 6.1.3, Protection of Narrow Endemic Plant Species

Under Section 6.1.3, site-specific focused surveys for narrow endemic plant species shall be required where appropriate or suitable habitat is present within identified Narrow Endemic Plant Species Survey Area. Portions of the project site are located in the Narrow Endemic Plant Species Survey Area 3 which includes the following species: California orcutt grass, many-stemmed dudleya, Munz's onion, San Diego ambrosia, spreading navarretia, and Wright's trichocoronis. Projects with the potential to affect Narrow Endemic Plant Species shall be subject to avoidance, minimization, and mitigation strategies as outlined in Section 6.1.3 of the MSHCP.

Focused surveys for these plant species were conducted in 2004 and 2005. None of the designated Narrow Endemic Plants were identified in the project site. Since the project would not impact any Narrow Endemic Plants, the proposed project is in compliance with Section 6.1.3 of the MSHCP.

Section 6.1.4, Guidelines Pertaining to the Urban/Wildlife Interface

Section 6.1.4, outlines the minimization of indirect effects associated with locating development in proximity to the MSHCP Conservation Area. To minimize these effects, guidelines in section 6.1.4 of the MSHCP shall be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area and address the following: drainage, toxics, lighting, noise, invasive species, barriers, and grading/land development.

The MSHCP Reserve Assembly process describes acquisition and conservation criteria for designated "Criteria Areas." The project will incorporate measures discussed below to ensure there will be no project-related adverse impacts to the MSHCP Conservation Area and nearby cores and linkages. Accordingly, the project will be consistent with the Urban/Wildlife Interface Guidelines.

During construction, The Master Developer will implement **MM Bio 14** to delineate for construction workers where conservation areas are and what needs to be avoided. During

construction and operations. The Master Developer of the proposed project will include **MM Bio 11, 11a and 11b** which will ensure the implementation of an Environmental Stewardship program to educate THE VILLAGES OF LAKEVIEW residents of the potential impacts of edge effects to open areas and Conservation Areas including to sensitive wildlife, vegetation, and habitat. In addition to the items discussed below, this mitigation measure will help mitigate indirect impacts to edge effects as identified in Section 6.1.4 of the MSHCP.

- **Drainage:** The San Jacinto River is located down slope of the project site and storm water runoff from the site will be conveyed to the river. At the southern urban/wildland interface (Lakeview Mountains), the natural drainage pattern flows away from the Lakeview Mountains conservation area. The project will continue to drain away from the Lakeview Mountains Conservation Area, and will therefore not result in adverse drainage impacts to this area. Portions of the project will drain towards the northern urban/wildland interface with the San Jacinto Wildlife Area (SJWA); however, the project will not discharge runoff into any of the newly proposed conservation parcels. The project shall incorporate measures discussed in the Hydrology Section (Section 5.8) required through the National Pollutant Discharge Elimination System requirements to ensure the quality and quantity of runoff that is discharged into the Conservation Area is not altered in any way when compared with existing, predevelopment conditions. **MM Bio 9** also addresses this issue by requiring the Central Park detention basin be designed for future flexibility with release of water to best meet the needs of the off-site wetlands and on-site vernal pool areas to most closely mimic existing conditions in the 2-year and 10-year storm.

Portions of the project will drain towards the northern urban/wildland interface with the SJWA. The existing condition of drainage to the SJWA includes runoff from the existing agricultural uses including dairies and other surrounding land uses that are currently untreated for runoff pollutants. Land uses proposed near the adjacent edge of the SJWA include residential and school, both of which will have a minimum 500-foot setback away from the SJWA. Through the conversion of land uses from agricultural to residential and by treatment of on-site generated runoff, the proposed THE VILLAGES OF LAKEVIEW Specific Plan project will result in substantial improvements to water quality over the current site conditions.

- **Toxics:** Land uses proposed in the project include houses, schools, and parks; while immediately adjacent to SJWA are passive parks and conservation open space. Furthermore, a 500-foot setback will separate the houses and schools from the SJWA. The project has developed a WQMP that will identify potential pollutants of concern subject to treatment. Surface runoff generated within the project site will be treated on site, reducing the possibility of toxics transported to the SJWA. Prior to construction of the project, a Storm Water Pollution Prevention Program (SWPPP) will be prepared, and during construction of the project, best management practices (BMPs) will be utilized to prevent the release of toxics generated during construction-related activities from entering the SJWA. Currently, runoff from the project site to the SJWA comes across agricultural fields. This existing runoff may include chemicals/fertilizers used in farming and therefore, may be more polluted than post-development runoff will be. Compliance

with **MM Bio 11** and **MM Bio 11b** the RCA-recommended conditions of approval will also reduce this potential impact to less than significant.

- **Lighting:** The project will introduce new sources of nighttime lighting and glare near conservation areas for outdoor security purposes and the residences located on site. Proposed land uses immediately adjacent to the SJWA (northern interface) consist of conservation and open space with drainage facilities (including but not limited to drainage facilities, water quality basins, and passive parks). No active park uses are planned closer than 200 feet from the SJWA boundary. Recreational facilities are not proposed to include lighting other than that needed for security/safety. Proposed land uses adjacent to the Lakeview Mountains (southern interface) consist of residential development (including a fuel modification zone for fire protection) and park use. Potential impacts from introduced lights include impacts to migratory birds that use constellations to guide them during migration, and impacts to foraging, reproduction, and circadian rhythms of other species.

Implementation of **MM Bio 1** is required to minimize impacts from new sources of nighttime lighting at both interfaces to reduce impacts to less than significant. **MM Bio 1** identifies measures that will be enforced through the residential CC&Rs and Homeowners' Association. These associations will ensure that lighting is not projected into the Conservation Area at either interface. Street lighting will be designed with internal baffles to direct the lighting towards the ground and have a zero side angle cut off to the horizon. At the interface with the Lakeview Mountains, street lighting will be at least 50 feet away from the Conservation Area. North of Ramona Expressway, street lighting will be at least 400 feet from the project's proposed conservation areas and at least 500 feet away from the existing SJWA. The shielded lighting and adequate setback will ensure that there will be no spillage of lighting into the Conservation Area. The CC&Rs will restrict the placement and use of lighting on private residential properties, such that individual residences will not direct lighting into the Conservation Area.

While the Specific Plan Area is not located within Zone A of Riverside County Ordinance 655 (within a 15-mile radius of the observatory), it is located within Zone B of Ordinance 655 (within 45 miles) and therefore is subject to portions of Ordinance 655, which relates to regulating light pollution for the Palomar Mountain observatory. Lighting for the project will be designed to comply with the Palomar ordinance, which, for outdoor lighting limits use at night, generally allows only the use of partially and fully shielded low-pressure sodium and luminous tube lighting, and eliminates "searchlight" advertising methods. This requirement will further ensure that ambient lighting with the SJWA and Lakeview Mountains is not increased. Finally, the Master Developer will create an Environmental Stewardship Program, **MM Bio 11**, which could include on-going education for homebuilders and homeowners and annual compliance reviews to determine whether proper lighting is being utilized.

- **Noise:** THE VILLAGES OF LAKEVIEW Specific Plan will ensure that wildlife within SJWA and Lakeview Mountains will not be subject to noise that would exceed exterior residential noise standards. The County of Riverside Zoning Code regulates exterior noise levels for residential uses. The project will be designed to keep ambient noise levels to below 65 db, as required the County of Riverside ordinance. See the Noise Section (Section 5.10) for more information.

- **Invasive Species:** THE VILLAGES OF LAKEVIEW Specific Plan will minimize landscaped areas adjacent to the SJWA and Lakeview Mountains. In the case of manufactured slopes and vegetative buffers at either interface, landscaped areas will avoid the use of invasive and non-native plant species identified in Table 6-2 of the MSHCP document. Of the species identified in the MSHCP table (see also Appendix D (CD #3) and Appendix C (CD #3) of the Specific Plan), 69 of them will not be used at all within the Specific Plan. Of the remaining 17 plants, those used would be placed at least 150 feet from the existing and proposed conservation areas. CC&Rs will be enforced through the Home Owners' Association to exclude invasive species from private residential properties when adjacent to (or a prescribed distance from) the urban/wildland interface. Maintenance of these landscape areas will include the removal of invasives that may establish through natural dispersal mechanisms. **MM Bio 11** and **MM Bio 11a** will further provide education and direction for compliance.
- **Barriers:** The MSHCP requires barriers to be incorporated in proposed land uses adjacent to MSHCP Conservation Areas to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in the MSHCP Conservation Area. Unauthorized access to these areas can negatively affect plants, animals, and their habitats thereby reducing the conservation value of the Conservation Areas potentially leading to significant impacts to protected species and protected communities. The Specific Plan proposes fencing between the SJWA and the project. In addition, mitigation measures **MM Bio 2** and **MM Bio 3** ensure that planning areas and roads located adjacent to the SJWA and Lakeview Mountains will incorporate barriers (as appropriate) to minimize unauthorized public access, domestic animal predation, illegal trespass, or unauthorized dumping. The exception will be public access locations, which will direct the public into authorized access areas within the Conservation Area (i.e., SJWA and the Lakeview Mountains). All barriers will be placed within the boundaries of the development and will be outside of the Conservations Areas. Barriers will be designed to accommodate wildlife movement, but directing wildlife away from residential areas. Additionally, **MM Bio 11** will further provide education for compliance.

The urban/wildlife interface where many of these barriers will be located are areas where sensitive cultural resources may also be located. To ensure impacts to cultural resources are minimized during barrier placement, **MM Bio 12** is required.

- **Grading/Land Development:** THE VILLAGES OF LAKEVIEW Specific Plan has been designed so that manufactured slopes, as well as fuel modification zones, will be contained within the boundaries of the development footprint and will not extend into the Conservation Areas.

Section 6.3.2, Additional Survey Needs and Procedures

As outlined in Section 6.3.2 of the MSHCP, habitat assessments and additional surveys are needed for certain plant and animal species in conjunction with MSHCP implementation in order to achieve full coverage for these species. Portions of the project site are located within the Criteria Area Species Survey Area 3 (San Jacinto Valley crownscale, Parish's brittlescale, Davidson's saltbush, thread-leaved brodiaea, smooth tarplant, Coulter's goldfields, little

mousetail, round-leaved filaree, and mud nama), the Burrowing Owl Survey Areas, and the Mammalian Species Survey Areas (Los Angeles pocket mouse). Within these survey areas, habitat assessments are required to address, at a minimum, potential habitat for these species. If potential habitat for these species is determined to be located within the proposed project site, focused surveys are required during the appropriate season. For locations with positive survey results, 90% of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species are met.

Focused surveys for criteria area plants were conducted in 2004 and 2005. Three of the Criteria Area Plants were observed on site, including Coulter's goldfields, smooth tarplant, and thread-leaved brodiaea. Coulter's goldfields were observed in three areas of the project site: a population of approximately 100 plus individuals located in the extreme western portion of the site, immediately north of the Ramona Expressway; a population of approximately 10,000 individuals in the extreme northwest corner of the project site, immediately east of the SJWA; and a few individuals in the alkali playa vernal pools located in the northwestern portion of the project site. All three of these populations are located within the proposed conservation area and will be avoided by site development.

Smooth tarplant was observed in three locations on site, including four areas along the northern edge of the property adjacent to the San Jacinto Wildlife Area, and an additional location immediately north of Ramona Expressway in the northwest portion of the property. The observations include a small population (less than 25 individuals) in the extreme western portion of the property, immediately north of Ramona Expressway with Coulter's goldfields; a small population intermixed with the larger Coulter's goldfields population located in the extreme northwest corner of the project site; and a few individuals in the alkali playa vernal pools located in the northwestern corner of the project site. All three of these populations are located within the proposed conservation area and will be avoided by site development. Similar surveys were recently published in the Draft EIR/EIS for the Mid County Parkway project which show populations of smooth tarplant in slightly different locations from the surveys conducted for THE VILLAGES OF LAKEVIEW. It is not uncommon for plant populations to expand or contract or establish in new locations depending on rainfall variation and disturbance. Disturbance can be due to agricultural practices, such as disking or stockpiling manure, and road maintenance.²

Four individuals of thread-leaved brodiaea were identified within the alkali playa vernal pools. These individuals are part of a much larger population that occurs off site in the SJWA. The thread-leaved brodiaea individuals on site are located within the proposed conservation area and will be **avoided by site development**.

San Jacinto Valley crownscale, Parish's brittlescale, Davidson's saltbush, little mousetail, round-leaved filaree, and mud nama were not observed during 2004 and 2005 focused plant surveys of the project site. Given the previously disturbed nature of the on site ponding areas, where little mousetail and mud nama have the greatest likelihood to occur, the absence of these species during 2004 and 2005 focused plant surveys, and the further disturbance to the ponding areas,

² David Moskovitz, letter to Andrew Petitjean, dated January 2009. (Available in Appendix D of this DEIR.)

these areas do not appear suitable to support little mousetail or mud nama populations. Some of the native habitat areas associated with the southeast portion of the Specific Plan Area may represent potentially suitable habitat for round-leaved filaree based solely on vegetation type, although the species is not expected to occur due to a general lack of clay soils. Though San Jacinto Valley crowscale, Parish's brittlescale, and Davidson's saltbush was not observed on site, areas in the northwest portion of the Specific Plan Area in association with the river floodplain and disturbed alkali playa areas (also mapping of Willows soils) offer some habitat suitability. While these species have some potential to occur on site, the potential habitat areas will not be disturbed as they are within natural open space areas. Therefore these species will **not be impacted**.

A burrowing owl habitat assessment was conducted on the project site in 2003. Where suitable burrowing owl habitat was present, focused surveys were conducted during the 2003-2004 wintering season and 2004 breeding season. During the breeding season survey, three burrowing owls were observed on one occasion in the northwest portion of the property. These three owls were found to be associated with a burrowing owl complex located within the SJWA. Although general use (including foraging) by burrowing owls is occurring at least along the northern portion of the project site, burrowing owls are not breeding within the project site. Based on the results of the 2004 and 2007 focused burrowing owl surveys, the proposed project would not impact burrows occupied by breeding owls. However, the project will impact areas with the potential to support breeding owls in the future and will result in the loss of foraging habitat for the burrowing owl, including along the northern boundary with the San Jacinto Wildlife Area where breeding owls have been documented to occur off site within the Wildlife Area. The loss of foraging habitat and potential breeding habitat would be **potentially significant prior to mitigation**.

Objective number 5 of the MSHCP species-specific objectives for the burrowing owl addresses the avoidance requirements for breeding owl pairs detected on project sites. Objective number 6 of the MSHCP species-specific objectives for the burrowing owl requires that pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit; pre-construction surveys are to be conducted within 30 days prior to disturbance; take of active nests will be avoided; and passive relocation (use of one way doors and collapse of burrows), if approved, will occur when owls are present outside the nesting season.

With coverage and habitat mitigation afforded by the MSHCP, **MM Bio 4 and MM Bio 10** herein, and through compliance with Objectives 5 and 6 of the MSHCP, **impacts to the burrowing owl are considered less than significant with mitigation**.

A focused trapping study for the Los Angeles pocket mouse (LAPM) was conducted in 2004 and a small mammal trapping survey was conducted in 2007 within suitable habitat areas within the project site. Two LAPM individuals were captured on separate trap lines, one in the extreme western portion of the site (adjacent to the river channel), and one on the eastern side of the trapping area (east of Davis Road). Occupied habitat areas were determined based on the capture of LAPM, apparent suitability of soils, and a somewhat open vegetation landscape. Areas were excluded from this determination where they had excessively damp or wet conditions, regardless

of whether those areas were man made or natural. The trapping study identified 6.17 acres of long-term conservation value associated within the MSHCP mandated survey area for LAPM (the area referenced in the MSHCP Compliance Report).

One individual was trapped within the MSHCP survey area for the LAPM and the second individual was captured outside of the MSHCP survey area. Within the LAPM survey area, the identified long-term conservation value area is associated with a narrow, linear strip along the northern property boundary with the San Jacinto Wildlife Area. The area of occupied habitat occurs entirely within proposed conservation (82%) and open space areas (18%) within the 100-year floodplain. The remaining portions of the project site located within the MSHCP survey area do not provide long-term conservation value due to their existing conditions as they have been under active agriculture for decades.

The MSHCP requires that for positive survey results within the MSHCP survey areas, 90 percent of those portions of the property that provide for long-term conservation value shall be avoided. Within the project boundaries, long-term conservation value of the occupied habitat exists as a connection between the San Jacinto River and the San Jacinto Wildlife Area and as a buffer from proposed development projects. The proposed project includes the construction of a drainage channel that bisects the area of long-term conservation value for the LAPM. The channel will impact 8 percent (0.49 acre) of the long-term conservation value area leaving the remaining 92 percent (5.67 acres) of the long-term conservation value area unimpacted. The 5.67 acres of unimpacted area is within the proposed conservation area and will be avoided and permanently conserved in an MSHCP parcel.

As the project will conserve and avoid over 90 percent of the property that provides for long-term conservation value, the proposed project meets equivalency findings for the LAPM. **Impacts to the LAPM are considered less than significant** through project design.

Through proposed conservation, the proposed project would avoid all Criteria Area Species identified on site with long-term conservation value. As such, the proposed project is in compliance with Section 6.3.2 of the MSHCP.

Section 6.4, Fuels Management

Section 6.4 focuses on hazard reduction for human safety due to fire hazards in a manner compatible with public safety and conservation of biological resources. All necessary fuel modification associated with THE VILLAGES OF LAKEVIEW Specific Plan will be incorporated into the development boundaries and shall not encroach into the Conservation Areas. Therefore, the proposed project is consistent with MSHCP fuels management guidelines.

The HANS determination was submitted to the Western Riverside County Regional Conservation Authority (RCA) for its Joint Project Review (JPR). The RCA provided its comments to the Environmental Programs Department which were sent to the Master Developer on July 2, 2008. The RCA found that the project is in compliance with Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the MSHCP. As described above, the appropriate surveys have been

completed and it has been determined that the project complies with the requirements of the MSHCP.

Implementation of the proposed project will not conflict with the MSHCP Reserve Assembly. Based on the above analysis of consistency and the HANS determination, the proposed project is in compliance with Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, and 6.4 of the MSHCP. The proposed project will not conflict with the above provisions of the MSHCP and impacts are **less than significant**.

Wildlife Movement

The MSHCP designates the Lakeview Mountains as Proposed Noncontiguous Habitat Block 5, which is connected to other MSHCP-conserved lands via the Proposed Constrained Linkage 20. The Proposed Constrained Linkage 20 ultimately connects Existing Core H (Lake Perris) in the north with Proposed Noncontiguous Habitat Block 5 (Lakeview Mountains). The proposed linkage is shown on the Conceptual Land Use Diagram for the project to extend across the Ramona Expressway at the northeast portion of the project site. The linkage provides live-in and movement habitat for the following species: arroyo toad, western pond turtle, tricolored blackbird, mountain plover, white-faced ibis, Los Angeles pocket mouse, San Jacinto Valley crowscale, Parish's brittlescale, Davidson's saltscale, thread-leaved brodiaea, vernal barley, Coulter's goldfields, spreading navarretia, and Wright's trichocoronis. According to the MSHCP "treatment and management of edge conditions along this Linkage will be necessary to ensure that it provides habitat and movement functions for species using the Linkage."

The MSHCP identifies one medium-sized mammal (bobcat, *Lynx rufus*) as a planning species for Proposed Noncontiguous Habitat Block 5 (Lakeview Mountains). Additional medium-sized mammals expected to occur in the Lakeview Mountains, and that would be considered for utilizing the Proposed Constrained Linkage 20 includes (but are not limited to) coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), and raccoon (*Procyon lotor*). Large mammals such as Mountain lion (*Felis concolor*) and mule deer (*Odocoileus hemionus*) are not expected to occur in the Lakeview Mountains, and so are not considered by the MSHCP for the use of the linkage between the Lakeview Mountains and areas to the north. However, a mountain lion has been sighted in the Lakeview/Nuevo area as the cause of livestock kill.³

Development along the edge of the Lakeview Mountains will affect the local movement of wildlife that would normally enter the agricultural and rural development areas as part of territorial movement and the occasional search for supplemental food sources. Local movement within the Lakeview Mountains (and live-in habitat) will be maintained by the project through its contribution of contiguous lands (approximately 900 acres) to the MSHCP Conservation Area as part of Cell Group L.

The project will facilitate the regional movement of wildlife through the set aside of an approximately ~~4,000~~ 1,500-foot-wide corridor west of Bridge Street that will extend from the Lakeview Mountains to the Ramona Expressway. This corridor will contribute to the assemblage

³ Eastern Municipal Water District, *Final Environmental Impact Report*, comment letter from Joyce Swartz, December 2008. (Available at EMWD.)

of Proposed Constrained Linkage 20, in order to satisfy the MSHCP goals for regional movement along this linkage. The placement of this corridor coincides with a wildlife undercrossing proposed for the Mid County Parkway road project, which will facilitate an ultimate connection to Existing Core H via the San Jacinto River. This location is where the Lakeview Mountains and San Jacinto River are at their closest point.

Overall, the proposed project will result in potentially significant direct impacts to both local and regional wildlife movement, however, the project through its land set, aside will maintain long-term live-in habitat and local movement within the Lakeview Mountains, and will facilitate regional movement by providing the connecting corridor to the Ramona Expressway and through coordination with the Mid County Parkway project, connections under Street JJ will coincide with whatever is determined to be built for the Mid County Parkway crossing, since that street's crossing of the wildlife corridor is in the last phase of project development and immediately adjacent to the Ramona Expressway/Mid County right-of-way. The proposed project is consistent with the intent of Proposed Constrained Linkage 20. Development along the on-site corridor will implement measures following the urban/wildland interface guidelines to address indirect effects on wildlife movement. Through the set aside of the corridor to the Ramona Expressway in compliance with the MSHCP goals for regional movement, **impacts to regional wildlife movement are considered less than significant.**

As outlined in Section 6.1.1 of the MSHCP, "Payment of the mitigation fee and compliance with the requirements of Section 6.0 are intended to provide full mitigation under the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), Federal Endangered Species Act, and California endangered Species Act for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the U.S. Fish and Wildlife Service, the California Department of Fish and Game and/or any other appropriate participating regulatory agencies and as set forth in the Implementing Agreement for the MSHCP." Project compliance with Section 6.0 of the MSHCP is outlined above. **The proposed project will not conflict with MSHCP and impacts are less than significant.**

Stephens' Kangaroo Rat HCP

The project site is located within the Fee Area boundary of the Western Riverside County Stephens' Kangaroo Rat HCP. The project site is not located within a core reserve area but is located directly adjacent to the San Jacinto-Lake Perris Core Reserve. The San Jacinto-Lake Perris Core Reserve is part of the Lake Perris State Recreation Area and the San Jacinto Wildlife Area owned by the State of California. The project applicant is required to pay the applicable fee in accordance with Riverside County Ordinance 663.10 as it is located within the fee.

Ten individuals of SKR (*Dipodomys stephensi*) were trapped in five different locations throughout the project site, including along the northern property boundary, in the extreme western portion of the property adjacent to the San Jacinto River, and in the eastern, southeastern, and central portions of the property. Suitable habitat for the species is present throughout the site. The proposed project could adversely affect SKR either directly or through habitat modifications. The proposed project is located within the boundary of the RCHCA Habitat Conservation Plan (HCP) for the SKR. The SKR HCP establishes a mechanism for the

long-term conservation of the species. Potential impacts to the SKR are mitigated on a regional basis through compliance with the MSHCP and the SKR HCP. As the project is not in a core reserve, **the project will not conflict with the SKR HCP and impacts are less than significant.**

***Threshold B:** Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12) or on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service.*

State endangered, threatened, and rare plants of California and state endangered and threatened animals of California are listed under Title 14 of the California Code of Regulations, Sections 670.2 and 670.5, respectively. Wildlife and plants determined by the United States Fish and Wildlife Service to be Endangered or Threatened are listed under Title 50 of the Code of Federal Regulations, Sections 17.11 and 17.12, respectively.

As outlined above, the following endangered or threatened, candidate, sensitive, or special status plant species occur within the project site:

- Coulter's goldfields
- Smooth tarplant
- Thread-leaved brodiaea
- Paniculate tarplant

The following endangered or threatened, candidate, sensitive, or special status wildlife species occur or could occur on site or immediately adjacent to the site:

- Granite spiny lizard
- Orange-throated whiptail
- Coastal western whiptail
- Red-diamond rattlesnake
- Bell's sage sparrow
- Black-crowned night heron
- California gull
- California horned lark
- Cooper's hawk
- Ferruginous hawk
- Golden eagle
- Great blue heron
- Loggerhead shrike
- Northern harrier
- Prairie falcon
- Southern California rufous-crowned sparrow

- Swainson's hawk
- Western burrowing owl
- White-tailed kite
- White-faced ibis
- Los Angeles pocket mouse
- Stephen's kangaroo rat
- Northwestern San Diego pocket mouse
- San Diego desert woodrat
- Bobcat
- San Diego black-tailed jackrabbit

Of the above-noted wildlife species, several that are assigned special-status specifically when associated with rookery sites/breeding colonies or nesting were incidentally observed on site during biological surveys. These include the black-crowned night heron, California gull, Cooper's hawk, great blue heron, northern harrier, prairie falcon, Swainson's hawk, tricolored blackbird, white-faced ibis, and white tailed kite. None of these species would breed on site, and with the exception of the tricolored blackbird, no breeding colonies/rookeries are known to occur within the vicinity of the project area.

Direct impacts from project implementation are those that result in the destruction of individual plants or wildlife species. Direct impacts also include the displacement or the flushing out of wildlife species from an area. The destruction of individual plants or wildlife species may affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability. Direct impacts are also considered to be those that involve the loss, modification, or disturbance of plant communities, which in turn, directly affect the plants or wildlife species that they support. Some direct impacts could occur if areas that are to be part of conservation areas are disturbed during construction. Implementation of MM Bio 13 will ensure that conservation areas are protected during construction. Thus direct construction-impacts to habitat and species will be reduced to less than significant.

Impacts to Special-Status Plant Species

Implementation of the proposed project would result in direct impacts to one special-status plant species not covered by the MSHCP, but listed by the California Native Plant Society as list 4.2, paniculate tarplant. Plants in List 4 are of limited distribution or infrequent throughout a broader area in California, and their vulnerability or susceptibility to threat appears relatively low at this time. Other special-status plants identified on site will be avoided by the project, including populations of Coulter's goldfields, smooth tarplant, and thread-leaved brodiaea. The proposed project would result in impacts to scattered amounts of paniculate tarplant throughout ruderal and grassland areas adjacent to the Lakeview Mountains. Due to the low sensitivity of this species, the broad representation in the region, and the low level of project impacts, **potential impacts to paniculate tarplant are less than significant.**

However, according to the MSHCP EIR, implementation of the MSHCP will result in cumulatively significant impacts on the Non-Covered Species because the issuance of incidental take permits will remove an impediment to development outside of the MSHCP Conservation

Area. Non-Covered Species would receive little or no protection outside the reserves under existing ordinances and regulations. There are no threatened or endangered species known or likely to be on site which are not in the 146-species list covered by the MSHCP. The sensitive plant that occurs on site is the Paniculate tarplant (*Deinandra paniculata*). Because this species is not threatened or endangered, its range is sufficiently broad, and it is known to exist in other areas near the site (the Wildlife Area), direct loss of this plant is considered less than significant at the project-specific level. Because this species is the only Non-Covered species on-site, and it does not require an incidental take permit due to its lesser status, and for the same reasons it is less than significant at the project level, impacts to Non-Covered species are **cumulatively less than significant**.

Mapped populations of Coulter's goldfields, smooth tarplant, and thread-leaved brodiaea (see Exhibit 7 of the General Biological Report), species afforded coverage by the MSHCP, will be avoided and preserved in order to achieve Equivalency Findings as outlined in Section 6.3.2 of the MSHCP document. Altogether, the project will achieve 100 percent avoidance of areas supporting these plant species. Implementation of the proposed project is in compliance with the MSHCP regarding these species; therefore, **impacts to Coulter's goldfields, smooth tarplant, and thread-leaved brodiaea are considered to be less than significant**.

Impacts to Wildlife Species

The proposed project would result in the loss of foraging and/or breeding habitat for special-status animals including birds, reptiles, and small mammals. Species with potentially significant impacts prior to mitigation include western burrowing owl, Stephens' kangaroo rat, Bell's sage sparrow, and coastal California gnatcatcher.

Based on the results of the 2004 and 2007 focused burrowing owl surveys, the proposed project would not impact burrows occupied by breeding owls. However, the project will impact areas with the potential to support breeding owls in the future and will result in the loss of foraging habitat for the burrowing owl, including along the northern boundary with the San Jacinto Wildlife Area where breeding owls have been documented to occur off site within the Wildlife Area. The loss of foraging habitat and potential breeding habitat would be **potentially significant** prior to mitigation. Pre-construction surveys would be required pursuant to determine if existing conditions have changed with regards to burrowing owls. If breeding owls are detected on site, then avoidance and/or relocation must be conducted pursuant to objectives under the MSHCP. With coverage and habitat mitigation afforded by the MSHCP, **MM Bio 4 and MM Bio 10**, herein, and through compliance with Objectives 5 and 6 of the MSHCP species-specific objectives discussed is Threshold A, **impacts to the burrowing owl are considered less than significant**.

The proposed project would result in the loss of habitat for the Bell's sage sparrow, particularly through grading and fuel modification that would remove Riversidean sage scrub along the base of the Lakeview Mountains (south and southeast portion of project). Altogether, the project would directly impact approximately 65 acres of native scrub habitats, within which the sage sparrow has been observed. The Lakeview Mountains has been identified by the MSHCP as Proposed Noncontiguous Habitat Block 5, which contains a key population of Bell's sage

sparrow. The sage sparrow is a species that is particularly sensitive to edge effects. As such, the project has the potential to indirectly affect Bell's sage sparrow along the interface between development and open space. The project will mitigate the direct loss of Bell's sage sparrow habitat through the conservation of approximately 900 acres of native scrub habitats in the Lakeview Mountains. This conservation will contribute to the assembly of Proposed Noncontiguous Habitat Block 5 of the MSHCP. Additionally, the loss of habitat is mitigated through participation in the MSHCP. The project will minimize edge effects to Bell's sage sparrow through the implementation of measures that follow the MSHCP Urban/Wildland Interface Guidelines, as discussed above. Through measures to address both direct and indirect effects, **impacts to Bell's sage sparrow are considered less than significant.**

Although the coastal California gnatcatcher was not detected on site during the focused surveys, potentially suitable habitat for this species occurs within the southern and southeastern portions of THE VILLAGES OF LAKEVIEW Specific Plan area. The coastal California gnatcatcher is designated as a Covered Species Adequately Conserved under the MSHCP without additional conservation requirements. However, the MSHCP does impose restrictions on clearing of occupied habitat during the nesting season. Condition 5b of the MSHCP Federal Fish and Wildlife take permit states that the "clearing of occupied habitat within the PQP (Public-Quasi-Public) lands and the Criteria Area between March 1 and August 15 is prohibited." Although the take of coastal California gnatcatcher is covered under the MSHCP, the purpose of this condition is to allow the successful reproduction of gnatcatchers during the nesting season and to prevent the take of active nests. Therefore, with implementation of **MM Bio 5 and MM Bio 10, impacts to coastal California gnatcatcher are considered less than significant.**

The proposed project would collectively result in the direct loss of foraging habitat for a number of special-status and common raptors, including the red-tailed hawk, red-shouldered hawk, American kestrel, Cooper's hawk, northern harrier, ferruginous hawk, golden eagle, white-tailed kite, prairie falcon, peregrine falcon, and merlin. The majority of the project area to be impacted includes at least marginal quality foraging habitat for the various raptor species, including the agricultural areas and rural residential areas. The greatest concentrations (and diversity) of raptors were observed where the property abuts with the San Jacinto Wildlife Area, although raptors were observed throughout the property. Impacts to raptor foraging habitat would be **potentially significant** prior to mitigation. The proposed project would result in the substantial loss of foraging habitat for numerous raptor species, including approximately 1,275 acres of various agricultural lands. The project will provide nearly 150 acres of conservation lands and other open space adjacent to the San Jacinto Wildlife Area, which will provide continued foraging habitat for raptors, as well as some breeding habitat. The majority of these lands are contiguous with the San Jacinto Wildlife Area. Habitat within conserved areas of the Lakeview Mountains will offer both foraging habitat and breeding habitat for some raptor species. In addition, the MSHCP itself mitigates the loss of raptor foraging habitat throughout the overall Plan Area through the assemblage of existing Cores and Linkages with lands acquired from the Criteria Areas. With the project's participation in the MSHCP, and the set aside of additional open space contiguous with the San Jacinto Wildlife Area and the Lakeview Mountains, impacts to raptor foraging habitat would be less than significant. However, with the habitat conservation provided by the MSHCP through the various Core areas, and additional MSHCP Conservation Areas, and with the additional project-specific habitat avoidance and the 500-foot buffer of

passive parkland located adjacent to the SJWA, the **loss of raptor foraging habitat is less than significant.**

The proposed project would result in the direct loss of habitat occupied by Stephens' kangaroo rat (SKR). As noted above, SKR was detected through trapping in several locations throughout the project site, with additional areas providing suitable habitat for the species. Occupied and other suitable habitat occurs in the northern, southern, and southeast portions of the site. In addition, the project has the potential to indirectly affect SKR occurring within the adjacent San Jacinto Wildlife Area and Lakeview Mountains. Without mitigation, direct and indirect impacts to SKR would be potentially significant; however, the SKR is covered under the MSHCP and SKR HCP without any additional project-specific survey/conservation requirements. Furthermore, the potential for indirect effects to SKR within the San Jacinto Wildlife Area and adjacent Lakeview Mountains are minimized through the implementation of measures that follow the MSHCP Urban/Wildland Interface Guidelines (see Section 5.3.1 above). With participation in the SKR HCP and the MSHCP, and the minimization of edge effects, **impacts to SKR are considered less than significant.**

Of the above discussed species the proposed project is anticipated to result in take of only one federally and state listed species, the Stephen's Kangaroo Rat. THE VILLAGES OF LAKEVIEW project is located within the HCP area but is not located within a core reserve area. The proposed project is covered activity under this plan. According to the Final Environmental Impact Statement and Environmental Impact Report, Section 10 (a) Permit to Allow Incidental Take of the Endangered Stephens' Kangaroo Rat in Riverside County, California, Volume 1, the maximum amount of take to be allowed during the permit period (30 years from permit authorization) will be limited to lesser of the 4,400 acres or 20 percent of the total amount of occupied SKR habitat within the HCP area. The HCP area covers 533,954 acres within RCHCA member jurisdictions (County of Riverside, Cities of Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Perris, Riverside, and Temecula), including approximately 30,000 acres of occupied SKR habitat. As a conservation program, the SKR HCP intends to provide for the establishment, expansion, and ongoing management of permanent reserves in a manner which will ensure the continued existence of SKR in the HCP area of western Riverside County while also providing opportunities to benefit other species of concern.

A Draft SKR Recovery Plan, prepared by the USFWS in April 1997, has never been finalized. The Draft Recovery Plan provides that the minimum criteria for delisting the SKR are the establishment of five reserves in western Riverside County encompassing at least 16,500 acres of occupied habitat that is permanently protected, funded and managed, as well as establishment of two reserves in San Diego County (Draft SKR Recovery Plan, p. iv.). The MSHCP calls for the conservation within the minimum 15,000 acres of occupied Habitat in the MSHCP Conservation Area, and the maintenance at least 30 percent of the occupied Habitat (approximately 4,500 acres) at a population density of medium or higher (i.e., at least 5–10) individuals per hectare where no single Core Area will account for more than 30 percent of the total medium (or higher) population density area. The Riverside County MSHCP conforms to the provisions of the Draft SKR Recovery Plan. The SKR is a MSHCP covered species that is adequately conserved.

Additional Indirect Impacts

Indirect impacts from project implementation are those that result in modifications to habitat that indirectly impact the plants or wildlife species they support by affecting their overall health, behavior, and/or reproduction success. Indirect impacts to habitat include changes to the parameters of the habitat such as lighting, noise levels, drainage, or hydrology, and introduction of non-native species.

In addition to direct impacts, THE VILLAGES OF LAKEVIEW project has the potential for indirect impacts to biological resources, including sensitive resources. Potential for indirect impacts are greatest at the two proposed open spaced boundaries, which includes the San Jacinto Wildlife Area (north) and the Lakeview Mountains (southeast). Through the MSHCP Urban/Wildlands Interface Guidelines, projects located adjacent to the MSHCP Conservation Area are required to implement measures to address indirect effects to plants and wildlife located within the adjacent Conservation Areas. The implementation of such measures and compliance with the MSHCP will reduce indirect effects to below a level of significance.

The adjacent San Jacinto Wildlife Area and Lakeview Mountains support an abundance of sensitive plants and wildlife that are susceptible to indirect development affects. The San Jacinto Wildlife Area contains a number of sensitive plant populations, some of which are immediately adjacent or in close proximity to the project site. These include the thread-leaved brodiaea, San Jacinto Valley crowscale, smooth tarplant, and Coulter's goldfields. Sensitive animals are known to occupy habitat in the San Jacinto Wildlife Area in close proximity to the project site, including the western burrowing owl, tricolored blackbird, Los Angeles pocket mouse, and Stephens' kangaroo rat. Within the Lakeview Mountains, sensitive animals located adjacent to the proposed development boundary include the Bell's sage sparrow, rufous-crowned sparrow, granite spiny lizard, orange-throated whiptail, and coastal western whiptail. Additional species have the potential to occur off site including cactus wren, badger, Stephens' kangaroo rat, and numerous other special-status reptiles and small mammals.

The introduction of up to 34,000 people (and associated pets) by this project along with additional population increases in the surrounding county and city areas, results in indirect impacts to sensitive wildlife species. . However, Section 5.1 of the MSHCP, which states: "It is anticipated that new development in the Plan Area will fund not only the mitigation of the impacts associated with its proportionate share of regional development, but also the impacts associated with the future development of more than 332,000 residential units and commercial and industrial development projected to be built in the Plan Area over the next 25 years." This indicates that impacts associated with the Urban/Wildland interface due to population increases were anticipated by the MSCHP EIR analysis. The MSHCP EIR found such impacts less than significant through compliance with Section 6.1.4 and Core and Linkage aspects of the Plan. Therefore, indirect impacts resulting from habitat modifications (i.e., vandalism, unauthorized trails, etc.) on any endangered, or threatened species, or on any species identified as a candidate, sensitive, or special status species through introduction of people from the project and cumulative projects in the area are **considered less than significant** because THE VILLAGES OF LAKEVIEW project is consistent with the MSHCP and is subject to mitigation measures and conditions of approval which will ensure the indirect effects are mitigated.

Overall 100-year storm flows are contained as necessary to meet Riverside County Flood Control and Water Conservation District standards; however, additional indirect impacts could occur to the San Jacinto River, wetlands located in the San Jacinto Wildlife Area, and the on-site vernal pool area due to project site drainage changes in the smaller storms events (e.g., 2-year or 10-year). These changes could result in biological impacts to plant and animal species and their habitats. A Hydromodification Technical Report (see Appendix I (CD #4)) was performed by Geosyntec Consultants July 2008 to analyze potential biological impacts due to hydrologic changes and hydrological impacts to areas located to the north of THE VILLAGES OF LAKEVIEW Specific Plan area. Hydromodification is defined by the U.S. Environmental Protection Agency as “alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources.” Hydromodification activities can change a waterbody's physical structure as well as its natural function which in turn can cause problems such as: changes to surface runoff volumes and dry weather flows, changes to the frequency and number of runoff events, changes to the long-term cumulative duration of flows, as well as increased peak flows. A change to the hydrologic regime is considered a hydrologic condition of concern (HCOC) if the change could have a significant impact on downstream natural channels and habitat integrity. The Hydromodification Technical Report specifically addresses the likelihood that the proposed project could create Hydrologic Conditions of Concern (HCOC) by focusing on the following elements:

- 1) Water Balance Modifications: Changes in the volume, nature, and frequency of runoff to the off site wetland and vernal pool area to the north of the Project will be evaluated to assess the impact to plant and wildlife habitat.
- 2) Alteration to Storm Event Discharge Characteristics: Quantification of the pre- and post-development runoff flow rates, volumes, and durations to determine if storm event discharge characteristics will be significantly altered by the project.
- 3) Cumulative Impacts to the San Jacinto River Watershed: A qualitative evaluation of the cumulative impacts to the San Jacinto River due to changes in runoff hydrology and hydraulics from the site.

The Hydromodification Technical Report evaluates how and where on-site drainage to the San Jacinto River, the San Jacinto Wildlife Area, and vernal pools were considered before and after project implementation. The report mapped existing drainages and proposed drainages and calculated annual volumes including flow rate for pre- and post-development that drain to the San Jacinto River, the San Jacinto Wildlife Area, and the vernal pool area.

Water Balance Modifications

Many plant communities and the wildlife habitat they support depend on periodic short to longer duration inundation for survival while others may survive with only direct precipitation. Since the proposed THE VILLAGES OF LAKEVIEW Specific Plan will change watershed imperviousness as well as the drainage characteristics, there is potential concern that the volume and frequency of runoff from the project site would be modified significantly enough to impact the seasonal water balance of adjacent wildlife areas. The seasonal water balance refers to the proportioning of rainfall and irrigation water into surface runoff, infiltrated water, and evapotranspired water.

The proposed project would be completed along with a project to complete a component of the approved Lakeview-Nuevo Area Master Plan (RCFCD, 1978 and 1981), where the discharges from the Lakeview Dam would be diverted to the Nuevo Channel. This diversion project would divert surface runoff from an approximately 8-square mile watershed that currently drains to the wildlife area. The combined effect of the diversion and the site development on the seasonal water balance to the wildlife area is a potential hydrologic issue of concern for the proposed project.

THE VILLAGES OF LAKEVIEW includes a Central Park, a portion of which will be used as a detention basin as part of the overall drainage system. The Hydromodification Technical Report analyzed conditions with this basin in operation. To better match existing hydrologic conditions, the study also analyzed project implementation without the central basin. It was found, that average volumes and flow rate to the San Jacinto Wildlife Area wetland located east of Davis Road would be lower than pre-existing conditions with both the basin included and excluded; however, discharges would be impacted less with exclusion of the Central Park basin. Average volumes and flow rate discharges to the San Jacinto River will be greatly increased (over 500 times greater monthly average volume) both with and without a detention basin; however volumes were found to be higher with the basin while flow rates generally remain the same. Although it was found that post-development discharges would not equal pre-development discharge conditions, volumes and flow rates that did not include the central basin were roughly equal. Final analysis showed with implementation of the project without the basin, discharges would be closer to existing conditions (see Figures 4-1, 4-2, and 4-4 within the Hydromodification Technical Report) and **impacts to surrounding areas due to seasonable water balance are considered less than significant.**

Alteration to Storm Event Discharge Characteristics

Changes in the hydraulic loading characteristics of surface runoff to natural or unlined channels may affect the existing stability of local conveyances or the general hydrologic condition of the area receiving runoff. While all on-site open conveyances will be engineered and stabilized with vegetation, rock, or other engineered materials, some existing off-site local channels may be left in their natural condition. High flow rates would be controlled with upstream detention basins and flow control structures; however, if there are increases in the duration of low flow rates as compared to existing conditions there may be an increase in the total amount of energy applied to existing channels.

The project will introduce discharges that drain directly into the San Jacinto River. The return period of storm event peak flow rates to the off-site channel are expected to increase significantly from the existing condition due to the fact that the off-site channel currently receives very little surface runoff. As indicated in the Figure 4-2 of the Hydromodification Technical Report, the Central Park Basin does not significantly affect the peak flow return periods to the San Jacinto River.

As described in the Hydromodification Report prepared by Geosyntec, an existing channel located on site at the northwest corner of the project site drains directly to the San Jacinto River at a very slight slope (<0.5%) over approximately 300 feet from the project's point of

connection. During larger events, given the shallow slope to the river, it is possible that the river will back up into this existing on-site channel thereby reducing any potential impacts associated with discharges from the MS4 Channel.

Existing storm water discharges surface runoff via culverts or roadway overtopping at several locations across Ramona Expressway to private dairies and fields and across Marvin Road to the San Jacinto Wildlife Area. The surface conveyances at these locations are not well defined indicating that high flows cross infrequently or these areas are regularly disturbed by land use activities (e.g. agricultural activities). The proposed project's surface conveyances include well-defined engineered channels and storm drains. New culverts will be installed near the locations where surface runoff is currently being discharged from the property. See Figure 2-10 of Geosyntec's Hydromodification Technical Report in Appendix I (CD #4) of this DEIR.

Cumulative Impacts to the San Jacinto River Watershed

The San Jacinto River is located at the northwest corner of the project site. The San Jacinto River has a nearly 500-square mile watershed of which THE VILLAGES OF LAKEVIEW Specific Plan area will impact less than 5 square miles, or less than 1% of the upstream watershed. This relatively small proportion of the watershed would not be expected to cause any significant impacts on San Jacinto River; however, as the watershed area becomes more developed, the proposed project may contribute to cumulative impacts on the hydrology and hydraulics of the river. By estimating the impervious area of the watershed at projected build-out conditions per the General Plan and comparing this to the proposed project impervious area, the contribution of the project to cumulative impacts may be assessed. While the proposed project does not include any in-stream modifications to the San Jacinto River, significant increases in peak runoff from the proposed project could contribute to channel instability and exacerbate the effects of future river channelization projects.

Due to the current lack of directly connected conveyances from the project area to the San Jacinto River, the proposed THE VILLAGES OF LAKEVIEW Specific Plan will significantly increase the average annual and monthly volumes discharged directly to the river. However, this increase is not expected to cause significant impacts since the majority of discharges will be treated, low-flows from the WQMP Basin located in the northern portion of the property. The velocities that exit the project site are below calculated levels that could cause significant scour or erosion of the downstream off-site channel. As all surface runoff from the project area eventually infiltrates or flows to the river, the total change in water balance to the river is much less than the directly connected component alone. The total average annual volume discharged from the proposed project area is predicted to increase by 34-percent. The implementation of the Lakeview Dam Diversion Project partially offsets the increase in surface runoff due to the proposed project's impacts to the San Jacinto River.

Project runoff to the vernal pool will be minimal, if at all, and is not considered a significant hydrologic concern since the nature of the vernal pool should be sustained with direct rainfall and shallow subsurface flow from adjacent areas. Runoff to the off-site wildlife area is expected to decrease due to project development by up to 125 acre-feet per year on average (~32%). Removing the Central Park Basin from the proposed development plan would reduce this decrease by more than half.

Although the natural drainage features that drain to surrounding areas will be impacted, the Hydromodification Technical Report has shown that the project's drainage system could be modified to ensure that the net flows across the property will be maintained, such that any resources located downstream of the project site will receive, or not receive, necessary annual flows in a fashion in keeping with the existing conditions, overall and seasonally. In addition, the implementation of a Water Quality Management Plan (WQMP) and Best Management Practices (BMPs) will ensure that this project will not have any adverse water quality impacts on site or to any downstream resources upon which biological resources rely. **MM Bio 9** will ensure that the drainage system is designed in such a way as to allow flexibility to meet the needs of downstream habitats and the River. Therefore, with **MM Bio 9** implemented, indirect impacts resulting from hydromodification will be reduced to **less than significant** levels.

Threshold C: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Wildlife Corridors

According to the *Principles of Wildlife Corridor Design*, wildlife corridors are features whose primary function is to connect at least two significant wildlife habitat areas. These corridors may help to reduce or moderate some of the adverse effects of habitat fragmentation by facilitating dispersal of individuals between substantive patches of remaining habitat, allowing for both long-term genetic interchange and individuals to re-colonize habitat patches from which populations have been locally extirpated.

The proposed project would result in impacts to both the local and regional movement of wildlife. Evidence of local movement has been observed throughout the Lakeview Mountains and into the agricultural and rural development areas adjacent to the Mountains. In addition, regional movement is expected to occur on a less frequent level north and south across the Ramona Expressway, as animals move back and forth from the San Jacinto Wildlife Area and the Lakeview Mountains. Evidence of movement across the Ramona Expressway has been observed, specifically road-killed coyotes that were struck trying to cross the Ramona Expressway.

The MSHCP designates the Lakeview Mountains as Proposed Noncontiguous Habitat Block 5, which is connected to other MSHCP-conserved lands via the Proposed Constrained Linkage 20. The Proposed Constrained Linkage 20 ultimately connects Existing Core H (Lake Perris) in the north with Proposed Noncontiguous Habitat Block 5 (Lakeview Mountains). The proposed linkage is shown to extend across the Ramona Expressway at the northeast portion of the project site.

The MSHCP identifies one medium-sized mammal (bobcat, *Lynx rufus*) as a planning species for Proposed Noncontiguous Habitat Block 5 (Lakeview Mountains). Additional medium-sized mammals expected to occur in the Lakeview Mountains, and that would be considered for utilizing the Proposed Constrained Linkage 20 includes (but are not limited to) coyote (*Canis*

latrans), gray fox (*Urocyon cinereoargenteus*), and raccoon (*Procyon lotor*). Large mammals such as mountain lion (*Felis concolor*) and mule deer (*Odocoileus hemionus*) are not expected to occur in the Lakeview Mountains, and so are not considered by the MSHCP for the use of the linkage between the Lakeview Mountains and areas to the north. However, a mountain lion has been sighted in the Lakeview/Nuevo area as the cause of livestock kill.⁴

Development along the edge of the Lakeview Mountains will affect the local movement of wildlife that would normally enter the agricultural and rural development areas as part of territorial movement and the occasional search for supplemental food sources. Local movement within the Lakeview Mountains (and live-in habitat) will be maintained by the project through its contribution of contiguous lands (approximately 900 acres) to the MSHCP Conservation Area as part of Cell Group L.

The project will facilitate the regional movement of wildlife through the set aside of an approximately ~~4,000~~ 1,500-foot-wide area west of Bridge Street. The placement of this corridor is consistent with the area identified by the MSHCP for Proposed Constrained Linkage 20. The MSHCP acknowledges the desire to cross wildlife at the Ramona Expressway west of Bridge Street so as not to require wildlife to cross Bridge Street itself. The widening of Ramona Expressway either per the current General Plan classification or ultimately the Mid County Parkway road project, and other landowners north of Ramona Expressway, will be required to facilitate an ultimate connection to Existing Core H. The Draft EIR/EIS for the Mid County Parkway identifies a wildlife undercrossing at this location.

In addition to the Ramona Expressway, the project includes one on-site roadway, “JJ” Street, which will cross Proposed Constrained Linkage 20. The “JJ” Street crossing will include an under-roadway crossing that will allow wildlife to utilize the wildlife crossing without coming into contact with traffic. The crossing under JJ Street will coincide with whatever is determined to be built for the Mid County Parkway crossing, since that street’s crossing of the wildlife corridor is in the last phase of project development and immediately adjacent to the Ramona Expressway/Mid County right-of-way.

Overall, the proposed project will result in potentially significant direct impacts to both local and regional wildlife movement, however, the project, through its set aside land, will maintain long-term live-in habitat and allow for local movement within the Lakeview Mountains, and will facilitate regional movement by providing the connecting corridor to the Ramona Expressway and through coordination with the Mid County Parkway project. Therefore, impacts to wildlife movement are **less than significant**.

Nursery Sites

The proposed project will remove vegetation (i.e., trees, shrubs, and ground cover) suitable habitat for nesting migratory birds, including raptors. Impacts to such species are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Mitigation measures, including seasonal avoidance of vegetation removal and/or nesting bird surveys will

⁴ Eastern Municipal Water District, *Final Environmental Impact Report*, comment letter from Joyce Swartz, December 2008. (Available at EMWD.)

ensure that migratory birds (and their nests) will not be directly harmed. Condition 5b of the MSHCP Federal Fish and Wildlife permit specifically notes that the MSHCP does not authorize the impacts to nesting birds in lieu of the MBTA. The proposed project will not directly impact or impede the use of any recognized wildlife nursery sites. Impacts to nesting migratory birds are **potentially significant** without mitigation; implementation of **MM Bio 6** will reduce this impact to less than significant.

***Threshold D:** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service.*

The portions of natural drainage features occurring within the boundaries of the project site consist of ephemeral (only flow during and immediately after rainfall) streams that do not support any riparian habitat. Portions of the drainage features occurring within the proposed conservation areas of the overall Specific Plan support riparian vegetation, although none of the riparian drainages will be affected by the proposed project. As such, the project will not result in the loss of any habitat function for riparian species. However, along with the overall watershed, the unvegetated features do provide hydrologic function to aquatic resources supported in downstream receiving waters. Regardless, the project will not result in a loss of this hydrologic function. The project's drainage plan will maintain flows across the property, such that flows to the San Jacinto Wildlife Area and the San Jacinto River will be maintained. All along the boundary with the San Jacinto Wildlife Area, the project will be designed to match (or nearly so) the pre-project conditions pertaining to hydrology and volumes.

Proposed development within THE VILLAGES OF LAKEVIEW Specific Plan area will impact waters potentially subject to the jurisdiction of the ACOE, and subject to the jurisdiction of the CDFG. Impacts to ACOE jurisdictional areas require a Clean Water Act (CWA) Section 404 permit from the ACOE and a CWA Section 401 Water Quality Certification from the Regional Water Quality Control Board. Impacts to CDFG jurisdictional areas require a California Fish and Game Code Section 1602 Streambed Alteration Agreement from CDFG. Through application agreement with the agencies and agreed upon impact mitigation, such as payment into mitigation banks, impacts to jurisdictional waters are considered less than significant.

Of the anticipated 1.76 acres of State jurisdictional waters, the project may impact 1.50 acres. As shown in Figure 5.4-3, Drainages A, I, and J are avoided whereas the rest of the drainage areas are directly impacted by project construction. The impact to these drainages will be mitigated consistent with **Mitigation Measure Bio 8**. A Streambed Alteration Agreement from CDFG will be obtained pursuant to Fish and Game Code Section 1602 (**Mitigation Measure Bio 7**). The avoided waters consist of Drainage A, which is a small portion of the San Jacinto River included in the project boundary located before the undercrossing at the Ramona Expressway Bridge. Drainages I and J are channelized flows off the Lakeview Mountains that dissipate into sheet flow at the base of the mountains. Post project development, Drainages I and J will continue to sheet flow across the wildlife corridor (linkage).

Development activities can result in two types of water quality impacts: erosion and sedimentation and discharge of other pollutants during construction, and long term impacts from

runoff from the completed development and associated land uses. Storm water runoff and pollutant discharges tend to increase with urbanization due to the increase in impervious surfaces (such as roof tops and driveways), which reduces infiltration of rainfall and runoff. The WQMP identifies project BMPs that are intended to minimize the impact from the pollutants of concern and hydrologic conditions of concern identified for the project. Pollutants associated with urban runoff can be generally categorized as sediment, nutrients, bacteria and viruses (pathogens), oil and grease, metals, organics, pesticides, and trash. If downstream receiving water bodies impairments, as listed on the 303(d) list of California impaired water bodies, are the same as those that the project will release, these pollutants are required to be treated with a BMP with medium to high effectiveness and are referred to as “Pollutants of Concern”. For example, Canyon Lake, a downstream receiving water body from the project, is listed as having impairments for nutrients and pathogens. As nutrients and pathogens are expected pollutants, the project is required to treat for those pollutants with a medium to high level of effectiveness. See Table 3.2, *Water Quality Basin Treatment Control BMP Selection Matrix*, of the Preliminary Water Quality Management Plan located in Appendix H (CD #3). Storm water runoff from all developed areas within the Specific Plan area will be routed to the regional water quality basin. In addition, the project includes nine debris basins to trap trash debris from mountainous areas that are both on site and off site of the project and will also function to control sediment. The project also has vegetated roadway medians, vegetated open channel storm drains, and vegetated swales at various locations throughout the project. The combination of these BMPs will address the and minimize pollutants entering downstream waterways. See Section 5.8 for further analysis. Through implementation of the WQMP and SWPPP and implementation of **MM Bio 7** and **MM Bio 8**, the project will **not result in impacts to riparian habitat or jurisdictional waters**.

Mitigation will be provided either through 1) the purchase of credits offsite at an approved mitigation bank; 2) the on-site restoration of areas that will be monitored, and when successful, preserved in perpetuity; and/or or 3) the off-site restoration of areas that will be monitored, and when successful, preserved in perpetuity. Any off site or on site restoration mitigation will be monitored to ensure success. The specifics any applicable monitoring program will be determined during the process to obtain the Water Quality Certification and/or WDR. The location(s) and type(s) of mitigation will be subject to the approval of the regulatory agencies, including the ACOE, CDFG, and the Regional Board. This mitigation is consistent with CEQA Guidelines Section 15370(e), which allows mitigation by "compensating for the impact by replacing or providing substitute resources or environments." Since mitigation will occur off site, monitoring, habitat management and reporting will be undertaken by the approved mitigation banking entity.

While the off-site improvements will impact a CDFG/ACOE jurisdictional segment of a roadside ditch at the intersection of Reservoir Avenue and Nuevo Road, the area does not support any wetlands/riparian vegetation and therefore, **off-site improvements will have no impact** on riparian habitat or sensitive natural communities.

The project site includes an approximate 0.10-acre complex of disturbed alkali playa areas, which at one time exhibited the parameters of a jurisdictional wetland/vernal pool. The disturbed playa areas were originally noted in the 2003 biological surveys. At that time, the complex

consisted of disturbed portions of alkali playa located within the northwest portion of the property, surrounded by compost piles, and exhibited seasonal ponding. The playa areas occur adjacent to and within agricultural areas. While an area of disturbed alkali vernal pools were identified on site, the project will not result in any impacts to MSHCP vernal pools as the disturbed areas of alkali playa pools are being avoided and preserved by the project, including its surrounding watershed.

The proposed project, including fuel modification would result in direct impacts to approximately 60.48 acres of sensitive native vegetation types, including chamise chaparral and Riversidean sage scrub.

Chamise Chaparral

The proposed project would result in direct impacts to 0.19 acre of chamise chaparral, all of which are associated with project grading. These impacts would be potentially significant prior to mitigation. Areas of chamise chaparral to be affected occur within the MSHCP Criteria Area associated with Cell Group L. Impacts to chamise chaparral are covered and mitigated for through the MSHCP. Furthermore, all remaining areas of chaparral associated with the Specific Plan Area (652.84 acres) will be conserved as open space. With coverage through participation in the MSHCP and with the conservation of 650+ acres of chamise chaparral, impacts to chaparral would be **less than significant**.

Riversidean Sage Scrub

The proposed project would result in direct impacts to 60.29 acres of various areas of Riversidean sage scrub, including 47.85 acres of undisturbed Riversidean sage scrub, 0.35 acre of sage scrub/cholla vegetation, and 12.09 acres of disturbed areas of Riversidean sage scrub. Of these impacts, 33.20 acres would be attributed to project grading for development, and an additional 27.09 acres to be affected through fuel modification. All areas of Riversidean sage scrub to be affected occur along the base of the Lakeview Mountains in the southern, southeastern, and eastern portions of the project site. Areas of Riversidean sage scrub to be affected occur entirely within the MSHCP Criteria Area.

The areas of scrub vegetation to be affected support several special-status wildlife species, including Stephens' kangaroo rat and Bell's sage sparrow. Bell's sage sparrow is designated as MSHCP Planning Species (subsets of Covered Species that are identified to provide guidance for Reserve Assembly in Cores and Linkages and/or Area Plans) for Subunit 2 of the Lakeview/Nuevo Area Plan for the Lakeview Mountains (Proposed Non-Contiguous Habitat Block 5). The MSHCP identifies the Lakeview Mountains as supporting a key population of the Bell's sage sparrow. Bell's sage sparrow itself is particularly sensitive to edge effects. The MSHCP states that the treatment and management of edge conditions in affected areas will be necessary to ensure that the Proposed Non-Contiguous Habitat Block 5 maintains high quality sage scrub habitat, particularly for the Bell's sage sparrow. Therefore, the proposed project must incorporate features that provide for the management of edge effects along the Urban/Wildlands Interface (Section 6.1.4 of the MSHCP document) as discussed above.

The project has been designed to reduce impacts to Riversidean sage scrub, and is avoiding 250+ acres of Riversidean sage scrub within the overall Specific Plan area. THE VILLAGES OF LAKEVIEW Specific Plan would preserve approximately 912.71 acres of native vegetation types associated with the Lakeview Mountains, including 259.87 acres of areas mapped as Riversidean sage scrub. The majority of the habitat to be conserved represents high quality habitat for the Bell's sage sparrow and other special-status animals and plants. Impacts to sage scrub are covered and mitigated for through the MSHCP. With coverage/mitigation afforded by the MSHCP and with the conservation of the additional scrub habitat, impacts to Riversidean sage scrub would be **less than significant**.

Threshold E: *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

As discussed above, the project site contains no jurisdictional wetlands and 0.10 acre of disturbed alkali playa vernal pools. The vernal pool feature is located at the northwestern portion of the project site. While the project will direct flows away from the vernal pool area, this design has no impact to vernal pools. Sheet flows are negligible in vernal pool sustainability as vernal pools are fed by local watersheds and vertical rainfall.

The 0.10 acre disturbed alkali playa vernal pool is located outside the development area and will not be disturbed. Therefore, the project will have **no direct impact** on federally protected wetlands and no direct impact on vernal pools.

As discussed above, in the hydromodification section, drainage from the project site currently contributes to a wetland area located within the SJWA east of Davis Road. As shown through the results of the Hydromodification Technical Report and through implementation of **MM Bio 9**, which allows for future flexibility in matching flows to that area, **impacts to off-site wetlands will be less than significant**.

Threshold F: *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

Riverside County Ordinance 810.2 establishes the Western Riverside County MSHCP mitigation fee. The project is within the region covered by the MSHCP and compliance with Ordinance 810.2 is required. The MSHCP addresses biological impacts for the take of Covered Species through establishment and implementation of a regional conservation strategy and other measures discussed in the MSHCP, such as mitigation fees. The MSHCP provides mitigation for current and future impacts of planned urban, rural, and regional infrastructure development on the species identified in the MSHCP.

Riverside County Ordinance 663.10 establishes the SKR HCP fee assessment area and mitigation fees. The applicant is required to pay the SKR mitigation fee and in doing so will not conflict with Ordinance 663.10. The project is located partially within the SKR HCP area. The HCP is designed to provide a method of mitigating impacts to the SKR caused by the loss of its habitat due to development. Mitigation of impacts to the Stephens' kangaroo rat will be

accomplished through the review of each proposed development project within the Fee Assessment Area to determine whether on-site mitigation through the reservation or addition of lands included within or immediately adjacent to a potential habitat reserve site or payment of the Mitigation Fee or a combination of both is appropriate and furthers the ultimate HCP objectives.

Riverside County Ordinance No. 559.7 regulates the removal of trees. Under this ordinance the removal of trees located in areas above 5,000 feet in elevation requires a permit. This ordinance is designed to ensure timberlands throughout the County are protected. The proposed project site is located below 5,000 feet in elevation. The proposed project will not conflict with this ordinance.

Policies:

- *Lakeview Nuevo Area Plan (LNAP) 7.1 Adhere to the lighting requirements specified in County Ordinance No. 655 for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Mount Palomar Observatory.*

The project will introduce new sources of nighttime lighting and glare near conservation areas for outdoor security purposes and the residences located on site. Proposed land uses immediately adjacent to the SJWA (northern interface) consist of conservation and open space with drainage facilities (including but not limited to drainage facilities, water quality basins, and passive parks). Proposed land uses adjacent to the Lakeview Mountains (southern interface) consist of residential development and park use. Mitigation Measures to minimize impacts to both interfaces will include measures that are enforced through the residential CC&Rs and Homeowners' Association. These associations will ensure that lighting is not projected into the Conservation Area at either interface. Street lighting will be designed with internal baffles to direct the lighting towards the ground and have a zero side angle cut off to the horizon. At the interface with the Lakeview Mountains, street lighting will be at least 50 feet away from the Conservation Area. North of Ramona Expressway, street lighting will be at least 400 feet from the project's proposed conservation areas and at least 500 feet away from the existing SJWA. The shielded lighting and adequate setback will ensure that there will be no spillage of lighting into the Conservation Area. The CC&Rs will restrict the placement and use of lighting on private residential properties, such that individual residences will not direct lighting into the Conservation Area.

The Specific Plan Area is located within Zone B of Ordinance 655 (within 45 miles) and therefore is subject to portions of Ordinance 655, which relates to regulating light pollution for the Palomar Mountain observatory. Lighting for the project will be designed to comply with the Palomar ordinance, which, for outdoor lighting limits use at night, generally allows only the use of partially and fully shielded low-pressure sodium and luminous tube lighting, and eliminates "searchlight" advertising methods. This requirement and implementation of MM Bio 1 will further ensure that ambient lighting with the SJWA and Lakeview Mountains is not increased. Finally, the Master Developer will create an Environmental Stewardship Program (also required in **MM Bio 11**), which

could include on-going education for homebuilders and homeowners and annual compliance reviews to determine whether proper lighting is being utilized.

- *LNAP 13.1 Conserve the existing intact upland habitat block in the Lakeview Mountains for the benefit of raptors, burrowing owl, and cactus wren.*

A portion of the Lakeview Mountains is included in THE VILLAGES OF LAKEVIEW Specific Plan Area. The portions of the Lakeview Mountains within the Specific Plan Area are within the proposed conservation area. Species that occur within THE VILLAGES OF LAKEVIEW Specific Plan Area will be avoided.

- *LNAP 13.2 Conserve clay soils intermixed with or near vernal pools occurring in the middle reaches of the San Jacinto River supporting core populations of thread-leaved brodiaea.*

While the project site includes Willow series soils associated with the disturbed alkali playa vernal pools and thread-leaved brodiaea, the location of the soils is not within the San Jacinto River. The Willow series soils that are associated with thread-leaved brodiaea are located within proposed conservation areas and will be avoided.

- *LNAP 13.3 Conserve wetland habitats along the San Jacinto River including existing vernal playas, vernal pools, and associated watersheds. Maintain watershed processes that contribute to and enhance water quality and the hydrologic regime.*

Wetland habitats within the project site along the extreme west portion of the Specific Plan Area within the San Jacinto River will be conserved as conservation area. An area of remnant disturbed alkali playa vernal pool, approximately 0.1 acre, is located at the northwest corner of the project site will not be disturbed by the project.

- *LNAP 13.4 Conserve Willow-Domino-Travers soils that support sensitive plants such as spreading navarretia, San Jacinto Valley crownscale, Coulter's goldfields, Parish's brittlescale, and Davidson's saltbrush.*

Approximately 38.60 acres of Willows soils are mapped within the Specific Plan Area, including the northwestern portion of the property. Areas mapped as Willows soils are degraded due to long-standing disturbances, including agricultural operations, a materials stockyard, and other disturbances. However, some areas mapped as Willows soils do support remnant patches of native vegetation and habitat. A portion of the area containing the disturbed alkali playa vernal pools is mapped as Willows soils. In addition, an area in the extreme western portion of the property along the northern edge of Ramona Expressway supports Coulter's goldfields and smooth tarplant, both of which are designated as MSHCP Criteria Area Plants. All portions of Willow soils supporting plants are avoided.

- *LNAP 13.5 Maintain and enhance linkage value of the San Jacinto River for wildlife movement and live-in habitat.*

THE VILLAGES OF LAKEVIEW Specific Plan has been designed so that the proposed land uses and circulation adjacent to the San Jacinto Wildlife Area and Lakeview Mountains will incorporate barriers (as appropriate) to minimize unauthorized public access, domestic animal predation, illegal trespass, or unauthorized dumping. Barriers will be designed to accommodate wildlife movement, but directing wildlife away from residential areas.

In addition, the project will facilitate the regional movement of wildlife through the set aside of an approximately ~~1,000~~ 1,500-foot-wide corridor west of Bridge Street in the location of the MSHCP Proposed Constrained Linkage 20. The placement of this corridor coincides with a wildlife under-crossing proposed for the Mid County Parkway road project, which will facilitate an ultimate connection to Existing Core H via the San Jacinto River. Therefore, the linkage values in the area are maintained and enhanced.

- *LNAP 13.6 Conserve grasslands adjacent to coastal sage scrub habitats as foraging habitat for raptors.*

The Specific Plan Area includes approximately 20 acres of non-native grassland of which 6 acres are located within conservation areas and the remaining 14 are located within the project's footprint. Approximately 290 acres of the Specific Plan Area is comprised of Riversidean sage scrub. Riversidean sage scrub is recognized as an inland (more xeric) sub-association of coastal sage scrub.

The majority of raptor use observed consisted of general foraging and roosting. Species commonly observed foraging throughout the project site included red-tailed hawk and American kestrel. Special-status raptors, which were less commonly observed, were mainly detected foraging and roosting within the northern portion of the project site, and within the adjacent San Jacinto Wildlife Area. These species included the ferruginous hawk, prairie falcon, white-tailed kite, and northern harrier.

The project will result in the loss of some non-native grassland located adjacent to Riversidean sage scrub. However, the project will designate approximately 138 acres of the overall site as Open Space With Drainage Facilities, much of which will offer foraging habitat for raptors. The majority of these are contiguous with the San Jacinto Wildlife Area. In addition, the MSHCP itself mitigates the loss of raptor foraging habitat throughout the overall Plan Area through the assemblage of existing Cores and Linkages with lands acquired from the Criteria Areas. With the project's participation in the MSHCP and the set aside of additional open space contiguous with the San Jacinto Wildlife Area, impacts to raptor foraging habitat would be less than significant.

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts related to biological resources to below the level of significance.

To reduce impacts associated with avoiding conflicts with the provisions of the MSHCP regarding urban/wildlife interface, the following three mitigation measures shall be implemented:

MM Bio 1: The project will introduce new sources of nighttime lighting and glare near conservation areas for outdoor security purposes and the residences located on site. Proposed land uses immediately adjacent to the SJWA (northern interface) consist of conservation and open space with drainage facilities (including but not limited to drainage facilities, water quality basins, and passive parks). Proposed land uses adjacent to the Lakeview Mountains (southern interface) consist of residential development (including a fuel modification zone for fire protection) and park use. Potential impacts from introduced lights include impacts to migratory birds that use constellations to guide them during migration and impacts to foraging, reproduction, and circadian rhythms of other species. The CC&Rs and Homeowners' Associations will ensure that lighting is not projected into the Conservation Area at either interface. Street lighting will be designed with internal baffles to direct the lighting towards the ground and have a zero side angle cut off to the horizon. At the interface with the Lakeview Mountains, street lighting will be at least 50 feet away from the Conservation Area. North of Ramona Expressway, street lighting will be at least 400 feet from the project's proposed conservation areas and at least 500 feet away from the existing SJWA. The shielded lighting and adequate setback will ensure that there will be no spillage of lighting into the Conservation Area. The CC&Rs shall be submitted to the Planning Department and County Counsel prior to Map Recordation and will restrict the placement and use of lighting on private residential properties, such that individual residences will not direct lighting into the Conservation Area.

MM Bio 2: Planning Areas and roads adjacent to the SJWA, Proposed Constrained Linkage 20 (wildlife corridor) and Lakeview Mountains will incorporate barriers (as appropriate) to minimize unauthorized public access, domestic animal predation, illegal trespass, or unauthorized dumping. The exception will be public access locations, which will direct the public into authorized access areas within the Conservation Area (i.e., SJWA and the Lakeview Mountains). All barriers will be placed within the boundaries of the development and will be outside of the Conservation Areas. Barriers will be located between the SJWA/Lakeview Mountains and houses/paved roads. Barriers will be designed to accommodate wildlife movement, but directing wildlife away from residential areas. Barriers may consist of, but not be limited to, walls, plants, fences, berms, and other means (such as horizontal distance and vertical distance) or combination of means to achieve the desired result. The final design of the barriers shall be completed based on consultation between the developer, County Planning Department, and as approved by the County Environment Programs Department when tentative tract maps and/or road plans are approved. California Department of Fish and Game San Jacinto Wildlife Area representatives will be consulted regarding final design of barriers along the SJWA edge. Where barriers are required between established conservation areas and other areas of the project site, impacts to cultural resources shall be taken into consideration with respect to location, design, and installation such that cultural resources adjacent to the conservation areas are avoided and that the setting is respected or enhanced. The County Archaeologist, or designee thereof, shall review all barrier plans proposed adjacent to conservation areas on-site to assure consistency with this mitigation measure

MM Bio 3: The project Conditions, Covenants and Restrictions shall restrict the number of domestic animals (e.g., dogs, cats and other predatory animals) allowed per residence to two, thus further limiting potential impacts. Cats shall be limited to indoors. Copies of the CC&Rs shall be provided to the County Planning Department prior to Map Recordation. [Note: Current County zoning allows up to 4 dogs per premises.] This mitigation measure applies to the development north of Ramona Expressway (Resort Village) and the following Planning Areas south of Ramona Expressway: 58, 66-69, 73 and 77.

To reduce impacts associated with minimizing impacts to the burrowing owl, sensitive species and sensitive and listed bird species, the following mitigation measures should be implemented:

MM Bio 4: No more than 30 days prior to ground disturbance associated with the development of the project regarding clearing, grading, or demolition, a qualified biologist will conduct a pre-construction burrowing owl survey to satisfy Objective Number 5 of the MSHCP species-specific objectives for the burrowing owl. If breeding burrowing owls are detected on site, the Master Developer will coordinate with the County of Riverside Environmental Programs Department (EPD) to determine if the occupied habitat will need to be avoided, or if the owls can be relocated from the site. If the relocation of owls is approved, the Master Developer will prepare a plan of relocation (passive or active) to be approved by EPD and the responsible wildlife agencies (i.e., U.S. Fish and Wildlife Service and CDFG). If approved, relocation will be conducted outside of the breeding season. If non-breeding owls are identified on site, including wintering owls, the proponent will also notify EPD, and will relocate the owls following a protocol to be approved by EPD and the wildlife agencies.

MM Bio 5: If habitat suitable to support the coastal California gnatcatcher is to be removed between March 1 and August 15, focused surveys shall first be conducted to determine if the habitat is occupied by gnatcatchers. If gnatcatchers are present and are determined to be nesting, the occupied areas shall be avoided until after August 15.

MM Bio 6: The removal of potential nesting vegetation of sensitive bird species will be conducted outside of the nesting season (February 1 to August 31) to the extent that this is feasible. If vegetation must be removed during the nesting season, a qualified biologist will conduct a nesting bird survey of potentially suitable nesting vegetation prior to removal. Surveys will be conducted no more than three (3) days prior to scheduled removals. If active nests are identified, the biologist will establish buffers around the vegetation containing the active nest (500 feet for raptors and 200 feet for non raptors). The vegetation containing the active nest will not be removed, and no grading will occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest). If clearing is not conducted within three days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.

To reduce impacts to riparian habitats and jurisdictional waters, the following mitigation measure shall be implemented:

MM Bio 7: Prior to the issuance of a grading permit, individual projects will obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters. Authorizations may include, but are not limited to, a Section 404 permit from the Army

Corps of Engineers, a Section 401 Water Quality Certification from the Regional Board, and a Section 1602 Streambed Alteration Agreement from California Department of Fish and Game.

MM Bio 8: Project-specific impacts to jurisdictional waters will be mitigated at a minimum ~~1:1~~ 3:1 ratio in a manner to be determined by the Master Developer and to be approved by the Army Corps of Engineers, California Department of Fish and Game, and the Regional Board through the permitting process.

MM Bio 9: To allow for future flexibility in the hydrological function of the project drainage system so as to best meet the needs of the off-site wetlands and on-site vernal pool areas, the Central Park detention basin shall be designed to allow flows to be detained (as currently planned) or to bypass (completely or partially) the basin such that greater flows can be released to the wetland area to most closely mimic existing conditions in the 2-year and 10-year storm.

To comply with the Riverside County Multiple Species Habitat Conservation Plan, the following mitigation measure shall be implemented:

MM Bio 10: The County of Riverside is a participating entity or permittee of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The purpose of the MSHCP is to conserve open space and habitat on a countywide, cumulative basis. Take authorization for the MSHCP was granted by the USFWS and CDFG on June 22, 2004. The County of Riverside will be allowed to utilize its allotted authorized take for projects in compliance with the MSHCP. Compliance with the MSHCP fee requirements will provide adequate mitigation for potential impacts to the burrowing owl and other species and plant communities determined to be adequately conserved by the MSHCP. To address the impacts associated with the cumulative loss of habitat for special status birds by the loss of habitat, the proposed project shall be conditioned to pay Riverside County MSHCP mitigation fees as set forth under Ordinance No. 810.2.

To reduce direct and indirect impacts due to edge effects and to further comply with Section 6.1.4 of the MSHCP, the following mitigation measure shall be implemented:

MM Bio 11: In order to increase public awareness and knowledge about local environmental issues and reduce potential significant indirect effects of development ~~adjacent~~ near to Conservation Areas, the Master Developer of the proposed project shall provide an Environmental Stewardship Program. The program will include methods of community education such as interpretive and directional signs, pamphlets and demonstrations. The types of information presented shall include, but not be limited to: lighting, noise, keeping on trails, wildlife, plants, habitats, barriers, domestic animals, toxics such as pesticides, and invasive species. The Environmental Stewardship Program shall include a fund to be administered by the Lakeview Community Services Organization and a portion of the fund shall be used for SJWA management items, including feral animal trapping, removal of trash, invasive species removal and enforcement. The budget will be developed in consultation with the California Department of Fish and Game.

MM Bio 11a: In order to reduce the potential significant indirect effects of invasive species to Conservation Areas, the Specific Plan will design landscaped areas adjacent to the SJWA and

Lakeview Mountains to avoid the use of invasive plant species identified in Table 6-2 of the MSHCP document. Of the 86 species identified in the MSHCP table (see also Appendix D (CD #3) and Appendix C (CD #3) of the Specific Plan), 71 of them will be outright prohibited within the Specific Plan. Of the remaining 15 plants, if used, they shall be placed at least 150 feet from the existing and proposed conservation areas in the Lakeview Mountains and shall not be used within 500 feet of the San Jacinto Wildlife Area and the downstream conservation areas along the San Jacinto River. CC&Rs will be enforced through the Home Owners' Association to exclude 71 invasive species from properties throughout the project and 86 invasive species from properties within the above-prescribed distances from the urban/wildland interfaces. Maintenance of landscaping in these areas will include the removal of invasives that may establish through natural dispersal mechanisms. Such maintenance shall be funded through the Environmental Stewardship Program.

MM Bio 11b: In order to reduce the potential significant indirect effects of pesticides and rodenticides to conservation areas, the Environmental Stewardship Program established under MM Bio 11, shall include an Integrated Pest Management (IPM) program. The IPM program will 1) Establish minimum action thresholds for the application of pesticides; 2) Provide educational materials to promote accurate identification of pests by homeowners, so appropriate control decisions can be made in conjunction with action thresholds; 3) Educate homeowners to promote the prevention of pests before infestation occurs; and 4) Recommend thresholds for utilization of control methods. Compliance with the IPM program will be made a requirement of the project Conditions, Covenants and Restrictions, and enforced through the homeowners association.

MM Bio 12: Where barriers are required between established conservation areas and other areas of the project site, impacts to cultural resources shall be taken into consideration with respect to location, design, and installation such that cultural resources adjacent to the conservation areas are avoided and that the setting is respected or enhanced. The County Archaeologist, or designee thereof, shall review all barrier plans proposed adjacent to conservation areas on-site to assure consistency with this mitigation measure.

MM Bio 13: Prior to issuance of grading permit for all Planning Areas located adjacent to a conservation area that will come under Riverside Conservation Authority Management, sensitive resources (conservation areas) shall be delineated with temporary construction fencing. Training for construction workers and construction management personnel shall have occurred which informs project workers of their responsibilities in regards to avoiding and minimizing impacts to sensitive biological resources through avoiding the fenced areas.

MM Bio 14: To further deter wildlife from entering developed areas, trash receptacles and refuse containers located within the Greenbelt and parks located within 100 feet of all Conservation Areas shall be provided with mechanisms which prevent scavenging animals from gaining access to the contents of such trash containers.

Summary of Project-Specific Environmental Effects After Mitigation Measures Are Implemented

Based on the results of the biological assessment and this analysis, potential adverse direct impacts associated with endangered or threatened species, sensitive or special status species, or on riparian habitat or other sensitive natural community, or federally protected wetlands, movement of fish or wildlife, and compliance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and other local policies or ordinances, are considered significant. Compliance with the required regulations, project design criteria, and mitigation measures above, the direct impact is **less than significant**.

Section 4.4 of the MSHCP states that:

The MSHCP was specifically designed to cover a large geographical area so that it would protect numerous endangered species and habitats throughout the region. It is the projected cumulative effect of future development that has required the preparation and implementation of the MSHCP to protect multiple habitats and multiple endangered species.

It goes on to state that:

The LDMF [Local Development Mitigation Fee] is to be charged throughout the Plan Area to all future development within the western part of the county and the cities in order to provide a coordinated conservation area and implementation program that will facilitate the preservation of biological diversity, as well as, maintain the region's quality of life.

The reason for the imposition of the Fee over the entire region is that the loss of habitat for endangered species is a regional problem resulting from the cumulative impacts of continuing development throughout all of the Jurisdictions. In addition, the purchase of habitat properties for preservation purposes with regionally-generated fees not only mitigates the endangered species habitat issue, but also helps resolve other regional problems related to the retention of open space and historic view sheds which, in turn, promote flood protection and water re-charge measures.

Last, Section 5.1 of the MSHCP states that:

“It is anticipated that new development in the Plan Area will fund not only the mitigation of the impacts associated with its proportionate share of regional development, but also the impacts associated with the future development of more than 332,000 residential units and commercial and industrial development projected to be built in the Plan Area over the next 25 years.”

As public and private development, including construction of buildings, structures, infrastructure, and all alterations of the land that are implemented within areas that are outside of the Criteria Area are permitted under the Plan (see MSHCP Section 2.3.7.1), cumulative impacts would be less than significant provided that the terms of the MSHCP are fully implemented. As discussed in Impact 4.3-8, the proposed project has consulted the MSHCP database and has performed the recommended and required habitat assessments and focused surveys for the

project site and would be required to pay the required MSHCP mitigation fee(s). The project would comply with the requirements of the MSHCP and, thus, would not conflict with its adopted policies. Therefore, impacts to special-status species, including sensitive natural communities, are fully addressed within the Plan and are considered less than significant. Through compliance with the MSHCP, the proposed project's impacts to special-status species, sensitive habitat, existing conservation plans, or wildlife movement would also be less than significant.

Summary of Cumulative Environmental Effects After Mitigation Measures Are Implemented

Section 7.1 includes a more detailed discussion of cumulative environmental effects.

Cumulatively, wildlife movement between the Lakeview Mountains and Existing Core H will be affected by the proposed THE VILLAGES OF LAKEVIEW project, future improvements to the Ramona Expressway and Bridge Street, and additional landowner activities north of the Ramona Expressway. It is the responsibility of these projects and landowners, in conjunction with THE VILLAGES OF LAKEVIEW project, to ensure that the Proposed Constrained Linkage 20 is assembled in a manner that supports wildlife movement. The placement of this corridor coincides with a wildlife under-crossing proposed as part of the future County of Riverside's Mid County Parkway project. Connection to existing Core H would occur via the San Jacinto River. The MSHCP acknowledges that the existing linkage is constrained due to existing agriculture and proposed road projects. However, the corridor proposed as part of this project combined with the proposed under crossing of Ramona Expressway, relieves existing and future constraints for this linkage south of Ramona Expressway. The MSHCP provides for other wildlife corridors so that cumulatively, impacts to wildlife movement remain **less than significant**.

The project will also have cumulative effects on the San Jacinto River and the San Jacinto Wildlife Area with regards to hydrologic conditions. The San Jacinto River and the San Jacinto Wildlife Area are specialized ecosystems that draw water from the surrounding areas. Areas of development generally have higher amounts of impervious surfaces leading to greater runoff with a potential higher pollutant load. Development surrounding these ecosystems will have a negative effect to these areas if hydrologic conditions are not cumulatively taken into consideration. The project includes a Hydromodification Technical Report (see Appendix I (CD #4)) where impacts to the River and Wildlife Area were considered before and after project implementation. It was found that increased volume will enter the San Jacinto River and the San Jacinto Wildlife Area while less volume will enter the on-site vernal pool area. Final analysis showed with implementation of the project without the Central Park basin, discharges more closely match peak flow rates of the existing condition. This project has included measures to ensure minimal changes in hydrologic conditions will result from THE VILLAGES OF LAKEVIEW. Impacts from reasonably foreseeable related development projects (see **Table 5.14-K** and **Figures 5.14-8a and 8b**) that surround the Wildlife Area and drain to the San Jacinto River may result in significant impacts if hydromodification is not taken into consideration within subsequent project design for those other developments. Since the project matches the peak flow rates of the existing condition, it will not contribute to cumulative impacts, therefore, impacts to

the San Jacinto River and San Jacinto Wildlife are considered **cumulatively less than significant**.

The Riverside County Multiple Species Habitat Conservation Plan Environmental Impact Report Section 5.1.1, *Cumulative Impact Analysis, Biological Resources*, evaluated the cumulative effects of the proposed MSHCP and alternatives on biological resources. In particular, the analysis focuses on the cumulative effects of the proposed MSHCP with the regional growth forecasts.

Through compliance with the MSHCP, the project will not result in a cumulative adverse effect, either directly or through habitat modifications, on any of the Covered Species listed in the Plan as implementation of the MSHCP benefits Covered Species by preserving their habitat in order to address their life cycle needs. Thus, through compliance with the MSHCP and based on the features of the MSHCP itself, impacts to Covered Species are mitigated below a level of significance.

Implementation of the MSHCP will result in cumulatively significant impacts on the Non-Covered Species because the issuance of incidental take permits will remove an impediment to development outside of the MSHCP Conservation Area. Non-Covered Species would receive little or no protection outside the reserves under existing ordinances and regulations. However, within the project area, there are no threatened or endangered species known or likely to be on site which are not on the 146-species list covered by the MSHCP. One sensitive plant that occurs on site is listed on the California Native Plant Society list and is Non-Covered by the MSHCP: Paniculate tarplant (*Deinandra paniculata*). Because this species is not threatened or endangered, its range is sufficiently broad, and it is known to exist in other areas near the site (the Wildlife Area) which is not proposed for development, direct loss of this plant is considered less than significant at the project-specific level. Because this species is the only Non-Covered species on site, and it does not require an incidental take permit due to its lesser status, and for the same reasons it is less than significant at the project level, impacts to Non-Covered species are **cumulatively less than significant**.

The project will **not cause adverse cumulative effects** related to the reduction of sensitive vegetation communities; as the project is located within the MSHCP Plan Area and the Plan itself is designed to preserve sufficient acreage of the sensitive vegetation communities present in western Riverside County. Similarly, the project will not cause adverse cumulative effects related to interference with the movement of any native resident or migratory fish or wildlife species or obstruction of genetic flow for the identified Planning Species. Part of the purpose and goals of the MSHCP is to use regional planning efforts to assemble a reserve that will preserve contiguous blocks of habitat in large enough areas to ensure that the reserve will allow movement of species and flow of genetic information.

The proposed project will **not cause adverse cumulative impacts** by conflicting with the provisions of any adopted Habitat Conservation Plan, Natural Communities Conservation Plan or other approved local, regional, or state habitat conservation plan either within or outside of the Plan area. The MSHCP has been written specifically to complement existing HCPs, such as the Stephens' kangaroo rat long-term HCP. Through compliance with the MSHCP and existing

HCPs, local, regional, and state plans, cumulative impacts are considered less than significant.

Cumulative effects associated with the proposed MSHCP take authorization would involve direct loss of habitat and species associated with ground disturbance in take authorized areas as development occurs in accordance with projected growth. Cumulative indirect effects would occur to species and habitats within the MSHCP Conservation Area and would be associated with development of proposed land uses and activities in take authorized areas in proximity to the MSHCP Conservation Area. Indirect effects primarily result from adverse “edge effects” and may be short-term indirect effects related to construction or long-term indirect effects associated with development or land use practices in proximity to conserved habitat areas. Cumulative indirect impacts resulting from construction activities include dust, noise, and general human presence that may temporarily disrupt species and habitat vitality and construction-related soil erosion and runoff. Edge effects at the boundary between natural lands and human-occupied lands (“urban edge effects”) arise due to human-related intrusions such as lighting, noise, invasive species, exotic predators (e.g., dogs and cats), hunting, trapping, off-road activities, dumping, and other forms of recreation and disturbance. Human-induced edge effects are generally unfavorable to native species and are considered cumulative as edge increases throughout the landscape.

Cumulative significant indirect impacts associated with edge effects and increased development outside the conservation areas established by the proposed MSHCP are addressed in the provisions of Section 6.1.4 of the Draft MSHCP. Edge effects will result as development occurs in proximity to habitat; however, the proposed MSHCP contains provisions that will reduce the adverse impacts associated with edge effects. The MSHCP provides take authorization for Covered Species. The MSHCP would not directly cause edge effects, but it would dictate where such effects could occur through the reserve assembly process. Thus, cumulative indirect impacts associated with edge effects are considered **less than significant**.

The project's contribution to the cumulative problem of climate change may exacerbate impacts to biological resources, however all impacts to species and habitat caused directly by the project have been mitigated as discussed herein. The Project is consistent with two adopted HCPs and they provide for adaptive management that will include species management to address potential future impacts from climate change. Cumulative indirect impacts to biological resources outside the project site are too speculative to analyze in this document.

5.5 CULTURAL AND PALEONTOLOGICAL RESOURCES

Cultural resources encompass historical, archaeological, and paleontological resources that may be present on the project site or on adjacent areas that may be indirectly affected by project implementation. Potential impacts related to cultural resources resulting from the proposed project were addressed in the Notice of Preparation (NOP) and were determined to have potentially significant impacts. This section addresses whether the proposed THE VILLAGES OF LAKEVIEW Specific Plan project has the potential to alter, destroy, or cause a substantial adverse change in the significance of a historical or archaeological resource; disturb human remains, including those interred outside of formal cemeteries; restrict existing religious or sacred uses within the potential impact area; or directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

In addition to other documents, the following sources were used in the preparation of this section of the DEIR:

- County of Riverside, *County of Riverside General Plan, Lakeview/Nuevo Area Plan*, October 2003. (Available at County of Riverside or at www.rctlma.org/genplan/content/ap2/lnap.html)
- County of Riverside, *Riverside County Integrated Project, Existing Setting Report*, LSA Associates, March 2003. (Available at County of Riverside.)
- Statistical Research, Inc. (SRI), *Mystic Paavo': Cultural Resources Survey and Evaluation of The Villages of Lakeview Specific Plan, Riverside County, California*, December 2008. (Appendix E (CD #3) Confidential maps and site records are available for review by qualified researchers at the California Historical Resources Information System (CHRIS) Eastern Information Center, University of California, Riverside.)
- LSA Associates, Inc., *Paleontological Resource Assessment, The Villages of Lakeview, Riverside County, California*, March 2007. (Appendix E (CD #3))
- National Park Service, *National Register of Historic Places (NRHP)*, January 2008. (Available online at <http://www.nps.gov/nr/>)

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

Setting

The project site is located in the Lakeview community of western Riverside County, southeast of Lake Perris and the city of Moreno Valley, and west of the city of San Jacinto. The project area is situated in a large, open valley between the Lakeview Mountains and the Bernasconi Hills. The Lakeview Mountains are part of the Peninsular Ranges, a geologically diverse set of mountain ranges that form a north-south barrier from Mexico to the San Geronio Pass between the coastal basins to the west and the Colorado Desert to the east. This particular portion of southern California (western Riverside County) is equated with the western boundary of the Sonoran Desert and can be associated with the Sonoran Life Zone, supporting desert vegetation important to the survival of various desert wildlife important to native peoples.

Paleontological Resources

Paleontology is the study of the developing history of life on earth, of ancient plants and animals based on the fossil record (evidence of their existence preserved in rocks). This includes the study of body fossils, tracks, burrows, cast-off parts, fossilized feces, and chemical residues. Modern paleontology sets ancient life in its context by studying: how long-term physical changes of global geography and climate have affected the evolution of life, how ecosystems have responded to these changes and have changed the planetary environment in turn, and how these mutual responses have affected today's patterns of biodiversity.

According to the Paleontological Resource Assessment prepared by LSA (Appendix E (CD #3)), geologic features exposed in the project area are alluvial deposits that are at least 10,000 years old. The project area is underlain with sediments from the Quaternary alluvial fan and valley deposits, as well as Cretaceous granitics. A large and diverse collection of Rancholabrean fossils (fossils that are from a stage of geologic time in southern California in the upper Pleistocene era (approximately 1.8 million years before present)), were found within similar sediments that are in the project area, approximately 11 miles southeast at the Diamond Valley Lake Reservoir. The closest group of fossil localities is about 1 mile to the southwest. Fossil remains from plants, invertebrates, reptiles, amphibians, birds, and mammals were found approximately 15 feet below the surface.

Riverside County General Plan's Paleontological Sensitivity Map defines areas that have a high, low, or undetermined potential for paleontological resources. The low to high rating is based on an inventory of geologic formations known to potentially contain paleontological resources. The Riverside County General Plan Figure OS-8 maps high sensitivity areas as either "High A" or "High B". "Sedimentary rock units with High potential for containing significant nonrenewable paleontological resources are rock units within which vertebrate or significant invertebrate fossils are present or are likely to be present." This also includes production of a few significant fossils that may provide new and significant data.

Based on the Paleontological Sensitivity map, most of the project site is within the area of High Paleontological Sensitivity, identified as High B (Hb). The High B (Hb) designation is a nominal classification as it is a measure based on depth of fossils (as opposed to an ordinal sensitivity ranking) and thus is equivalent to High A in terms of sensitivity. "Hb" indicates that fossils are likely to be encountered at or below 4 feet of depth, and may be impacted during excavation by construction activities.

Importance of Local Waters

The availability and reliability of water sources in the project vicinity contributed to the presence of prehistoric and historical-period inhabitants, according to the Cultural Resources Survey and Evaluation prepared by SRI. The San Jacinto River is the primary drainage in the area. Many ephemeral drainage courses have been observed leading from the Lakeview Mountains into the San Jacinto River. In addition, springs have been observed in the vicinity of archaeological resources near the project area. These springs and drainage courses may have been water sources for many earlier peoples. Perhaps the most significant water source in this area is Mystic Lake,

located to the north of the project site. Mystic Lake is an ephemeral water body formed by the San Jacinto River, rain water, and runoff from the land between the Lakeview Mountains, Bernasconi Hills, the Badlands, and Mount Russell. The lake varies from being completely dry during dry years to over several miles in circumference in wet winters. The SRI report cites studies of research in the California deserts, the Great Basin, and in Australia which found that complex archaeological discoveries are likely in the proximity of ephemeral water bodies.

Early Importance of Area Flora and Fauna

The symbiosis between the native vegetation and the mammals present in the vicinity would have had an important influence on prehistoric and early-historic inhabitants of the area. In the winter of 1774, Juan Bautista de Anza entered the San Jacinto Valley and described it as a frost-free, fertile, moist valley, full of trees and vegetation. Therefore, it seems highly likely that early peoples would have inhabited the project area, and in fact, travelers in Anza's party mention numerous encounters with Native American inhabitants in their diaries.

The native vegetation is characterized as an Inland Sage Scrub community. The scrub communities found inland are different than coastal scrub areas in terms of the variety of species present and a slightly different mix of scrub. These differences are due to the fact that scrub communities inland must withstand more arid conditions, much warmer temperatures, and generally higher elevations. In addition, cottonwoods were found adjacent to seeps and drainage areas. Elderberry and juniper grow in the higher elevations of the Lakeview Mountains.

The larger mammals that once inhabited the project area include mule deer (*Odocoileus hemionus*) and pronghorn antelope (*Antilocapra americana*). Small mammals included black-tailed jackrabbits (*Lepus californicus*) and desert cottontails (*Sylvilagus audubonii*). These mammals most likely would have contributed greatly to the diet of the prehistoric and early-historic period inhabitants.

Early Holocene – Prehistoric

The SRI report indicates that there is well-established evidence that Early Holocene cultures were present in southern California about 12,000–7,000 years ago. These cultures were adapted to the hotter and drier climate that came at the end of the Pleistocene, which necessitated settlement near reliable water sources. The local expression of these early cultures was known as the San Dieguito Complex. These cultures were primarily hunters (although some evidence suggests that they used plant resources when available) with a flaked stone industry. They created flake and core scrapers, choppers, hammer stones, drills, and gravers, as well as enigmatic objects known as crescents.

Early Holocene sites in the inland valleys are expected to be discovered in recent alluvial deposits. Within the study area region, Early Holocene buried sites have been found along the shores of Lake Elsinore (CA-RIV-2798/H) and within the project area at CA-RIV-6069. Both sites contain stratified deposits, intact features, and ground stone implements. The Lake Elsinore site is dated at 8,400 years ago and cultural deposits were found at depths up to 8.5 feet (2.6 meters). The CA-RIV-6069 site is dated to more than 9,000 years ago and includes the oldest

known fired ceramics that have yet been discovered in North America. Also, sites found along the San Jacinto River suggest the use of the river during the earliest period of pre-history.

Middle Holocene – Prehistoric

Around 8,500 years ago, subsistence patterns began to change in reaction to warming climate conditions. Changes in flora and fauna resulted, as reflected by the decreased number of projectile points, scrapers, and choppers. The aforementioned hunting/animal-processing implements were replaced with plant-processing tools such as ground stone artifacts. The importance of animals in the prehistoric diet decreased, although not altogether. The rise in plant processing gave way to what is referred to as the Middle Holocene period, also known as the Milling Stone Horizon. These cultures ranged from 7,000 to 3,500 years ago.

Middle Holocene cultures in the project area are expected to fit the pattern described for the Pauma Complex, first defined in northern San Diego County. The characteristics of Pauma sites suggest a sedentary lifestyle with high reliance on gathering. The presence of deep-basined *metates* suggests a high reliance on seeds. The later period of the Middle Holocene era (3,500–1,500 years ago, described as the Intermediate horizon) shows a significant broadening of the food base and the introduction of mortars and pestles in food preparation. These innovations indicate intensification of food production and an increase in population during this time.

Late Holocene – Prehistoric

The San Luis Rey culture was likely to have been the representative culture for the project area during the latest prehistoric period. The San Luis Rey period is divided based on the absence of (San Luis Rey I, A.D. 1400–1750) or presence of (San Luis Rey II, A.D. 1750–1850) ceramics, cremation urns, and rock paintings. San Luis Rey I sites typically contain bedrock mortars, *metate* slicks, and small, triangular arrowheads. San Luis Rey II sites contain the same items found with San Luis Rey I sites but also include pottery vessels, pictographs, and non-aboriginal items such as glass beads and metal knives. Other common features include pitted rock features (also known as pit-and-groove, or cupule, petroglyphs) and rock rings. Though there are distinct differences between the two San Luis Rey periods, it is not known whether there were significant cultural changes concurrent with said changes.

During the San Luis Rey period, three distinct settlement patterns have been noted: (1) a mobile population following a seasonal pattern of movement; (2) a more sedentary population with settlements located near streams; and (3) a more complex village pattern, probably influenced by contact with missionaries, along with drought and resource competition, and the change in subsistence patterns and the subsequent introduction of non-native plants and animals. Sites near the project area have revealed bedrock milling features, rock art, and significant midden developments with large quantities of projectile points and brown ware pottery.

Historical Period

The first recorded historical account of the Lakeview area was in March of 1774 when Juan Bautista de Anza entered the San Jacinto Valley and traveled near the shores of Mystic Lake. While it was de Anza's intent to blaze a trail for future settlement in California, his route was little used after his initial expedition because a trail made by Pedro Fages in 1782 farther south via Warner's Spring became the preferred trail.

California came under Mexican rule after the Mexican Revolution against Spain in 1822. The Mexican government began granting mission ranch lands to Mexican settlers. In 1834, Jose Antonio Estudillo was awarded title for the Mission San Luis Rey lands, including those in the San Jacinto Valley. At this time, however, the project area was used for cattle grazing without record of European settlement.

In the mid-1800s, a significant wave of change hit southern California. First, the Mexican-American War left dominion of California under the United States and shortly after, gold was discovered at Sutter's Mill in northern California. After the gold rush, travel in southern California increased dramatically. American explorers, settlers, and gold-miners traveled routes throughout the region, including heavy use of the San Geronimo Pass following a government survey in 1853. Following a severe drought in 1860, and as a result of political and financial pressure following the shift to American rule, many Hispanic land owners were forced to sell off their land to new settlers. By 1874 there were between 50 and 75 American settlers living in the Valley. Residents of the San Jacinto Valley relied on the raising of cattle and income from logging in the San Jacinto Mountains.

In the late 1800s, the area experienced a significant building boom with the expansion of the railroad into California, along with development of the supply of water from the San Jacinto River. As a result, orchards were planted and the town of Lakeview was built. By 1895 the Hotel Hansen was completed in Lakeview and was considered fashionable in its day. Development continued around the hotel. However, a period of drought began in California. As a result, the San Jacinto River failed to provide an adequate water supply and efforts to drill for water could not satisfy demand. By 1897, wells began to fail and agriculture fields and orchards died. Thus, people moved en masse from the town of Lakeview.

The Colorado River Aqueduct was built in 1933–1941 at the height of the Great Depression. During the eight-year course of its construction, the project employed 30,000 people, with as many as 10,000 working at one time, making it the largest Depression-era work project in southern California. The Colorado River Aqueduct conveys water 242 miles, from the Colorado River to Lake Mathews in western Riverside County. The central section of the aqueduct, completed in 1938, passes through THE VILLAGES OF LAKEVIEW Specific Plan area. The aqueduct was recognized in 1992 as one of the seven “wonders of the American engineering world” and documented in the Historic American Engineering Record (HAER CA-26) in 1998. For its role in providing water critical to the modern development of the Los Angeles region, the Colorado River Aqueduct is recommended eligible for listing in the NRHP under Criterion (a).

Just as the lack of water had led to the decline of Lakeview in the late 1800s, the abundance of water led to its resurgence after the completion of Metropolitan Water District’s Colorado River Aqueduct project. By 1951, the San Jacinto Valley was receiving water from the Colorado River Aqueduct and farmers began cultivating alfalfa. In 1953, Carl Rehnborg built the Nutrilite facilities on a portion of his 700 acres of farmland. Since the 1950s, large-scale agriculture has declined. The specialty type farming practiced by the Nutrilite Corporation, poultry farming, small horse ranches, and home sites are what remain on the land today.

Cultural Resources Investigations for THE VILLAGES OF LAKEVIEW Specific Plan

A cultural resources survey and evaluation of THE VILLAGES OF LAKEVIEW Specific Plan area was conducted by SRI to identify “historical resources” and “unique archaeological resources” as defined by CEQA, which could be affected by the project (see Appendix E (CD #3)). The cultural resources study included a records search at the CHRIS Eastern Information Center; a pedestrian survey of 2,965 acres which included the entire 2,786-acre project site and off-site improvements corridors; mapping and recording of 19 prehistoric sites and 5 isolates, and 12 historical-period resources and 3 isolates; along with trenching and limited test excavation to determine site boundaries and presence or absence of subsurface cultural deposits. A summary of the results is presented in **Table 5.5-A, Cultural Resources Evaluated on THE VILLAGES OF LAKEVIEW Specific Plan Area.**

The identified sites listed in **Table 5.5-A** were evaluated for significance according to the criteria for eligibility for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and for consideration as unique archaeological resources as defined by CEQA. Only sites identified as CRHR or NRHP Eligible are discussed in the impact analysis below.

**Table 5.5-A, Cultural Resources Evaluated on
THE VILLAGES OF LAKEVIEW Specific Plan Area**

Prehistoric Archaeological Resources				
CHRIS Designation^a	SRI Field No.	Site Description	Size (m²)^b	CRHR/NRHP eligible?
P-33-000394 CA-RIV-394/H	–	Food-processing site with 4 bedrock mortars on a large granitic boulder	99	Yes
P-33-000397 CA-RIV-397	–	Rockshelter with pictographs, milling features, artifact scatter, a small ceramic fragment, and a midden deposit	1,944	Yes
P-33-000806 CA-RIV-806	–	Rockshelter with subsurface cultural deposit, previously reported ceremonial and milling artifacts	452	Yes
P-33-001842 CA-RIV-1842	–	Food-processing and habitation site with 2 features containing a total of 4 milling surfaces, and a subsurface cultural deposit	3,598	Yes
P-33-002585 CA-RIV-2585	–	Food-processing site with 8 features containing a total of 10 metate slicks	2,730	Yes

P-33-004155 CA-RIV-4155	–	Food-processing site with 6 features containing a total of 9 bedrock mortars and 4 metate slicks, 1 associated ceramic sherd on the surface, and a sparse subsurface cultural deposit	10,479	Yes
P-33-004156 CA-RIV-4156/H	–	Food-processing site with 5 features containing a total of 6 metate slicks and 1 bedrock mortar	754	Yes
P-33-004158 CA-RIV-4158	–	Artifact scatter of flaked stone and ground stone items, highly disturbed by modern activities	12,455	Yes
P-33-16577 CA-RIV-8698	TVOL-1	Food-processing site with 1 feature containing 2 metate slicks	30	Yes
P-33-16578 CA-RIV-8699	TVOL-2	Food-processing site with 1 feature containing 2 metate slicks	64	Yes
P-33-16579 CA-RIV-8700	TVOL-3	Food-processing site with 1 feature containing 1 metate slick	25	Yes
P-33-16581 CA-RIV-8702	TVOL-5	Food-processing site with 1 feature containing 1 metate slick	48	Yes
P-33-16582 CA-RIV-8703	TVOL-6	Food-processing site with 2 features containing 7 metate slicks	264	Yes
P-33-16583 CA-RIV-8704	TVOL-7	Food-processing site with 2 features containing a total of 13 metate slicks and 1 bedrock mortar, with limited subsurface cultural deposits	249	Yes
P-33-16584 CA-RIV-8705	TVOL-8	Food-processing site with 4 features containing a total of 8 metate slicks and 1 bedrock mortar	1,104	Yes
P-33-16585 CA-RIV-8706	TVOL-9	Food-processing site with 3 features containing 3 metate slicks	1,081	Yes
P-33-16586 CA-RIV-8707	TVOL-10	Food-processing site with 2 features containing 4 metate slicks	47	Yes
P-33-16587 CA-RIV-8711	TVOL-21	Food-processing site with 3 features containing a total of 5 bedrock mortars	126	Yes
P-33-16598 CA-RIV-8712 (inc. RIV-393, RIV-398/414, RIV-413, and RIV-6069)	TVOL-22	Extensive multiple-use site with four previously recorded loci containing 5 rock shelters, numerous milling features (at least 31 features containing a total of 59 metate slicks and 69 bedrock mortars), rock art, deep midden, and buried features that have been dated to more than 9,000 years old.	317,686 (78.5 acres)	Yes
P-33-16565	TVOL I-1	Isolated granite metate fragment	1	No
P-33-16566	TVOL I-2	Isolated granite mano fragment	1	No
P-33-16571	TVOL I-3	Isolated granite metate	1	No
P-33-16574	TVOL I-6	2 pieces unmodified small mammal bone and 1 piece of fire-affected rock recovered from Trench 51	10	No
P-33-16575	TVOL I-7	1 piece of fire-affected rock, 1 flaked stone artifact	10	No
Historical-Period Resources				
CHRIS Designation^a	–	Site Description	Size (m²)	No
P-33-008268 CA-RIV-6085H	–	Trash scatter that may be a dump associated with a Colorado River Aqueduct work camp	3,325	No
P-33-008269 CA-RIV-6086H	–	Trash scatter that may be a dump associated with a Colorado River Aqueduct work camp	48,245 (11.9 acres)	No

P-33-011265 CA-RIV-6726H		Colorado River Aqueduct segment (within project area)	118,988 (29.4 acres)	Yes
P-33-16587 CA-RIV-8708H	TVOL-11H	40-acre parcel surrounded by remnant landscape trees and windbreaks, a trash dump, and 8 irrigation features, including a pump, water tank, stand pipes and distribution hydrants	170,405 (42 acres)	No
P-33-16588 CA-RIV-8709H	TVOL-12H	Line of tamarisk trees and water system remnants	5,253	No
P-33-16589	TVOL-13H	Historical quarry area	8,463	No
P-33-16590	TVOL-14H	Lakeview spur of the California Southern Railroad, constructed in 1894–1898	11,106	No
P-33-16591	TVOL-15H	Residential complex at 19510 Davis Road with 1 small residence and 2 outbuildings, pre-1938	164	No
P-33-16592	TVOL-16H	Residence at 19440 Davis Road, ca. 1935, recently demolished	16	No
P-33-16593	TVOL-17H	Residential building and garage at 19410 Davis Road, ca. 1935, recently demolished	218	No
P-33-16594	TVOL-18H	Commercial outbuilding, constructed ca. in 1940s and moved to current location between 1962 and 1974, recently demolished	677	No
P-33-16596 CA-RIV-8710H	TVOL 20H	Trash scatter that may be a dump associated with a Colorado River Aqueduct work camp	798	Yes
P-33-16572	TVOL I-4	Isolated glass medicine bottle fragment	1	No
P-33-16573	TVOL I-5	Isolated sun-colored-amethyst glass vessel fragment	1	No
P-33-16576	TVOL I-8	Isolated metal beverage can	1	No

Notes:

- California Historical Resources Information System designations include Primary numbers (P-33-xxxxxx) for all resources, and trinomials (CA-RIV-xxxx) for archaeological sites.
- Sites with single milling features that are smaller than 100m² include a 2-m perimeter buffer within the site area.

Thresholds of Significance

Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts to scenic resources through the design of the project.

Riverside County has not established local CEQA significance thresholds as described in Section 15064.7 of the CEQA Guidelines. However, the Riverside County's "Environmental Assessment Form: Initial Study" (Environmental Assessment Number: 39816) which is part of the Notice of Preparation for the subject project (see Appendix A (CD #3) of this document) indicates that impacts related to cultural resources may be considered potentially significant if the project would:

- Alter or destroy a historic site.
- Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5.
- Alter or destroy an archaeological site.

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.
- Restrict existing religious or sacred uses within the potential impact area.
- Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature.

Due to the nature of the information and analysis presented herein, the thresholds regarding historical resources/sites will be combined. Likewise, the two thresholds regarding archaeological resources above will be combined and analyzed simultaneously based on the thresholds A. and B, below. All thresholds analyzed are listed below.

- A. Alter or destroy a historic site and/or cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5.
- B. Alter or destroy an archaeological site and/or cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5.
- C. Disturb any human remains, including those interred outside of formal cemeteries.
- D. Restrict existing religious or sacred uses within the potential impact area.
- E. Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature.

Related Regulations

The treatment of cultural resources is governed by federal, state, and local laws and guidelines. There are specific criteria for determining whether prehistoric sites or objects are significant and thus protected by law. Federal and state significance criteria generally focus on the resource's integrity and uniqueness, its relationship to similar resources, and its potential to contribute information important to scholarly research. Some resources that do not meet federal significance criteria may be considered significant by state criteria. The laws and regulations seek to mitigate project impacts on significant prehistoric and historical-period resources.

Federal Regulations

THE VILLAGES OF LAKEVIEW Specific Plan is subject to compliance with CEQA and may be subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) as well, if the project involves a federal undertaking, such as issuance of a federal permit or federal funding. The NHPA requires federal agencies to take into account the effects of an undertaking on historic properties, defined as cultural resources included in or eligible for listing in the NRHP. Because CEQA allows use of NRHP eligibility determinations for CRHR eligibility as well, the NRHP criteria and the guidelines for implementation of Section 106 of the NHPA (36 CFR 800), can be used to make recommendations for significance evaluations under CEQA.

NRHP Criteria

Determination of NRHP eligibility for cultural resources prior to making a finding of effect is made according to the following criteria of evaluation:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- b) that are associated with the lives of persons significant in our past; or
- c) that embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or
- d) that have yielded, or may be likely to yield, information important to prehistory or history [36 CFR 60.4].

If cultural resources do not meet the above criteria, they are not historic properties and are not further considered in the Section 106 process.

State Regulations

The California Register of Historical Resources (Public Resource Code Section 5024.10 *et seq.*)

State law protects cultural resources by requiring evaluations of the significance of historical resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA guidelines. These criteria are similar to those used in federal law. The California Register of Historical Resources (CRHR) is maintained by the state Office of Historic Preservation. Properties listed, or formally designated eligible for listing, on the National Register of Historic Places (NRHP) are automatically listed on the CRHR, as are state historical landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

Unique Archaeological Resources Criteria

CEQA also requires the lead agency to consider whether the project will have a significant effect on unique archaeological resources (even if they are not eligible for listing in the CRHR), and to avoid unique archaeological resources when feasible or mitigate any effects to less-than-significant levels (Public Resources Code [PRC] Section 21083.2). As used in CEQA:

A unique archaeological resource means 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:

- 1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CRHR Criteria

For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the CRHR (PRC Section 21084.1). A resource is eligible for listing in the CRHR if it meets any 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.
- 4) Has yielded, or may be likely to yield, information important in prehistory or history.

The California Code of Regulations (CCR) further provides that cultural resources of local significance are CRHR-eligible (Title 14 CCR, Section 4852).

CEQA requires the lead agency to determine whether the proposed development project will have a significant effect on the environment. According to CEQA Guidelines Section 15064.5(b), only those resources determined to be "historical resources," that is, eligible for listing in the CRHR, are considered subject to potential significant adverse impacts. CEQA recognizes that historical resources are part of the environment, and that a project "that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC Section 21084.1). The CEQA Guidelines state, "A project with an effect that may cause a substantial adverse change in significance of an historical resource is a project that may have a significant effect on the environment" (CEQA Guidelines Section 15064.5(b)). A "substantial adverse change" is defined as "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" (CEQA Guidelines Section 15064.5(b)(1)). The significance of a historical resource is materially impaired when a project affects "those physical characteristics of an historical resource that convey its historical significance" (CEQA Guidelines Section 15064.5(b)(2)(a)).

Paleontological Resources

According to Appendix G (CD #3) of the *CEQA Guidelines*, a project could have a significant effect if it would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Human Remains

According to Section 15064.5 of the *CEQA Guidelines*, all human remains are a significant resource. Section 15064.5 of the *CEQA Guidelines* also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are discussed within Public Resources Code Section 5097.

Public Resources Code 5097.98

Public Resources Code 5097.98 (Senate Bill 297, 1982) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during ground-disturbing activities; and establishes the Native American Heritage Commission as the entity to resolve any dispute regarding the disposition of such remains if one should arise. It has been incorporated into Section 15064.5(e) of the *CEQA Guidelines*.

California Environmental Quality Act Sections 21083.2 and 21084.1

Sections 21083.2 and 21084.1 of *CEQA* deal with the definitions of unique and non-unique archaeological resources. Section 21083.2 directs the lead agency to determine whether the project may have a significant effect on unique archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the issue of those resources. Section 21084.1 directs the lead agency to determine whether the project may have a significant effect on historical resources, irrespective of the fact that these historical resources may not be listed or determined to be eligible for listing in the California Register of Historic Resources, a local register of historical resources, or they are not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 of the Public Resources Code.

Health and Safety Code Sections 7052 and 7050.5

Section 7052 of the California Health and Safety Code states that disturbance of Indian cemeteries is a felony. There are no known Indian cemetery sites within the project area. Section 7050.5 of the California Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are found to be Native American, the coroner must contact the California Native American Heritage Commission.

Senate Bill 18 and the SB 18 California Tribal Consultation Guidelines

The State of California Governor's Office of Planning and Research developed these guidelines in order to provide guidance to cities and counties on the process for consulting with Native American Indian tribes during the adoption or amendment of local general plans or specific plans. SB 18 requires local agencies to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process thereby providing tribes an opportunity to participate in local land use decisions at an early planning stage. Tribal consultation and notice requirements (Government Code Section 65352.3) of SB 18 took effect on March 1, 2005. Although this law does not actually apply to THE VILLAGES OF LAKEVIEW project as the application was submitted to the County prior to the SB 18 effective date of March 1, 2005, the County requested that the project comply with the provisions of SB 18. As part of its community outreach efforts, the project proponent voluntarily initiated consultation with local Native American groups. As part of the cultural resources studies for the project, SRI initiated consultation with Native American groups and individuals with known or potential ties to the study area. Arrangements were made for representatives of local tribes to attend meetings and field visits to the project area, and to participate in the archaeological fieldwork. In addition to the Native American outreach and consultation performed by SRI and the project proponent, the County initiated a series of meetings with associated tribes pursuant to SB 18.

In addition to the consultation requested by the County, the Notice of Preparation (NOP) for this project was sent to the Native American Heritage Commission, Morongo Band of Mission Indians, Pechanga Band of Mission Indians, Ramona Band of Cahuilla Mission Indians, San Manuel Band of Mission Indians, Santa Rosa Band of Cahuilla Mission Indians, and Soboba Band of Luiseño Indians.

Local Regulations

Riverside County General Plan

Chapter 5 of the Riverside County General Plan contains policies that are intended to ensure the preservation of cultural, historical, archaeological, and paleontological resources in the County. See Appendix N (CD #4) for further discussion of the project's consistency with these General Plan Policies.

OS 19.2 Review all proposed development for the possibility of archaeological sensitivity.

OS 19.3 Employ procedures to protect the confidentiality and prevent inappropriate public exposure of sensitive archaeological resources when soliciting the assistance of public and volunteer organizations.

OS 19.4 Require a native American Statement as part of the environmental review process on development projects with identified cultural resources.

OS 19.5 Transmit significant development proposals to the History Division of the Riverside County Regional Park and Open-Space District for evaluation in relation to the destruction/preservation of potential historical sites. Prior to approval of any development proposal, feasible mitigation shall be incorporated into the design of the project and its conditions of approval.

OS 19.6 Enforce the Historic Building Code so that historical buildings can be preserved and used without posing a hazard to public safety.

OS 19.7 When possible, allocate resources and/or tax credits to prioritize retrofit of County historic structures, which are irreplaceable.

OS 19.8 Whenever existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources, a report shall be filed stating the extent and potential significance of the resources that may exist within the proposed development and appropriate measures through which the impacts of development may be mitigated.

OS 19.9 This policy requires that when existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities, with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate repository, and file a report with the Planning Department documenting any paleontological resources that are found during the course of site grading.

OS 19.10 Transmit significant development applications subject to CEQA to the San Bernardino County Museum for review, comment, and/or preparation of recommended conditions of approval with regard to paleontological resources.

Project Design Considerations

THE VILLAGES OF LAKEVIEW project includes large amounts of open space, including all areas above the toe of the slope of the Lakeview Mountains. As a result, all rock shelters and most milling features identified in the cultural resources surveys are located within open space areas and will not be subject to disturbance.

More than 75 percent of the area of CA-RIV-8712, 59.5 of 78.5 acres, has been planned for open space, which will not be subject to disturbance and is proposed to minimize human intrusion into areas in which rock art, rock shelters, milling features, and the portions of the site containing the highest density of surface and subsurface artifacts are located. The remaining portions of the site area proposed for development contain only sparse surface artifacts and minimal subsurface cultural deposits.

Consultation with the Pechanga Indian Reservation (Temecula Band of Luiseño Mission Indians), Soboba Band of Luiseño Indians, Morongo Band of Mission Indians, Ramona Band of Mission Indians, Cahuilla Band of Mission Indians, and San Manuel Band of Mission Indians

regarding the proposed project was sought. Responses were obtained from the Pechanga Indian Reservation (Temecula Band of Luiseño Mission Indians), and the Soboba Band of Luiseño Indians. Tribal recommendations were taken into consideration on the proposed project.

Environmental Impacts Before Mitigation

***Threshold A:** Alter or destroy a historic site and/or cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5.*

Twelve historical-period sites and three “isolates”— isolated finds of period debris, artifacts, or small items (glass fragments, bottles, cans, etc.) —were recorded within the project area by SRI. Of the historical-period sites, two are recommended by SRI as eligible. One site (CA-RIV-6726H), the Colorado River Aqueduct, is recommended eligible under NRHP Criterion (a) and CRHR Criterion 1, indicating an association with significant historic events. The second site (CA-RIV-8710H, TVOL 20H), the CRA trash dump, is recommended eligible under NRHP Criterion (a)/CRHR Criterion 1 and NRHP Criterion (d)/CRHR Criterion 4, indicating an association with significant historic events and that the site has yielded, or is likely to yield, information important to history or prehistory (see **Table 5.5-B, Assessment of Potential Adverse Effects to Historical-Period Sites**).

The proposed VILLAGES OF LAKEVIEW project will result in various direct and indirect impacts to historical resources. Potential impacts to significant historical resources are discussed below, and summary information is presented in **Table 5.5-B**. THE VILLAGES OF LAKEVIEW Conceptual Land Use Diagram (Figure 3-1) illustrates the various proposed land-use designations in the project, as well as the toe of the slope and open space areas so that general locations of sites can be discussed. For the safety of resources, exact locations are not made public.

Site RIV-6726/H, the Colorado River Aqueduct (CRA), is an underground pipeline in the TVOL project area. It will be preserved in a Public Facility/Open Space land use designation and will continue in its present use. The CRA itself will not be affected by the proposed project. Two benchmarks associated with the CRA are recorded as Features 1 and 2 of RIV-6726H. One of these, Feature 1, is located within prehistoric site RIV-4156H, a site located within a Very High Residential planning area. Thus, the benchmark recorded as Feature 1 is subject to direct adverse impacts. The second benchmark, Feature 2, is located within Locus C of site RIV-8712, which will be preserved intact in an Open Space planning area, and thus is not subject to direct impacts. Impacts to Feature 2 of RIV-6726H are considered potentially **significant** without **MM Cultural 1e**, below. Compliance with the mitigation measure will reduce this impact to **less than significant with mitigation**. Direct impacts to Feature 2 of RIV-6726H is considered **less than significant**.

Mitigation measure **MM Cultural 1** requires the implementation of the master Cultural Resources Management Plan (CRMP) which was prepared and is contained in Chapter 9 of the Cultural Resources Study (Appendix E of the DEIR). The master CRMP contains mitigation measures for cultural sites and strategies to implement the mitigation measures over the course of the project’s development. The process begins when a tentative tract or other development project within the Specific Plan area is filed on land containing, or within 500 feet of, prehistoric

sites. At that point, an addendum to the master CRMP will be prepared to address the sites affected by that tentative tract or project. Each such addendum to the CRMP will be prepared in consultation with the Native American tribes consulted for the project, the Tribal Traditional Resources Advisory Committee, and landowners. The Riverside County Transportation Commission shall also be consulted during preparation of any addendums to the master CRMP for properties located adjacent to the MCP project. These addenda will include Site Preservation Plans for sites to be preserved in place, and Data Recovery Plans for sites that cannot be avoided and require archaeological excavation as mitigation, as provided by the CEQA Guidelines (CCR Title 14, Section 15126.4[b][3]).

As required by CEQA Guidelines Sections 15064.5(e) and (f), the CRMP addendum shall contain detailed provisions for the treatment of unanticipated discoveries during project construction, including human remains. The provisions of the CRMP will be consistent with state law as contained in Health and Safety Code Section 7050.5, and PRC Sections 5097.94 and 5097.98. The purpose of preparing Addenda to the CRMP is to take into account the additional information that will be available after individual tentative tract maps and grading plans have been developed. The purpose of a CRMP addendum is not to change the conclusions of the DEIR with respect to significant impacts, but to specify additional details regarding the amount of data recovery needed for sites or site areas subject to direct adverse impacts, and to stipulate site protection measures that are consistent with the open space plans in consultation with the tribes.

Table 5.5-B
Assessment of Potential Adverse Effects to Historical-Period Sites

Site	Total Site Area (m ²)	Site Area Subject to Direct Effect (m ²)	Nature of Adverse Effects to Site
CA-RIV-8710H	798	0	Site is located in Open Space planning area; no direct effects but possible indirect effects from possible vandalism, illicit artifact collection, etc.
CA-RIV-6726H	118,988	0	The Colorado River Aqueduct, an underground pipeline in the project area, will be preserved in a Public Facility/Open Space land use and will not be affected by The VILLAGES OF LAKEVIEW project. One of the two benchmarks associated with the construction of the CRA could be affected by development.

Site CA-RIV-8710H is a historical-period trash dump that most likely derives from a construction camp (in an unknown location not on the project site) for the Colorado River Aqueduct. According to SRI, the dump has good integrity and is eligible due to its association with the Colorado River Aqueduct and the potential of the site deposit to provide additional information about chronology of the camp, subsistence at the camps, the relationship between the camp and the local and regional economies, and the technology of Colorado River Aqueduct construction. RIV-8710H will not be impacted by grading or development; however, the site may be subject to indirect impacts from possible illicit artifact collection due to the increased

population of the project area. To minimize these potential significant adverse effects, detailed recording and mapping of all items at the dump, along with photographic documentation or collection of diagnostic and unique items is required by MM Cultural 1i, below. Although subsurface deposits are unlikely at the site, a limited set of shovel probe excavations is recommended to determine if any dump materials have become completely buried. Potential adverse indirect impacts to RIV-8710H are considered potentially **significant without mitigation**, but implementation of Mitigation Measure Cultural 1 (MM Cultural 1f), below, impacts to this historic site will be mitigated to **less than significant with mitigation**.

***Threshold B:** Alter or destroy an archaeological site and/or cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5.*

Four previously identified prehistoric or protohistoric (archaeological) sites—CA-RIV-393, CA-RIV-413, CA-RIV-398/414, and CA-RIV 6069—are recommended to be combined into a single NRHP-eligible site, identified as TVOL-22 by SRI, and now recorded as CA-RIV-8712. This site also appears to meet not only the NRHP and the CRHR criteria for eligibility, but also the CEQA criteria for consideration as a “unique archaeological resource.” In addition to CA-RIV-8712, all other identified prehistoric sites (CA-RIV-394/H, 397, 806, 1842, 2585, 4155, 4156/H, 4158, 8698, 8699, 8700, 8702, 8703, 8704, 8705, 8706, 8707, and 8711) are considered eligible under NRHP Criterion (d) and CRHR Criterion 4, indicating an association with significant historic events and that the sites have yielded, or are likely to yield, information important to history or prehistory. In addition two of these sites containing rock art, RIV-397 and RIV-8712, as well as one that once reportedly contained a spirit stick, RIV-806, are also recommended eligible under NRHP Criterion (c) and CRHR Criterion 3, indicating that they embody the distinctive characteristics of the style, type, or period.

Direct impacts to cultural resources will occur in those portions of the project area that are subject to mass grading for construction of buildings and interior roads. This applies to most of the level areas of the project. A fuel modification zone adjacent to residential development areas will extend from the toe of the slope for a distance of approximately 150 feet upslope. Brush removal in the fuel modification zone could affect sites in or adjacent to the area if conducted without provisions to monitor and avoid cultural resources. Debris basins and other drainage facilities constructed near the toe of the slope also have the potential to affect cultural resources in the vicinity. Areas above the toe of the slope will not be graded or developed and no direct impacts to resources in this area are anticipated, although significant resources in those areas could nevertheless be subject to indirect impacts as a result of increased use and activity in the area, which could lead to artifact collection or illicit excavation. An Environmental Constraints Sheet (ECS) will be required above the toe of slope.

The proposed THE VILLAGES OF LAKEVIEW Specific Plan project will result in various direct and indirect impacts to archaeological resources. Potential impacts to significant archaeological resources are discussed below, and summary information is presented in **Table 5.5-C, Assessment of Potential Adverse Effects to Prehistoric Archaeological Sites** below. Buried resources exist within the project area; **Figure 5.5-1, Cultural Resources Sensitivity**, indicates potential for finding buried resources within the project boundary.

Site RIV-394, a single boulder with four mortars, is located in a Public Facilities planning. The current plans for the planning area call for water tanks to be placed and a pipeline to be installed south and west of the site. No direct impacts to the site are anticipated but the site could be subject to potential indirect effects from possible vandalism or future development within the Public Facilities planning area. It is also possible that the site could be affected by activities within the nearby fuel modification zone, if such activities are conducted without cultural resource protections in place; therefore leading to **unavoidable indirect impacts**. To reduce indirect impacts to less than significant, **MM Cultural 1g** will be implemented.

Site CA-RIV-397 is a moderate-size aboriginal site in the center of the project area. It includes the “Split Rock” rockshelter and rock art panels, as well as several milling surfaces, an artifact scatter, and a midden deposit. Trenching revealed an intact feature with abundant fire-affected rock and midden deposits. Cultural-material-bearing deposits extend to approximately 4 to 5 feet below ground surface. The northern boundary of the site is outlined by negative trenches where no further artifacts were found. The southern boundary is less clear; the southernmost trench contained midden deposit, but no artifacts. Although there has been some graffiti on and near the rock art panels, the site overall is in fair condition with moderate to high integrity. Direct and/or indirect impacts to RIV-397 would be **significant and adverse** without mitigation. Additional testing is recommended to determine firmly the southern boundary of the site and assess the composition and structure of the subsurface deposits. Potential adverse impacts to RIV-397 are considered potentially **significant** without **MM Cultural 1h** and **2**, below. But direct impacts can be reduced to **less than significant** while indirect effects will be unavoidable.

Table 5.5-C
Assessment of Potential Adverse Effects to Prehistoric Archaeological Sites

Site	Total Site Area (m ²)	Site Area Subject to Direct Effect (m ²)	Nature of Adverse Effects to Site
RIV-394	99	0	Site is located in Public Facilities planning area; no direct impacts anticipated but site could be subject to potential indirect effects from possible vandalism.
RIV-397	1,944	0	Site is located at edge of Medium High Residential planning area, rockshelter and rock art are within Open Space planning area; entire 0.48 acre site area to be avoided; area to be avoided would be subject to potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-806	452	0	Site is located in Open Space planning area; no direct impacts but potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-1842	3,598	3,598	Site is located in Medium High Residential planning area; entire site will be subject to direct impacts from grading for residential uses.
RIV-2585	2,730	0	Site is located in Open Space planning area; no direct impacts but potential indirect effects from possible vandalism, illicit artifact collection, etc.

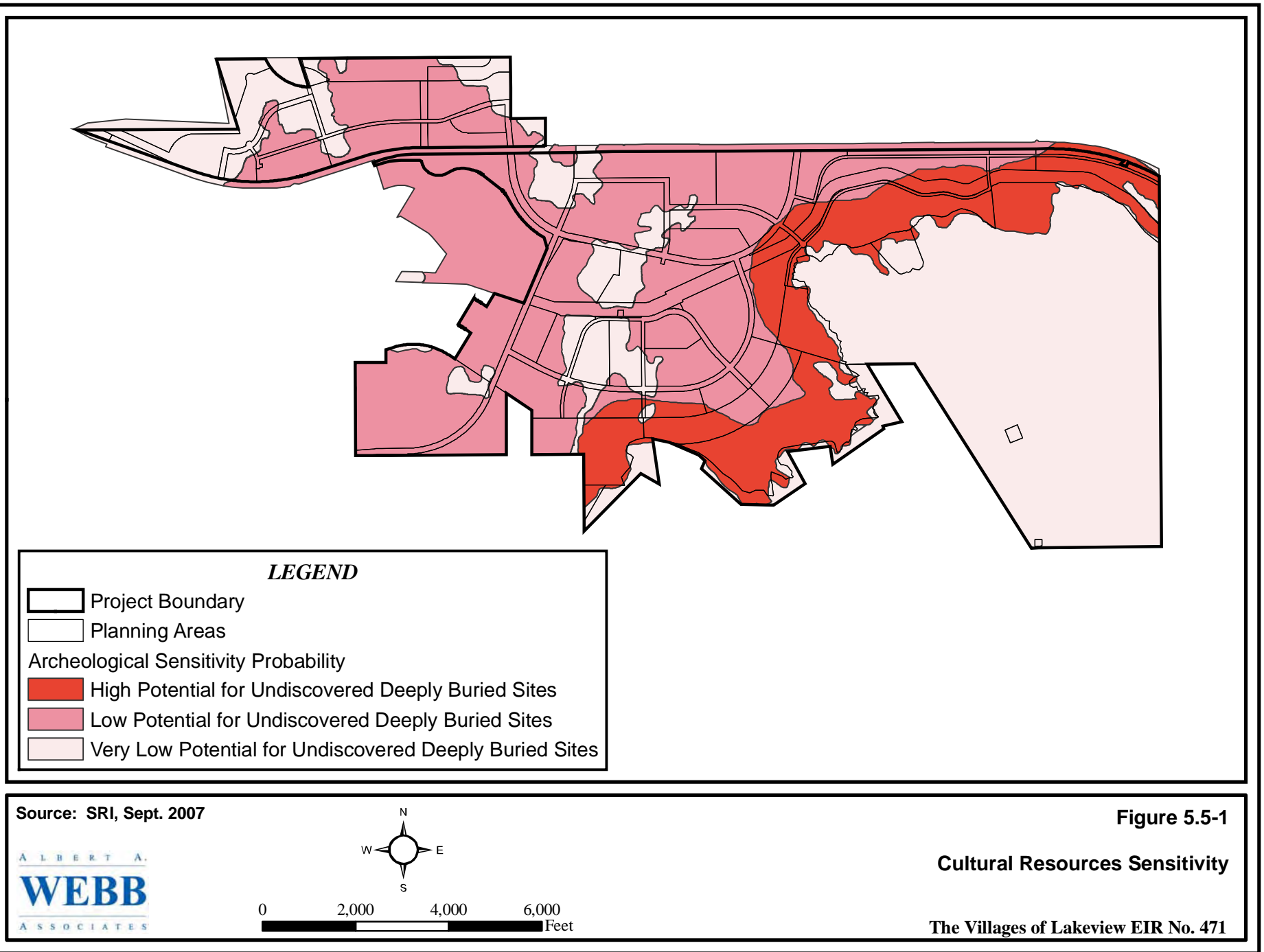
Site	Total Site Area (m²)	Site Area Subject to Direct Effect (m²)	Nature of Adverse Effects to Site
RIV-4155	10,478	0	Site was initially planned within Public Facilities area and subject to direct effects from water tank placement, but redesign will avoid impacts and place site in an Open Space planning area; no direct impacts but potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-4156/H	754	754	Site is located in High Residential planning area; entire site will be subject to direct impacts from grading for residential uses.
RIV-4158	12,455	12,455	Site is located in Very High Residential planning area; entire site will be subject to direct impacts from grading for residential uses and road right-of-way.
RIV-6726H	118,988	0	The Colorado River Aqueduct, an underground pipeline in the project area, will be preserved in a public facility/open space (MWD) land use and will not be affected by the project. Two associated benchmarks will be preserved in place or relocated to an interpretive exhibit.
RIV-8698	30	0	Site is located in Open Space planning area; no direct impacts but potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-8699	64	0	Site is located in Open Space planning area; no direct effects but potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-8700	25	0	Site is located in Open Space planning area; no direct effects but potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-8702	48	48	Site is located in Medium High Residential planning area; entire site will be subject to direct effects from grading for residential uses.
RIV-8703	264	264	Site is located in High Residential planning area; entire site will be subject to direct effects from grading for residential uses.
RIV-8704	249	0	Site is located in Open Space planning area; no direct impacts but potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-8705	1,104	0	Site is located in Open Space planning area; no direct impacts but potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-8706	1,081	1,081	Site is located in High Residential planning area; entire site will be subject to direct effects from grading for residential uses.
RIV-8707	47	0	Site is located in Public Facilities planning area; no direct impacts anticipated but site could be subject to potential indirect effects from possible vandalism.
RIV-8710/H	798	0	Site is located in Open Space planning area; no direct effects but potential indirect effects from possible vandalism, illicit artifact collection, etc.
RIV-8711	126	0	Site is located in Open Space planning area; no direct impacts anticipated but site could be subject to potential indirect effects from possible vandalism.

Site	Total Site Area (m ²)	Site Area Subject to Direct Effect (m ²)	Nature of Adverse Effects to Site
RIV-8712	317,686 (78.5 acres)	77,164 (19 acres)	47 acres of site area containing rock art and highest surface-artifact density are within Open Space planning area, and an additional 12.5 acres have been destroyed through previous construction of CRA and IFP, leaving 19 acres, or approximately 24 percent of site area, subject to direct adverse impacts from grading for High Residential and Very High Residential uses. Preserved portions of site are subject to potential indirect effects from possible vandalism, illicit artifact collection, etc.

Site RIV-806, a rockshelter, is located in an Open Space area. As such, it is not subject to direct adverse impacts from project development but could be exposed to indirect effects from possible vandalism or illicit artifact collection; therefore leading to **unavoidable indirect impacts**. The site's overall integrity is not expected to be compromised by the proximity of other land uses. There are no feasible mitigation measures that would avoid or reduce the indirect impacts resulting from human activities to less than significant.

Site CA-RIV-1842 is a small-to-moderate size milling complex site in the center of THE VILLAGES OF LAKEVIEW Specific Plan area. It includes two milling features with milling slicks. Trenching investigations identified ground stone fragments, flaked stone artifacts, a faunal bone, and midden deposit approximately 130–260 feet west of the milling feature area. Midden deposit was encountered as deep as 4 feet below ground surface. The southern boundary of the site is defined by a negative trench where no deposits were found. The northern boundary has not been so clearly determined; the northernmost trench contained several artifacts, but no midden deposit. An area immediately south of the milling features has been heavily disturbed and currently has a manmade berm and depression with some concrete debris. Overall, whereas the surface condition of the site is fair, the midden deposits suggest some subsurface integrity and the potential to hold additional cultural materials. The entire site area will be subject to direct adverse impacts from grading for residential development. Potential impacts to RIV-1842 are considered potentially **significant** without **MM Cultural 1i** and **2**, below, but can be reduced to **less than significant** with mitigation. Indirect effects could result in substantial adverse change in the significance of RIV-1842 over time and indirect effects are considered **significant and unavoidable**.

Site RIV-2585, with eight milling features containing a total of 10 slicks and no mortars, is located in an Open Space area. As such, it is not subject to direct adverse impacts from project development but could be exposed to indirect effects from possible vandalism or illicit artifact collection. An existing trail which passes nearby will be incorporated into the trails element of the Open Space area. It is also possible that the site could be affected by activities within the fuel modification zone adjacent to the site, if such activities are conducted without cultural resource protections in place; therefore leading to potential **unavoidable indirect impacts**. Implementation of **MM Cultural 1h** shall reduce impacts to **less than significant**.



Portions of RIV-4155—which contains numerous milling features, artifacts, and a cultural deposit—were initially planned within a Public Facilities area and subject to direct effects from water tank placement. The Public Facilities area has been redesigned and moved to avoid the site boundaries. The site is now located in an Open Space planning area and no longer subject to direct adverse impacts. The site may be subject to indirect effects from possible vandalism, and illicit artifact collection; therefore leading to potential **unavoidable indirect impacts**. Implementation of **MM Cultural 1h** shall reduce impacts to **less than significant**.

Site RIV-4156/H, with four milling features containing six slicks and one mortar, is located in a High Residential planning area. Although three trenches were excavated in the vicinity of the site with negative results, the immediate site area was not tested and subsurface deposits cannot be ruled out. The entire site will be subject to direct impacts from grading for residential uses. Potential impacts to RIV-4156/H are considered potentially **significant** without **MM Cultural 1j** and **2**, below, but can be reduced to **less than significant** with mitigation.

Site RIV-4158, which is believed be a redeposited assortment of artifacts removed from other nearby sites, is located in a Very High Residential planning area. Trenching results indicate that, although RIV-4158 appears to contain sparse subsurface archaeological deposits, this site may retain relatively little subsurface integrity. The entire site will be subject to direct impacts from grading for residential uses and a road right-of-way. Potential impacts to RIV-4158 are considered potentially **significant** without **MM Cultural 1k** and **2**, below, but can be reduced to **less than significant** with mitigation.

Site RIV-8698 and RIV-8699, each with two slicks on a single boulder; RIV-8700 and RIV-8702, each with one slick; RIV-8704, with 13 milling slicks and one mortar distributed on two features; and RIV-8705, with eight milling slicks and one mortar spread across four boulders—are located in Open Space planning areas and are therefore not subject to direct impacts from grading for development. However, they may be subject to potential indirect effects from possible vandalism, illicit artifact collection, and other damage associated with trails and other recreational uses in the vicinity of the sites. All but one of the sites, RIV-8705, were tested for subsurface deposits; three of them, RIV-8698, 8699, and 8704, had associated cultural deposits. Existing trails which pass near some of these sites will be incorporated into the trails element of the Open Space area. It is also possible that some of the sites could be affected by activities within adjacent fuel modification zones, if such activities are conducted without cultural resource protections in place. Therefore, potential **unavoidable indirect impacts** to these sites exist. Implementation of **MM Cultural 1h and l** shall reduce impacts to **less than significant**.

Site RIV-8702, with a single-milling slick on one boulder, is located in a Medium High Residential planning area. The entire site will be subject to direct adverse effects from grading for residential uses and impacts are potentially **significant** without **MM Cultural 1l**, below, but can be reduced to **less than significant** with mitigation.

Site RIV-8703, with seven milling slicks on two different boulders, is located in a High Residential planning area. The entire site will be subject to direct adverse effects from grading for residential uses and impacts are considered potentially **significant** without **MM Cultural 1l**, below, but can be reduced to **less than significant** with mitigation.

Site RIV-8706, with three slicks, each on a separate boulder, is located in a High Residential planning area. The entire site will be subject to direct effects from grading for residential uses; therefore, impacts are considered potentially **significant** without **MM Cultural 1l**, below, but can be reduced to **less than significant** with mitigation.

Site RIV-8707, with a single slick, is located in a Public Facilities planning area. The current plans for the area call for water tanks to be placed and a pipeline to be installed west of the site. No direct impacts to the site are anticipated but the site could be subject to potential indirect effects from possible vandalism or future development within the Public Facilities planning area. It is also possible that the site could be affected by activities within the fuel modification zone adjacent to the site, if such activities are conducted without cultural resource protections in place. Therefore, potential **unavoidable indirect impacts** to RIV-8707 exist. To reduce indirect impacts to less than significant, **MM Cultural 1f** will be implemented.

Site RIV-8711, with five mortars distributed across three boulders, and no milling slicks, is located in an Open Space planning area and thus is not subject to direct adverse impacts. The site may be subject to indirect effects from possible vandalism, and illicit artifact collection. Therefore, potential **unavoidable indirect impacts** to RIV-8711 exist. Implementation of **MM Cultural 1h** shall reduce impacts to **less than significant**.

Site CA-RIV-8712 covers an area of nearly 79 acres containing five previously recorded sites, now defined as loci within the larger site complex recorded as CA-RIV-8712. Collectively, these loci contain 28 bedrock milling features, 7 panels of rock art, 5 rock shelters, and an extensive scatter of surface materials including ceramics, flaked, and ground stone artifacts, and fire-affected rock. Previous investigations for the Inland Feeder Pipeline project documented numerous buried features, including hearth materials, roasting pits, artifact caches, and possible activity areas that have been radiocarbon dated to more than 9,000 years old, and subsequently destroyed by the pipeline construction. Based on preliminary discussions between SRI, Inc. and LSA Associates, Inc., recent investigations by LSA Associates at the northern edge of CA-RIV-8712 within the proposed future right-of-way (ROW) for the planned Mid-County Parkway found 50 artifacts on the surface and a sparse subsurface cultural deposit, and concluded that the cultural materials had generally been moved into the ROW through agricultural plowing and alluvial slope-wash over time.

The portions of the site containing the rock art and milling features, and having the highest surface artifact density, are within an Open Space planning area and will not be subject to direct impacts. Of the remaining portions of the site, approximately 19 acres, or 24 percent of site, will be subject to direct adverse effects from grading for High Residential and Very High Residential Uses. The protected areas of the site within the Open Space planning area constitute more than 47 acres, which together with 12.5 acres of the site within existing pipeline corridors, cover 76 percent of the site area. These areas will not be subject to direct impacts from project grading; however, they could be affected by fuel modification activities, and by indirect effects from possible vandalism, illicit artifact collection, and changes in the integrity of setting, feeling, and association resulting from the proximity of the residential use and are considered significant. Potential direct impacts to RIV-8712 are considered potentially **significant without MM Cultural 1m and 2**, below, but will be reduced to **less than significant** with mitigation.

No direct impacts will result from project implementation to archaeological sites RIV-394, RIV-397, RIV-806, RIV-2585, RIV-4155, RIV-6726/H, RIV-8698, RIV-8699, RIV-8700, RIV-8704, RIV-8705, RIV-8707, RIV-8710, and RIV-8711. Direct impacts were mitigated for archaeological sites CA-RIV-1842 and CA-RIV-8712. Even though these sites will be avoided by project development and impacts to the remaining portions of site RIV-8712, as well as to Feature 1 of RIV-6762H and sites RIV-1842, RIV-4156/H, RIV-4158, RIV-8703, and RIV-8706 will be mitigated to minimize direct impacts, these sites may still be accessible to the public and indirect impacts such as vandalism and illicit artifact collection may occur. With the introduction of approximately 34,000 people to THE VILLAGES OF LAKEVIEW Specific Plan project and other anticipated development in the area, these indirect effects could result in substantial adverse change in the significance of the resources over time and indirect effects are considered **significant**. There are no feasible mitigation measures that would avoid or reduce the indirect impacts resulting from human activities to less than significant.

Although Isolates 6 and 7 do not meet the criteria for a site and are therefore not CRHR or NRHP eligible, **MM Cultural 1n** shall be implemented to determine if the isolates are part of an eligible site as well as the extent of the potential site.

***Threshold C:** The proposed project would result in a significant impact if it disturbs any human remains, including those interred outside of formal cemeteries.*

The SRI Cultural Resources Assessment did not uncover the presence of any known Native American human remains within the project boundaries. Through consultation with Native American Tribes and literature research, burial sites have been uncovered one half mile from the project area. Although no human burial sites were identified within the project area, human burials could potentially be present in the vicinity of habitation areas and rock art sites. A site located within the northeastern portion of the project site has been identified by the SRI Cultural Resources Assessment as a habitation site including a large number of features such as milling slicks, an extensive midden deposit area, and artifacts where the possibility of discovering human remains may exist. Most of this site has been previously disturbed by routine discing and agricultural operations and as such the landscape is altered from its native condition in the project area. The depth of artifacts ranged from 4.9 feet to 15.7 feet in this site; however, no human remains or potentially artifactual indicators of burials were located.

While the project is not expected to disturb any human remains, provisions of state law (CA Health & Safety Code Section 7050.5 and CA PRC Section 5097.98) outline the appropriate steps to be taken upon the accidental discovery of human remains. If human remains are unearthed, site disturbance in the immediate vicinity of the discovery is to stop immediately and the Riverside County Coroner's office is required to be notified immediately. If the Coroner determines that the remains are Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will notify the Most Likely Descendant (MLD) who will make a recommendation to the landowner regarding disposition of the remains. The NAHC is authorized resolve any disputes regarding the disposition of such remains pursuant to Section 15064.5(e) of the CEQA guidelines, if necessary. Since these requirements are applicable to the construction of the proposed project, the impacts associated with the potential discovery of human remains during construction activities are considered to be

less than significant; however if human remains are found, implementation of **MM Cultural 1c** and **2** will assure that impacts remain **less than significant**.

***Threshold D:** The proposed project would restrict religious or sacred uses within the potential impact area.*

Site CA-RIV-397, consisting of a boulder outcrop and rockshelter with pictographs and an associated midden area, is located at the edge of a Medium High Residential planning area near the toe of the slope of the Lakeview Mountains. The slicks, midden soil, and artifacts suggest the site was used over an extended period of time. It is possible the rockshelter may have been a dwelling at one time. Activities at the site included food processing and stone tool production and maintenance. The pictograph's style and presence suggests ritual activities may have occurred at this site.

Site CA-RIV-806 is a small rockshelter located in an Open Space area that was reported by a Native American consultant to have once contained a "spirit stick," which may indicate the site was formerly used for ritual activities. The artifact was not observed during surveys for the current project.

Site CA-RIV-8712 is a complex, multi-use site reflecting a range of past human activities. Evidence of habitation is reflected in the presence of midden and rockshelters, whereas the numerous milling features and associated ground stone artifacts provide evidence of food-processing activities. Past occupants not only used stone tools but appear to have produced them at the site as well. Additionally, the array of prehistoric ceramic artifacts suggests a variety of functions including utilitarian, decorative, and perhaps ritual. Ritual behavior and artistry are also reflected in the numerous rock art panels, which include cupules and geometric, cross-hatching, and zoomorphic designs.

No evidence of current or ongoing religious or sacred use of any of these three sites has been documented, although the sites are known to have been visited on occasion primarily for the purposes of Native American youth education. Nevertheless, should Native American communities desire access to these sites, the sites are proposed to be located in Open Space or buffer areas where public access will be maintained. Therefore, the project will not restrict religious or sacred uses and impacts are considered **less than significant**.

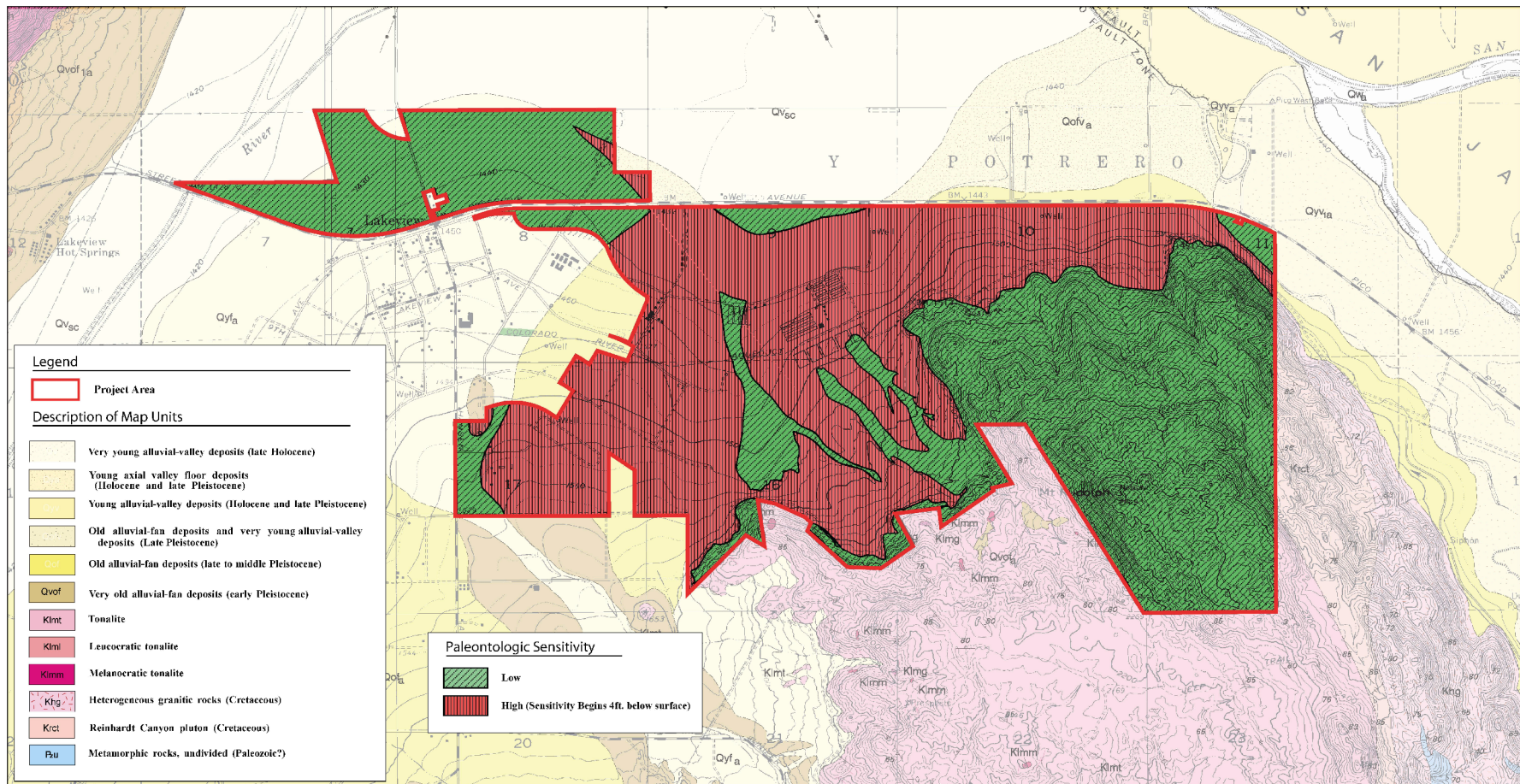
***Threshold E:** The project would directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature.*

The portion of the project site located north of Ramona Expressway and the Lakeview Mountains generally are located in an area mapped by the Paleontological Resource Assessment Report as having a Low potential for paleontological resources (see **Figure 5.5-2, Paleontological Sensitivity**). The Riverside County General Plan EIR states that this sensitivity rating is based on the occurrence of fossils at specific depths below the surface that are known to contain or have the correct age and depositional conditions to contain significant paleontological resources. According to the Paleontological Resource Assessment, prepared by LSA Associates, Inc. (Appendix E (CD #3)), these two areas contain sediments that are less than 10,000 years old,

which are considered too young to contain fossils. There is a low potential for these areas of the site to contain significant paleontological resources. However, in the unlikely event that paleontological resources are discovered during earth-moving operations, **MM Paleontology 1 and 2** shall be implemented to reduce potential impacts to a level **less than significant**.

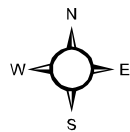
The remaining areas of the site are generally located within an area mapped as High B (see **Figure 5.5-2, Paleontological Sensitivity**). The Riverside County General Plan EIR states that this sensitivity rating is based on the occurrence of fossils at a specific depth below the surface that are known to contain or have the correct age and depositional conditions to contain significant paleontological resources. The High B (Hb) designation is based on the occurrence of fossils at a specified depth below surface. High B category indicates that fossils are likely to be encountered at or below 4 feet of depth.

A large and diverse collection of Rancholabrean fossils were found within similar sediments that are in the project area, approximately 11 miles southeast at the Diamond Valley Lake Reservoir. The closest group of fossil localities is about 1 mile to the southwest where fossil remains from plants, invertebrates, reptiles, amphibians, birds, and mammals were found approximately 15 feet below the surface. Grading is expected to disturb soils below 4 feet of depth. There is a potential to encounter these sensitive resources during ground-disturbing activities on the project site. Impacts to paleontological resources are therefore potentially significant. Compliance with **MM Paleontology 1 and 2** will reduce impacts to **less than significant** levels.



Source: LSA Associates, Sept. 2007

ALBERT A.
WEBB
ASSOCIATES



0 2,000 4,000 6,000
Feet

Figure 5.5-2

Paleontologic Sensitivity

The Villages of Lakeview EIR No. 471

Proposed Mitigation Measures

The preferred method to mitigate adverse impacts to historical resources and historic properties is avoidance and preservation in place. Guidance regarding mitigation for impact to cultural resources is set forth in CEQA Guidelines 15126.4(b)(3):

Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed . . . for a project involving such an archaeological site:

- A. Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
- B. Preservation in place may be accomplished by, but is not limited to, the following:
 - 1) Planning construction to avoid archaeological sites;
 - 2) Incorporation of sites within parks, greenspace, or other open space;
 - 3) Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site;
 - 4) Deeding the site into a permanent conservation easement.
- C. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 of the Health and Safety Code.
- D. Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the DEIR and that the studies are deposited with the California Historical Resources Regional Information Center.

MM Cultural 1: A master Cultural Resources Management Plan (CRMP) was prepared and is contained in Chapter 9 of the Cultural Resources Study. The master CRMP contains mitigation measures for prehistoric sites and strategies to implement the mitigation measures over the course of the project development.

When a tentative tract or other development project within the Specific Plan area is filed on land containing, or within 500 feet of, prehistoric sites, an addendum to the master CRMP will be prepared to address the sites affected by that tentative tract or project. Each such addendum to the CRMP will be prepared in consultation with the Native American tribes consulted for the project, the Tribal Traditional Resources Advisory Committee, and landowners and shall be reviewed and approved by the County. Riverside County Transportation Commission shall also be consulted during preparation of any addendums to the master CRMP for properties located adjacent to the MCP project. These addenda will include Site Preservation Plans for sites to be preserved in place, and Data Recovery Plans for sites that cannot be avoided and require archaeological excavation as mitigation, as provided by the CEQA Guidelines (CCR Title 14, Section 15126.4[b][3]).

As required by CEQA Guidelines Sections 15064.5(e) and (f), the CRMP addendum shall contain detailed provisions for the treatment of unanticipated discoveries during project construction, including human remains. The provisions of the CRMP should be consistent with state law as contained in Health and Safety Code Section 7050.5, and PRC Sections 5097.94 and 5097.98. Such mitigation shall be addressed in a manner consistent with the following:

- a. If buried materials of potential historical, cultural or archaeological significance are accidentally discovered during any earth-moving operations associated with the proposed project, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. If the find is determined to be an historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State CEQA Guidelines), avoidance or other appropriate measures as discussed in the CRMP shall be implemented.
- b. If evidence of potentially significant prehistoric or historic resources is uncovered during project-related grading outside of the high sensitivity areas in which archaeological and Native American monitoring has already been required, the extent of monitoring shall be amended and the presence of a Native American monitors shall be incorporated into the monitoring program for all areas in the affected tentative tract.
- c. If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to whether the remains are Native American. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission (NAHC) shall be contacted pursuant to the law, and the NAHC shall identify the most likely descendant. The most likely descendant shall then make recommendations in the time frames set forth in the Public Resources Code, and engage in consultation with the project proponent and landowner concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until the most likely descendant has made his or her recommendation regarding the treatment and disposition of the human remains and any associated grave goods. Should the most likely descendant fail to make a recommendation or the landowner or his or her authorized representative rejects the

recommendation of the descendant, the landowner (or authorized representative) is required to inter the human remains and associated grave goods with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.

~~If human remains are uncovered at any time, all activities in the immediate area of the find shall be halted by the developer or its contractor and the County Coroner shall be notified immediately pursuant to CA Health & Safety Code Section 7050.5 and CA PRC Section 5097.98. If the Coroner determines that the remains are of Native American origin, the Coroner shall proceed as directed in Section 15064.5(e) of the CEQA Guidelines.~~

In addition to unanticipated discoveries, the CRMP addendum shall incorporate the following recommendations to mitigate impacts to identified cultural resources:

- d. CA-RIV-6726H is the historical-period Colorado River Aqueduct (CRA). The CRA is currently in use and will not be modified by the proposed TVOL plan. SRI does not recommend any archaeological work in association with the CRA corridor. Two benchmarks that associated with the CRA are located within the TVOL project area and outside of the CRA corridor. Each is located within a separately recorded prehistoric site. One benchmark, Feature 2, is located within Locus C of site RIV-8712, and will be preserved in place. The other, Feature 1, is located on a boulder within site RIV-4156/H, which is in an area subject to direct impacts from development. These benchmarks are considered contributing elements to the CRA and should be preserved in place if possible. If preservation is not feasible, as may be the case with Feature 1, the affected benchmark shall be fully documented and relocated or salvaged for interpretive uses.

Treatment of the benchmark recorded as RIV-6762H Feature 1 shall be documented as part of the Data Recovery Plan for site RIV-4156/H to be prepared in an addendum to the CRMP.

- e. RIV-8710H is a historical-period refuse dump that most likely derives from a construction camp for the CRA. The dump has good integrity and is eligible due to its association with the CRA and the potential of the site contents to provide additional information about chronology of the dump, subsistence at the camps, the relationship between the camp and the local and regional economies, and the technology of CRA construction. The site is situated at the northern edge of the TVOL project area, adjacent to the San Jacinto Wildlife Area, and is believed to be located on land owned by Lewis Operating Corp.

Because the site will be subject to indirect impacts from possible illicit artifact collection due to the increased population of the project area, a data recovery plan in the form of detailed recording and mapping of all items at the dump, along with photographic documentation or collection of diagnostic and unique items shall be implemented. Although subsurface deposits are unlikely at the site, a limited set of shovel probe excavations to determine if any dump materials have become completely buried shall be implemented, and recovery of a representative sample of such materials, if present shall be conducted.

The recommended data recovery work shall be conducted prior to issuance of a grading permit for Phase 1a of the TVOL project. Prior to conducting the fieldwork, the California Department of Fish and Game, and the U.S. Army Corps of Engineers shall be notified and provided with a plan of work for the data recovery. The results of the data recovery investigations at site RIV-8710H shall be documented in a professional quality technical report, and as public interpretive information to be presented in the form of brochures, public lectures, and signage placed within public parks and facilities.

- f. Sites RIV-394 and RIV-8707 are not to be subject to direct adverse impacts, and are to be preserved in place in their entirety. Current plans for the Public Facilities planning area call for water tanks to be placed and a pipeline to be installed south and west of the sites. To mitigate potential indirect effects from possible vandalism, future development within the Public Facilities planning area, and activities within the nearby fuel modification zone, the Site Preservation Plan for these sites will include provisions for the sites to be flagged and avoided, and for archaeological and Native American monitors from the tribes consulted for the project to be present during all activities that could cause ground disturbance within 100 feet of the sites.
- g. CA-RIV-397 consisting of a boulder outcrop and rockshelter with pictographs and an associated midden area, is located at the edge of a Medium High Residential planning area near the toe of the slope of the Lakeview Mountains. The boulder containing the rockshelter and rock art is located in the Open Space planning area, and thus will be avoided and preserved from direct impacts. The remainder of the site will be added to the Open Space planning area and preserved from development, which will prevent direct impacts to all known cultural deposits, and provide a buffer between residential development the Split Rock boulder and associated rock art panels. To mitigate potential indirect effects from possible vandalism, illicit artifact collection, and changes in the integrity if setting, feeling, and association resulting from the proximity of the residential use, a Site Preservation Plan shall be prepared prior to approval of any tentative tract within 500 feet of the site. The Site Preservation Plan shall be based on consultation among the Tribes, Tribal Traditional Resources Advisory Committee, Regional Conservation Authority, and if possible and culturally appropriate, the County, and shall include provisions for removal of modern graffiti, detailed recording of rock art elements by a recognized rock art expert, capping of exposed cultural deposits with fill and restoration of native vegetation, and protection of the site area from vandalism through appropriate fencing, landscaping, and interpretation.
- h. Sites CA-RIV-806, 2585, 4155, 8698, 8699, 8700, 8704, 8705, and 8711 consist of varying numbers of milling features, including both slicks and mortars, some with associated cultural deposits, all located within Open Space planning areas. The sites are not to be subject to grading or other ground disturbances associated with development and therefore no direct impacts to these sites are anticipated; however, indirect impacts could occur as a result of the proximity of residential areas, the recreational use of nearby trails, and activities within adjacent fuel modification zones. No mitigation measures are proposed for RIV-806 because of the distance to the trails. For the remainder of the sites, to provide long term management and protection, a Site Preservation Plan shall be prepared prior to approval of any tentative tract within 500 feet of the site. The Site Preservation Plans for these sites should include provisions for the sites to be flagged and

avoided, and for archaeological and Native American monitors from the tribe(s) consulted for the project to be present during all activities that could cause ground disturbance within 100 feet of the sites.

- i. CA-RIV-1842 is a small- to moderate-size milling complex site in the center of THE VILLAGES OF LAKEVIEW Specific Plan area. It includes two milling features with milling slicks. Trenching investigations identified ground stone fragments, flaked stone artifacts, a faunal bone, and midden deposit approximately 1.3 to 2.6 feet west of the milling feature area. A midden deposit was encountered as deep as 4 feet below ground surface. Overall, whereas the surface condition of the site is fair, the midden deposits suggest some subsurface integrity and the potential to hold additional cultural materials. The northern boundary of the site has not been clearly defined.

The Data Recovery Plan for RIV-1842 shall include provisions for additional testing to determine firmly the northern boundary of the site and assess the composition and structure of the subsurface deposits. Based on the testing data, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. ~~All collections resulting from data recovery excavations shall be curated in perpetuity in a facility that meets the standards of the State of California *Guidelines for the Curation of Archaeological Collections* (OHP 1993) and 36 CFR 79. Such standards include: climate control, security, adequate staffing, access by qualified researchers and descendant groups.~~ The appropriate disposition of all cultural resource collections resulting from data recovery excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.

- j. CA-RIV-4156/H contains four milling features with a total of six slicks and one mortar. Although three trenches were excavated in the vicinity of the site with negative results, the immediate site area was not tested and subsurface deposits cannot be ruled out. The Data Recovery Plan for RIV-4156/H shall include provisions for testing to confirm the presence or absence of subsurface deposits. If the testing indicates that a subsurface deposit is present, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. ~~All collections resulting from data recovery excavations should be curated in perpetuity in a facility that meets the standards of the State of California *Guidelines for the Curation of Archaeological Collections* (OHP 1993) and 36 CFR 79.~~ The appropriate disposition of all cultural resource collections resulting from data recovery excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.
- k. CA-RIV-4158, which is believed to be a redeposited assortment of artifacts removed from other nearby sites. Trenching results indicate that, although RIV-4158 appears to contain sparse subsurface archaeological deposits, this site may retain relatively little subsurface integrity.

The Data Recovery Plan for RIV-4158 shall include provisions for additional testing to assess the composition and structure of the subsurface deposits. Based on the testing data,

a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. ~~All collections resulting from data recovery excavations should be curated in perpetuity in a facility that meets the standards of the State of California *Guidelines for the Curation of Archaeological Collections* (OHP 1993) and 36 CFR 79.~~ The appropriate disposition of all cultural resource collections resulting from data recovery excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.

- l. Sites RIV-8702, 8703, and 8706, with three slicks, each on a separate boulder, will be subject to direct adverse effects from grading for residential uses. Each will require preparation and implementation of a Data Recovery Plan to mitigate adverse impacts from site destruction. The Data Recovery Plans for these sites shall include provisions for testing to confirm the presence or absence of subsurface deposits. If the testing indicates that a subsurface deposit is present, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. ~~All collections resulting from data recovery excavations should be curated in perpetuity in a facility that meets the standards of the State of California *Guidelines for the Curation of Archaeological Collections* (OHP 1993) and 36 CFR 79.~~ The appropriate disposition of all cultural resource collections resulting from data recovery excavations will be determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.
- m. Site RIV-8712 covers an area of 78.5 acres containing five previously recorded sites, now defined as loci within the larger site complex. The portions of the site containing the rock art and milling features and having the highest surface artifact density are within an Open Space planning area that covers 47 acres (60 percent) of the site area. Approximately 12.5 acres (16 percent) of the site have already been disturbed by previous construction of the CRA and the IFP. The remaining portions of the site, approximately 19 acres, or 24 percent of the site area, will be subject to direct adverse effects.

To provide for long-term management and protection of the portions of site 8712, a Site Preservation Plan shall be prepared prior to approval of any tentative tract within 500 feet of the site. The Site Preservation Plan shall be based on consultation among the Tribes, Tribal Traditional Resources Advisory Committee, Regional Conservation Authority, and the County, and shall include provisions for protection of the site area from vandalism through appropriate fencing, landscaping, and interpretation.

The Data Recovery Plan for the portion of RIV-8712 subject to direct impacts shall include provisions for additional testing to assess the composition and structure of the subsurface deposits. Based on the testing data, a representative sample of subsurface cultural deposits shall be excavated, analyzed, and interpreted. The results of the data recovery shall be documented in a professional report and public interpretive information. ~~All collections resulting from data recovery excavations shall be curated in perpetuity in a facility that meets the standards of the State of California *Guidelines for the Curation of Archaeological Collections* (OHP 1993) and 36 CFR 79.~~ The appropriate disposition of all cultural resource collections resulting from data recovery excavations will be

determined in consultation with the applicant, the County and consulted tribes, and documented in the data recovery plans contained in addenda to the CRMP.

- n. Isolates 6 and 7 are subsurface items identified during the excavation of trenches 51 and 68. Located approximately 197 feet apart, the materials do not meet the criteria for consideration as a site. However, one flaked stone artifact was identified on the surface between two trenches and, as it is possible that additional materials are present below the surface between trenches 51 and 68; therefore, it is recommended by SRI that this area includes additional subsurface investigation. SRI recommends excavation of four additional trenches around TRs 51 and 68 and four more between TRs 65 and 50 to the east. This work should be conducted for and reported in the CRMP Addendum to be prepared for the tentative tract containing these resources.

If the results of the testing indicate the presence of an intact subsurface cultural deposit, a Data Recovery Plan for the newly identified site shall be prepared according to the provisions of the CRMP. The DRP shall contain monitoring during ground-disturbing activities, preparation of a professional report and public interpretive information, and curation of the collection. The DRP shall be reviewed and accepted by the County archaeologist prior to approval of any tentative tract containing or within 500 feet of the site. All DRP measures for the site shall be implemented prior to issuance of a grading permit for the associated tentative tract. A technical report of findings, including disposition of the recovered archaeological collection, for the DRP shall be submitted and approved by the County archaeologist prior to issuance of occupancy permits for the associated tentative tract.

MM Cultural 2: Even after full implementation of data recovery through MM Cultural 1, it is possible that significant buried resources could be present in many areas that will be graded. Therefore, to mitigate for discovered buried sites, the entire area designated as having high sensitivity for buried sites (see **Figure 5.5-1, Cultural Resources Sensitivity**) and borrow areas from within the project boundaries shall be monitored by a qualified archaeologist and a Native American monitor during any ground-disturbing activities. Full time archaeological and Native American monitoring during excavations shall be conducted in these areas. A full report of all monitoring activities, including disposition of all resulting collections, shall be prepared according to the provisions of the Cultural Resources Management Plan.

MM Paleontology 1: Should any paleontological resources be accidentally discovered during construction, construction activities shall be moved to other parts of the project site and a qualified paleontologist shall be contacted to determine the significance of these resources. If the find is determined to be a significant paleontological resource, and if the area was identified as having a “Low” sensitivity for containing paleontological resources, similar sediments may be reassigned as “High” sensitivity and would be subject to **MM Paleontology 2**.

MM Paleontology 2: For areas of the site identified as having a “High” sensitivity for finding paleontological resources and on-site borrow areas of depths greater than 4 feet, prior to the issuance of a grading permit, a qualified paleontologist shall be retained and a Paleontological Resource Monitoring and Treatment Plan (PRMTP) shall be prepared. Once the PRMTP is approved by the County of Riverside Planning Department, grading and construction activities may commence under the provisions of the PRMTP. The plan should include the following:

1. Pregrade meeting with a qualified paleontologist. The paleontologist will explain the likelihood for encountering paleontological resources, what resources may be discovered, and the methods that will be employed if anything is discovered.
2. In areas mapped with High B rating where grading will disturb depths of 4-feet or greater, a qualified vertebrate paleontologic monitor shall be present during construction excavation. The monitor shall inspect fresh cuts and/or spoils piles to recover paleontological resources. The monitor shall be empowered to temporarily divert construction equipment away from the immediate area of the discovery.
3. If the qualified paleontologist is not present when fossil remains are uncovered by earth-moving activities, these activities shall be stopped and a qualified paleontologist shall be called to the site immediately to evaluate the significance of the fossil remains.
4. It is recommended that native sediments occasionally be spot-screened through one-eighth to one-twentieth-inch mesh screens to determine whether microfossils are present. If microfossils are encountered, additional sediment samples as determined by the paleontological monitor shall be collected and processed to recover additional fossils.
5. If the qualified paleontologist determines that insufficient fossil remains have been found after fifty percent of earth moving activities have been completed, monitoring can be reduced or discontinued.
6. Any recovered specimens shall be prepared to the point of identification and permanent preservation, which may include the picking of any washed mass samples to recover small invertebrate and vertebrate fossils, if present, the removal of surplus sediment from around larger specimens to reduce the volume of storage for the repository and the hardeners/stabilizers to fragile specimens.
7. Specimens shall be identified to the lowest taxonomic level possible and curated at an institutional repository approved by the County of Riverside.
8. Fill dirt shall be free of cultural resources. Fill dirt from off-site resources shall be certified by the provider as being free of cultural or paleontological resources.
9. A report shall be prepared that details the methods and results of the monitoring program, even if the results are negative. If applicable, this shall include an appended itemized inventory of identified specimens. This report shall be submitted by the project paleontologist to the County of Riverside, Planning Department, prior to the issuance of the final grading inspection for all grading permits in areas where grading activities reached a depth of 4-feet or greater.

Summary of Project-Specific Environmental Effects After Mitigation Measures Are Implemented

With implementation of the mitigation measures recommended above, potential direct adverse impacts to historical-period sites RIV-6726H and RIV-8710H, and all prehistoric sites will be mitigated **below a level of significance** through implementation of **MM Cultural 1 and 2**.

Indirect impacts to the rock shelter at RIV-806 and to rock art features at RIV-397 and RIV-8712 Loci A and B resulting from changes in the integrity of setting, feeling, and association, as well as possible vandalism and illicit artifact collection from preservation areas, cannot be fully mitigated and will remain as **significant adverse impacts to cultural resources** even after implementation of the CRMP.

No fossils have been found or recorded from the project site. However, fossil remains have been found approximately 15 feet below the surface at least one mile from the site. Grading is expected to be below 4 feet of depth to almost 25 feet of depth. Therefore, potential to find fossils within portions of the site is high. Impacts related to destroying unique paleontological resource or site is **significant**. By implementing **MM Paleontology 1** and **MM Paleontology 2**, potential impacts to paleontological resources will be reduced to a **less than significant** level.

With adherence to and implementation of the above-listed General Plan policies, above listed mitigation measures, as well as adherence to standard federal, state, and County regulations, the impacts to historical-period cultural resources and to previously unknown prehistoric archaeological and paleontological resources will be **less than significant**.

Summary of Cumulative Environmental Effects After Mitigation Measures Are Implemented

Section 7.1 of the DEIR contains further information regarding cumulative effects.

Cultural resources impacts are site-specific with respect to any given resource. Cumulatively, then, impacts that may be considered cumulative simply relate to the loss of cultural resources in general over time throughout the region. As discussed previously, with implementation of the mitigation measures recommended, potential direct adverse impacts to historical-period sites RIV-6726H and RIV-8710H, and all prehistoric sites will be mitigated to below a level of significance. Direct impacts to rock art features at CA-RIV-397, CA-RIV-8712, and rock shelter at RIV-806 will be less than significant due to preservation in place of these features. Thus, these specific resources will be preserved on-site. Therefore, although their direct loss does not contribute to the general cumulative loss of cultural resources over time, indirect impacts to these resources can be cumulative as discussed below.

Indirect impacts resulting from human activity, such as theft, disturbance, or vandalism can be cumulative in the sense that population growth in an area places more people in proximity to such resources. The list of potential future development projects within the vicinity in adjacent cities and unincorporated county (**Table 5.14-K, Cumulative Developments Within Project Study Area**) will add approximately 127,250 people within five miles of the project site. Indirect impacts, both project-specific and cumulative, to rock art features at CA-RIV-397, CA-RIV-8712, and rock shelter at RIV-806 resulting from changes in the integrity of setting, feeling, and association, as well as indirect impacts such as possible vandalism and illicit artifact collection from preservation areas, cannot be fully mitigated and will remain as **significant adverse impacts** to cultural resources even after implementation of the CRMP which is required in **MM Cultural 1**.

As will archaeological and historic resources, paleontological resources may be considered cumulative simply as they relate to the loss of resources in general over time throughout the region. No fossils have been found or recorded from the project site. However, fossil remains have been found approximately 15 feet below the surface at least one mile from the site. Grading is expected to be below 4 feet of depth to almost 25 feet of depth. Therefore, potential to find fossils within portions of the site is high. Impacts related to destroying unique paleontological resources or sites is **significant**. By implementing **MM Paleontology 1** and **MM Paleontology 2**, potential impacts to paleontological resources will be reduced to a **less than significant** level.

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

5.6 GEOLOGY AND SOILS

Potential impacts related to faulting, liquefaction, seismic ground shaking, subsurface sewage disposal, and erosion by wind were all found to be less than significant in the Initial Study/NOP prepared for this project (Appendix A (CD #3)). The focus of the following discussion is related to the potential impacts from landslide risk, ground subsidence, dam inundation, change of topography, soils, and erosion.

In addition to other documents, the following references were used in preparation of this section of the DEIR:

- County of Riverside, *County of Riverside General Plan, Lakeview/Nuevo Area Plan*, October 2003. (Available at the County of Riverside or at <http://www.rctlma.org/genplan/content/ap2/lnap/html>)
- County of Riverside, *Riverside County Integrated Project, General Plan*, March 2003. (Available for review at Riverside County Planning Department and at <http://www.rcip.org>)
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Preliminary Geotechnical Investigation, Rockfall Hazard Evaluation, The Villages of Lakeview, Lakeview Area of Unincorporated Riverside, CA*, December 10, 2004. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Preliminary Geotechnical Investigation, Proposed 550-Acre Mixed-Use Development, Amway Property, North and South Sides of Ramona Expressway, Lakeview, CA*, May 21, 2003. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Preliminary Geotechnical Investigation, Proposed 60-Acre Residential Development Ross Property, South of the Ramona Expressway and west of Bridge Street, Lakeview area of Unincorporated Riverside County, CA*, October 28, 2004. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Preliminary Geotechnical Investigation, Proposed 120-Acre Mixed-Use Residential Development, La Certe Property, South of Ramona Expressway near Bridge Street, Lakeview Area of Riverside County, CA*, July 29, 2004. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Preliminary Geotechnical Investigation, Proposed 437-Acre Mixed-Use Sherman Ranch Development, Vicinity of Lakeview Avenue East and 4th Street, Lakeview, CA*, September 16, 2003. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Addendum Preliminary Geotechnical Investigation for Due Diligence Purposes, Additional Parcels of the Mixed-Use Sherman Ranch Development, Vicinity*

of Lakeview Avenue East and 4th Street, Lakeview, CA, January 24, 2006. (Appendix F (CD #3))

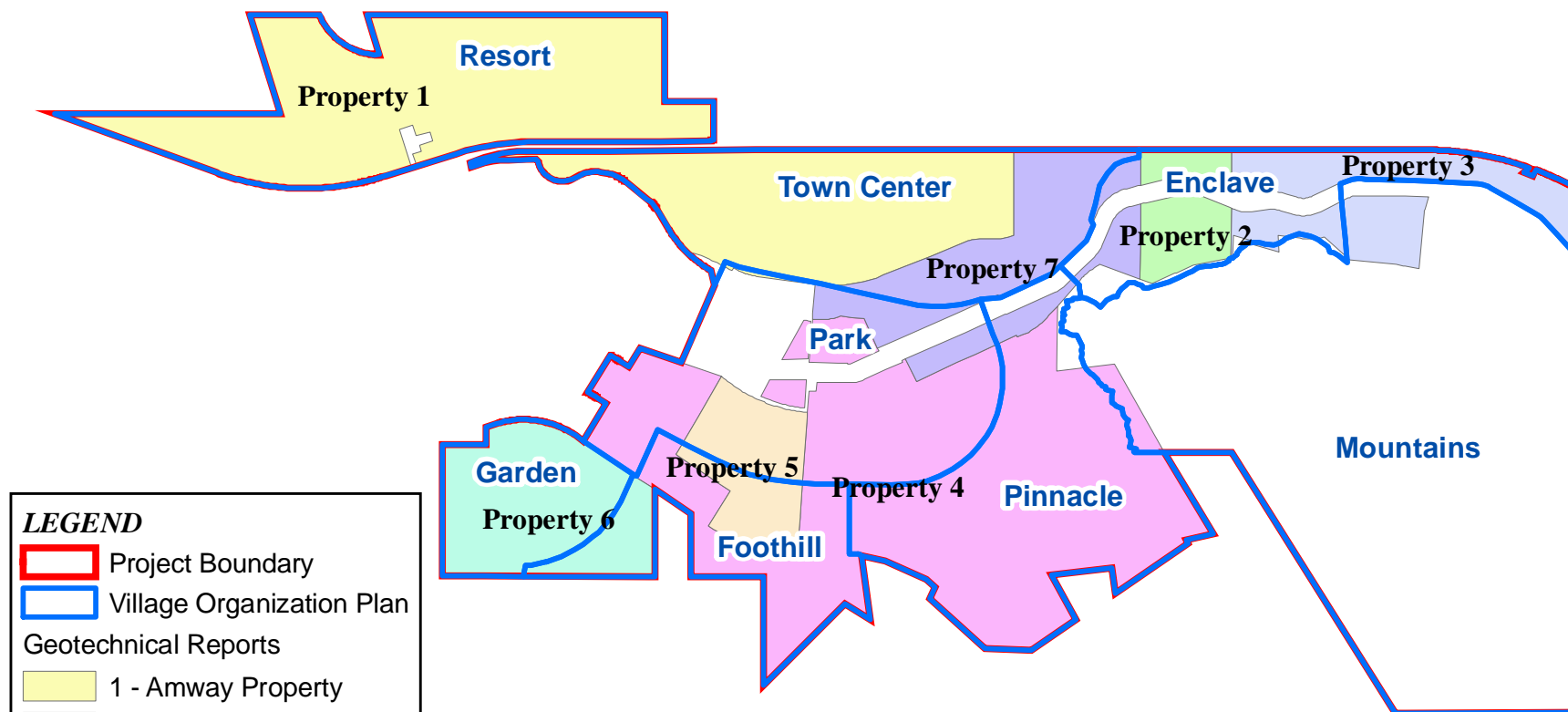
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Preliminary Geotechnical Investigation, Proposed Mixed-Use Residential Development, 75-Acre Abudayyeh Property, South of Lakeview Avenue East and East of 5th Street, Lakeview, CA, September 17, 2003. (Appendix F (CD #3))*
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Preliminary Geotechnical Investigation, Proposed Cannata Mixed-Use Residential Development, 135-Acre Thoroughbred Farm, Northeast of Hansen Avenue and Wolfskill Avenue, Lakeview, CA, September 22, 2003. (Appendix F (CD #3))*
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Preliminary Geotechnical Investigation, Proposed 155-Acre Residential Development, McAnally Property, South of Ramona Expressway Between Second and Fourth Streets, Lakeview Area of Riverside County, CA, March 24, 2005. (Appendix F (CD #3))*
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471, Response to the County of Riverside Seismic/Geologic/Geotechnical Review Sheet, Specific Plan 342 (County Geologic Report No. 1437), The Villages of Lakeview Project, Lakeview Area of Unincorporated Riverside County, CA, January 25, 2006. (Appendix F (CD #3))*
- U.S. Department of Agriculture, Soil Conservation Service, *Soil Survey, Western Riverside Area, California*, November 1971. (Available at the County of Riverside or at <http://www.ca.nrcs.usda.gov/mlra02/ssrequest.html>)
- San Jacinto River Watershed Council, *The San Jacinto Watershed Component of the Santa Ana Integrated Watershed Plan, Prop 50, Chapter 8, Planning Grant Application*, May 11, 2005. (Available at <http://www.sawpa.net/>)
- Eastern Municipal Water District, Water Resources Management Department, *West San Jacinto Groundwater Basin Management Plan, 2005 Annual Report*, April 2006. (Available at EMWD and at www.emwd.org/news/pubs_sj_subbasin.html)
- Thomas Olsen Associates, Inc., *BSA Properties Specific Plan No. 322 Draft Environmental Impact Report No. 426*, March 20, 2002. (Available at the County of Riverside.)
- California Department of Water Resources, *Lake Perris Dam Project Home Page*, accessed January 12, 2007. (Available at <http://perrisdam.water.ca.gov>)
- California Department of Water Resources, *DWR News, Climate Conditions*, Fall 2005. Date accessed May 18, 2007. (Available at <http://www.cwre.water.ca.gov/dwrnewsletter/news-people/News-People-fall05.pdf>)
- BSA Properties, *Specific Plan No. 322 and Final Environmental Impact Report No. 426*, June 2002. (Available at the County of Riverside.)
- California Department of Water Resources, Division of Safety of Dams, *Dams Within*

the Jurisdiction of the State of California, accessed 5/22/07. (Available at <http://damsafety.water.ca.gov>)

- Metropolitan Water District of Southern California, *Inland Feeder Project Final Environmental Impact Report and Environmental Assessment Volume 2 of 2*, February 1993. (Available at Eastern Municipal Water District.) (MWD 1993)

The following discussion of potential impacts to geology and soils is based on the Preliminary Geotechnical Investigations performed by Leighton and Associates, Inc. (referenced) for each of six subset properties. The reports for each subset property and their physical boundary description are presented in Appendix F (CD #3) of this DEIR.

The information presented in this section has been primarily derived from the seven Preliminary Geotechnical Investigations. For purposes of this discussion, the seven properties as broken down by Leighton and Associates, will not be referred to in this section; instead, the project has been divided into six proposed Specific Plan villages as discussed in the Introduction to this DEIR. For purposes of this analysis, **Figure 5.6-1, Village Organization Plan and Geotechnical Reports**, shows the boundaries of each geotechnical report listed above as they relate to each of the Specific Plan villages.



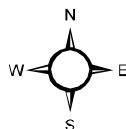
LEGEND

- Project Boundary
- Village Organization Plan
- Geotechnical Reports
- 1 - Amway Property
- 2 - Ross Property
- 3 - La Certe Property
- 4 - Sherman Ranch
- 5 - Abudayyeh Property
- 6 - Thoroughbred Farm
- 7 -McAnally Property

Source: Leighton and Associates, 2003-2006

Figure 5.6-1

A L B E R T A .
WEBB
A S S O C I A T E S



0 1,000 2,000 3,000
Feet

Village Organization Plan and Geotechnical Reports

The Villages of Lakeview EIR No. 471

Setting

As indicated in the Geotechnical Investigation Reports performed by Leighton and Associates (Leighton), the project site is located in the San Jacinto River Valley between the Lakeview Mountains and Bernasconi Hills, northeast of Perris Valley. The general site vicinity is located at the northeastern end of the Peninsular Range Province. The dominant structural feature within this region is the active San Andreas Fault system, located approximately 15.5 miles northeast of the site, as well as several major northwest-trending, right-lateral, strike-slip faults. Northeast of the site is the northwest-dipping, active San Jacinto Fault Zone, a major northwest-trending structural fracture near parallel to the San Andreas Fault. This fault is located approximately 1 mile northeast of the site near the base of the San Jacinto Mountains. The northeast-dipping Casa Loma fault is approximately 0.5 miles east of the eastern site limits. The San Jacinto Valley is infilled with alluvial soil deposits. The present landscape is the result of tectonic activity and erosion.

Site Soils and Geology

According to the Soil Survey of the Western Riverside Area, California, published by the U.S. Department of Agriculture, Soil Conservation Service (now the Natural Resources Conservation Service), the project has two general types of soil families on the site: the Hanford-Tujunga-Greenfield and Cieneba-Rockland-Fallbrook associations. The United States Department of Agriculture has identified thirty-eight soil types on site. These soil types are identified in Appendix N (CD #4) of this DEIR on Figure 5: *Soils Map*, and are described in Table 1: *Soil Types on The Villages of Lakeview Project Site*, located in the LESA report. Portions of the project site's native soils have been disturbed over the years by past and current agricultural activities.

Based on the Leighton's investigations, the primary geologic unit encountered and mapped on the project site is older alluvial soil derived from sediment deposited by the San Jacinto River and eroded from the Lakeview Mountains. Alluvial soils found during the site investigations by Leighton consist of fine to medium-grained silty sand, sandy silt, and sandy clay. This alluvium is expected to underlay the majority of the project site to depths ranging from five (5) to more than 200 feet below the existing ground surface.

Granitic bedrock underlies the alluvial soils at a relatively shallow depth along the perimeter of the Lakeview Mountains, (5 to 13 feet deep as observed in test pits and borings). However, the majority of the project site is underlain by approximately 100 feet or more of alluvium. Buried boulders and cobbles were not observed in any of the test pits or borings excavated by Leighton, but may be present within the alluvial soil near the base of the Lakeview Mountains.

Hardpan consisting of hard silty clay and silty sand was encountered within the Resort Village, north of Ramona Expressway, west of Davis Road, as well as south of Ramona Expressway between 5th and 6th Streets. Hardpan is a generally impervious layer below the ground surface.

Uncontrolled Artificial Fill

Uncontrolled artificial fill is present in the form of disturbed native soil, end-dumped soil, and compost material in several areas on site. This uncontrolled fill material consists of silty sand as well as organic material and debris present on site as a result of past site uses and grading activities. Uncontrolled artificial fill is located within portions of each of the six Specific Plan villages (excluding the Lakeview Mountains). Exploratory borings and test pits excavated by Leighton revealed that the fill material consists of loose, fine to medium-grained silty sand ranging from dry to moist. The uncontrolled fill was placed without adequate compaction and, as such, is not considered suitable for support of structures. The depth of artificial fill varies from approximately 5 to 15 feet in localized areas of the project site.

Groundwater

The project site is situated in the San Jacinto River Watershed, which covers an area of approximately 728 square miles (EMWD UWMP 2005). The San Jacinto River originates in the San Jacinto Mountains and follows the San Jacinto Valley through the eastern portion of the watershed (refer to the Hydrology section of this document, **Figure 5.8-3, Hydrology of the San Jacinto River**). The River can be characterized as an ephemeral system, with surface flow reaching Canyon Lake and Lake Elsinore only during wet periods. When storms are unusually intense and prolonged, the ground saturates quickly and most of the precipitation runs off to streams. The San Jacinto River drains the western slopes of the San Jacinto Mountains. Waterways tributary to the river include the North and South Forks, Strawberry, Indian, Poppet, and Bautista Creeks. The river recharges the groundwater basin in the area southeast of the city of San Jacinto. It then flows northwest past the Lakeview Mountains [the project site is located here within the watershed] before turning southwest to flow across the Perris Valley floor. The San Jacinto River ultimately flows into Lake Elsinore via Railroad Canyon and Canyon Lake. Lake Elsinore, when full, overflows into Temescal Wash, which joins the Santa Ana River near Prado Dam.

The San Jacinto groundwater basin lies within alluvium-filled valleys carved into the elevated bedrock plateau of the Perris Block. Collectively, the basins are nearly surrounded by impermeable bedrock mountains and hills. Internally, island-like masses of granite and metamorphic bedrock rise above the valley floor.

The San Jacinto and Casa Loma fault zones are the major geologic features that bound and/or crosscut many of the groundwater basins, and typically are effective barriers to groundwater flow. The area between the San Jacinto and Casa Loma faults is a deep, alluvium-filled graben (or valley) of tectonic origin, commonly referred to as the San Jacinto Graben. The effective base of freshwater in the graben is known to be quite deep but has not been precisely determined. The San Jacinto Graben consists of a fore bay area in the southeast where surface water recharge primarily occurs and a pressure area in the northwest where deep aquifers exist under confined conditions. To the east, the San Jacinto mountain range is the dominant geographic feature of the region, rising to a height of 10,805 feet. Groundwater management zones were delineated based on major impermeable boundaries, constrictions in impermeable bedrock, groundwater divides, and internal flow systems.

The eight groundwater management zones in the San Jacinto Watershed within Eastern Municipal Water Districts EMWD service area are:

1. Canyon
2. San Jacinto Upper Pressure
3. San Jacinto Lower Pressure
4. Lakeview/Hemet North
5. Hemet South
6. Perris South
7. Perris North
8. Meniffee

The project site is situated within the boundaries of the Lakeview/Hemet North Management Zone, which is bounded by the Casa Loma fault zone to the east; the groundwater divide near Esplanade Avenue to the south; the Lakeview Mountains to the west and south; the Bernasconi Hills to the north; and a bedrock constriction/saddle to the west. The Casa Loma fault zone is a known barrier to groundwater flow. However, groundwater leaks across the fault zone as underflow from the Upper San Jacinto Management Zone. Impermeable, crystalline bedrock outcrops that compose the Bernasconi Hills and the Lakeview Mountains to the north and south, respectively, are hard rock barriers to groundwater flow. To the west, the gap between the Bernasconi Hills and the Lakeview Mountains becomes narrow and the buried bedrock surface forms a saddle. This area of constriction in the water-bearing alluvium is the boundary between the Perris South and Lakeview/Hemet North Management Zones (EMWD UWMP).

EMWD extracts groundwater from multiple management zones in the San Jacinto Watershed. These zones are covered by one of two groundwater management plans. The Hemet South, Canyon, San Jacinto Upper Pressure, and the Hemet North part of the Lakeview/Hemet North Management Zones are covered by the *Hemet/San Jacinto Water Management Plan*. This annual report has been in place since 2005, and the current version was finalized in May of 2007. The Perris North, Perris South, San Jacinto Lower Pressure, and Meniffee Management Zones, and the Lakeview portion of the Lakeview/Hemet North Management Zone are covered by the *West San Jacinto Groundwater Basin Management Plan*. This annual plan has been in place since 1995, and the current version was finalized in June of 2007.

The *West San Jacinto Groundwater Basin Management Plan* indicates that groundwater levels within the Lakeview/Hemet North Management Zone were generally between 87 and 286 feet below ground level. No groundwater was encountered in any of the exploratory borings or test pits performed by Leighton. In general, the depth of exploratory borings was either 21.5 feet or 51.5 feet, and the test pits were generally 5 to 10 feet in depth, dug with a back hoe. The borings and test pits were taken throughout the project site, excluding areas within the Lakeview Mountains, as development is not anticipated in this portion of the project site. As indicated in the preliminary geotechnical investigation reports prepared for the project, historically, groundwater beneath the site was as little as 10 feet below ground surface (in 1916); and Leighton's review of current site well groundwater level data indicated that current groundwater, in the general site vicinity, is on the order of 200 feet below ground surface.

The geotechnical reports also indicate that wet soil was present in the northern portion of the site. The surface water from the adjacent dairy or other nearby properties appears to drain toward, and accumulate, in these areas. This wet soil is not indicative of shallow groundwater; rather it is the result of current agricultural practices on the properties north of Ramona Expressway and east of the Resort Village.

Flows in the headwaters of the San Jacinto River are affected by rising groundwater, interflow and discharge from Lake Hemet. As the San Jacinto River leaves the San Jacinto Valley, it passes through the San Jacinto fault zone. This fault zone is responsible for relatively high subsidence rates within the San Jacinto River Valley, which have resulted in the formation of a closed system that periodically fills with water from the river. This depression is referred to as Mystic Lake. When formed, the lake is relatively shallow with a large surface area, up to 4,000 acres. Downstream of Mystic Lake, the San Jacinto River forms a wide fluvial plain.

Regional Faulting and Seismicity

There are no known active or potentially active faults that traverse the site, and the site is not located in a State of California established Alquist-Priolo Earthquake Fault Zone or a Riverside County established Earthquake Fault Hazard Zone. No evidence of active faults was observed during Leighton's site investigations. Therefore, based on their analysis, Leighton concluded that the potential for fault ground rupture at the site is very low.

The principle seismic hazard that could affect the site is ground shaking resulting from an earthquake occurring along several major active or potentially active faults in Southern California. According to the geotechnical reports in Appendix F (CD #3), the closest mapped active fault that could affect the site is the Casa Loma Fault, located approximately 0.75 kilometers (0.5 miles) north and northeast of the project site's eastern limits. The San Jacinto fault, a right-lateral strike-slip fault is located approximately 2.0 kilometers (1.24 miles) northeast of the site. The Casa Loma fault, which flanks the eastern edge of the Lakeview Mountains, is part of the San Jacinto fault system. The San Jacinto Valley segment of the San Jacinto fault is estimated to have a mean characteristic earthquake with a magnitude of 6.9 (Mw) and an average slip rate of 12.0 + 6.0 millimeters per year (La Certe Property Geotechnical report, Appendix F (CD #3)). Other known regional active faults that could affect the site include the Elsinore-Temecula fault, Murrieta Hot Springs fault, and the Elsinore-Glen Ivy fault. The largest nearby fault, the San Andreas Fault System, is located approximately 25 kilometers (15.5 miles) northeast of the project site.

Peak Horizontal Ground Accelerations (PHGA) for the site were modeled based on currently available earthquake and fault information. Based on the analysis, the San Jacinto fault-San Jacinto Valley segment is potentially capable of producing the greatest PHGA at the site due to its proximity, fault type, and its maximum earthquake magnitude of 6.9 (Mw). A probabilistic seismic hazard analysis was performed to estimate the PHGA that could occur at the site. The PHGA with a 10 percent probability of exceedence (recurrence interval of 475 years) varies across the site from about 0.75g to 0.81g (where g is the acceleration of gravity)."

Liquefaction

Liquefaction is a phenomenon in which loose, water saturated, granular soils temporarily behave similarly to a fluid when subjected to high intensity ground shaking. Liquefaction occurs when three general conditions exist: 1) shallow groundwater, 2) low-density silty or fine sandy soils, and 3) high intensity ground motion. Based on the most recent information in the General Plan on liquefaction zones in Western Riverside County, the proposed project site is located within an area mapped with a low to moderate potential for liquefaction. Portions of the soil units mapped on site have been identified as being susceptible to liquefaction. However, Leighton has evaluated the potential for liquefaction and concluded that due to the absence of shallow ground water across the site, and the unlikely chance of the groundwater returning to historic levels, the potential for liquefaction to occur at the site is very low. While the potential for liquefaction to occur on site is considered to be very low, the potential for liquefaction should be further reviewed as the project proceeds.”

Ground Subsidence

Ground subsidence is a process characterized by downward displacement of surface material caused by natural phenomena such as removal of underground fluids (oil or water), natural consolidation, or dissolution of underground minerals. It may also be caused by phenomena such as settlement of underground mines. Subsidence can range from small or local collapse to broad regional lowering of the earth’s surface. Susceptible areas are predominantly valleys filled with unconsolidated relatively fine-grained sediments including sand, silty sand and clayey silt. Organic-rich layers may also be present. While subsidence may occur throughout a susceptible valley, displacement and fissures typically occur at or near the valley margins. Fissure location often corresponds to a subsurface shallowing of the alluvium-bedrock contact or other differences in the subsurface conditions. Fissures may also occur along other existing planes of weakness such as faults.

As indicated by Ground Subsidence Hazard Maps prepared by Riverside County, regional ground subsidence related to past groundwater withdrawal has been identified as a concern in portions of the San Jacinto Valley. In addition, while not located on site, subsidence-related ground fissures have been mapped in the vicinity of the proposed development. In the past, relatively shallow groundwater levels were present in the area and Mystic Lake covered a portion of the valley floor. However, over the past 70 years or more, groundwater levels in the valley have dropped significantly. This has resulted in the ground subsidence recognized in the area. In June of 2001, the Department of Water Resources (DWR) and local agencies executed a Memorandum of Understanding (MOU) to formulate a groundwater management plan for the Hemet/San Jacinto area. A groundwater policy committee was formed with elected officials from the Cities of Hemet and San Jacinto, Lake Hemet Water District (LHMWD), Eastern Municipal Water District (EMWD) and representatives of private groundwater producers to evaluate and manage the groundwater within the basin. With management of the groundwater resources, significant groundwater fluctuations in the basin are not expected in the future. Subsidence associated with groundwater withdrawal will also be significantly reduced as water levels in the basin are managed.” As such, further subsidence is expected to be regional in nature with little to no effect on the planned development. Subsidence related surficial features have not been identified on site and are not expected to pose a hazard to the proposed development.

Compressible and Collapsible Material

Soil compressibility refers to a soil's potential for settlement when subjected to increased loads, such as from a fill surcharge. Based on Leighton's investigation, the upper 3 to 15 feet of the on-site native alluvial soil is generally considered slightly to moderately compressible, becoming less compressible with depth. The on-site uncontrolled fill is considered to be highly compressible.

Collapse potential refers to the potential settlement of a soil under existing stresses upon being wetted, due to breakup of water soluble bonds between soil particles. Based on Leighton's geotechnical investigation, potentially collapsible material includes uncontrolled artificial fill and the upper 5 feet of the alluvial soil. The alluvial soils below a depth of five feet are expected to have minimal collapse potential.

Partial removal and re-compaction of the near surface soils will be necessary to reduce the potential for excessive total and differential settlement associated with compressible soils and collapse. Leighton has recommended overexcavation of all uncontrolled fill and the upper 5 to 8 feet of alluvial soil across the majority of the project with deeper overexcavation required locally. Overexcavated soil may be reused as fill provided it is free of debris, organic material and oversized rocks.

Expansive Soils

Expansive soils underlying a foundation or slab, if left unmitigated, can cause damage to structures, including heaving, tilting, and cracking of foundations, slabs, and walls. Differential heave due to expansive soil can result in damage to building floors and walls, as well as door and window frames. Based on testing conducted by Leighton, earth materials present at finish pad grade are expected to vary from silty sands to sandy clays. Representative on-site soil samples were tested and generally yielded Expansion Indices (EI) in the very low-to-low range (EI between 0 and 50). However, soils with a high expansion potential (EI of 98) were encountered locally (primarily in the Resort and Town Center areas). During grading, soils may be distributed to other areas of the site. Therefore, additional testing of the soils near finish grade should be conducted during grading to further evaluate the expansion potential of the near surface soils and provide appropriate foundation design recommendations to minimize adverse impacts associated with expansive soils.

Rockfall Hazard

Rockfall refers to a boulder or rock fragment that moves down-slope due to the force of gravity. This downward movement may be initiated by an earthquake, erosion, or other force of nature or man. The distance a rock may fall is based on a combination of factors, including, but not limited to: slope gradient, slope height, rock shape, adjacent obstacles, and soil development below the rocks. The Preliminary Rockfall Hazard Evaluation, included in Appendix F (CD #3), identifies the areas of concern relating to the localized rockfall potential to be along adjacent perimeter slopes, at the southern and eastern project site limits. Portions of the Specific Plan villages: Enclave, Foothill, and Pinnacle are located at the base natural slopes associated with the

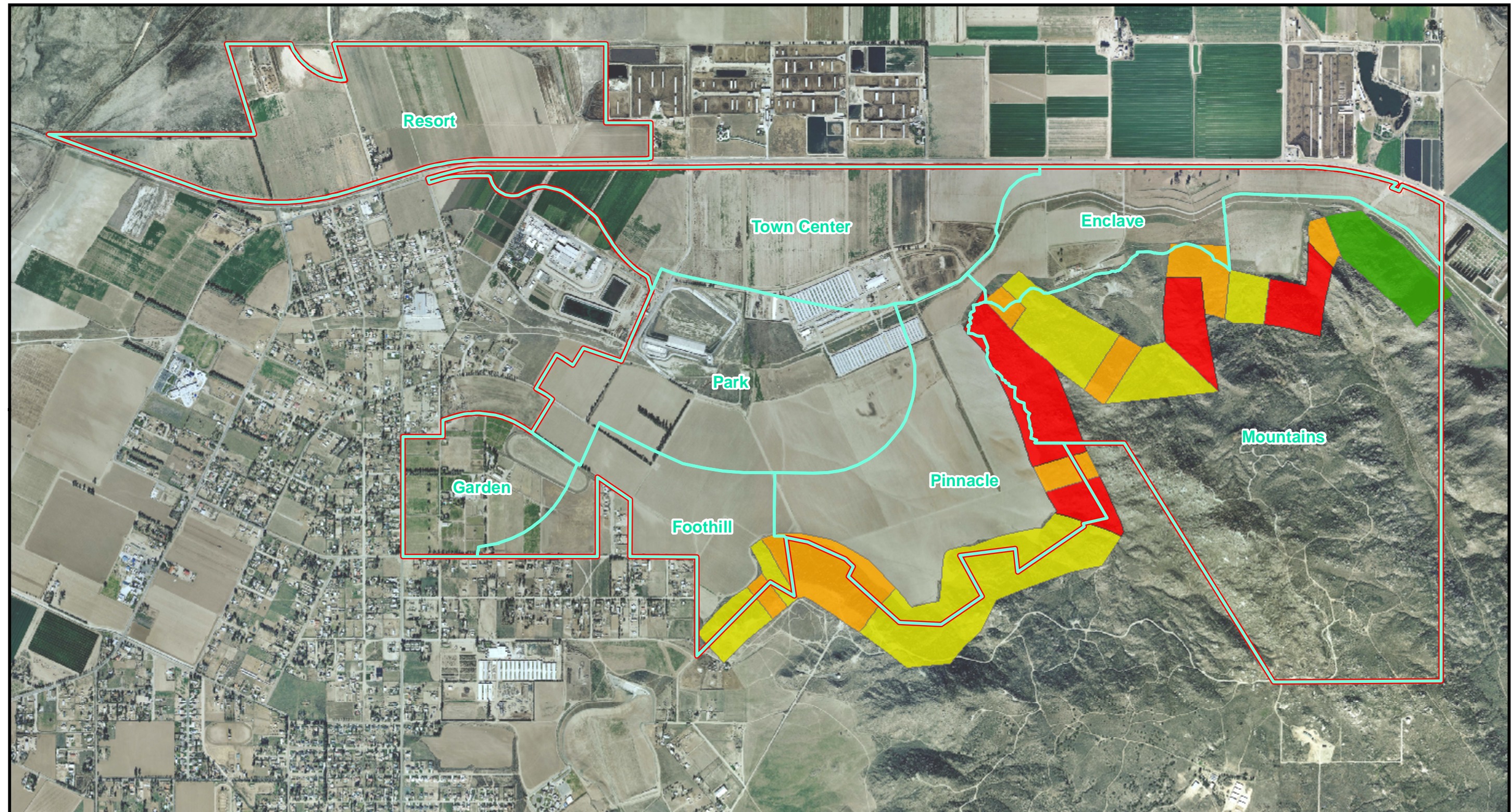
Lakeview Mountains. These development areas could be subject to hazard if the potential for rockfall is unmitigated (**Figure 5.6-2, Rockfall Hazard Zones**).

Leighton has delineated the slope areas of the project site by three distinct remedial zones. These remedial zones are indicated as Rockfall Zones 1 through 3, with Zone 1 having the least potential for rockfall hazard and Zone 3 having the greatest potential for rockfall hazard. The eastern portion of Property 2 (Enclave area of the development) is separated from the hillside by an adjacent MWD property easement. The MWD easement provides a buffer for the development from the slope where no development is planned. As such, no rock fall hazard designation is provided for this area.”

- Rockfall Zone 1 includes areas with a slight to low potential hazard. These areas are represented by parent rock exposed at the surface that is essentially one solid mass integral with the bedrock at depth.
- Rockfall Zone 2 slope conditions include areas where boulders and/or rock fragments are exposed at the surface and have been eroded from their parent rock. These rocks may not have moved in the past, but are currently resting on the slope surface, on a bedrock outcrop or on a thin soil layer.
- Rockfall Zone 3 slope conditions include areas where rocks are exposed at the surface, have been eroded/weathered from the parent rock and now rest atop or behind other loose boulders and/or rock fragments. In general, the rocks behind are prevented from moving downhill by the rocks or bedrock outcrops in front and down-slope (**Figure 5.6-2, Rockfall Hazard Zones**).

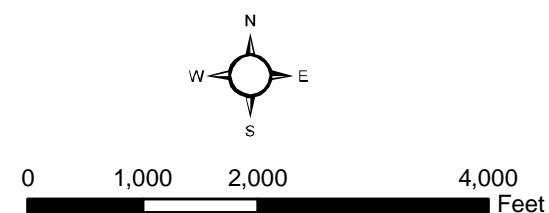
Flood Hazard

The northwestern portion of the project site, north of Ramona Expressway, is located within the 100-year flood zone of the San Jacinto River (refer to the Hydrology section of this document, **Figure 5.8-2, Existing Hydrology**).



Sources: Leighton and Assoc., 2004, Preliminary Rockfall Hazard Evaluation, The Villages of Lakeview; AirPhoto USA, Jan. 2006.

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	Project Boundary		Zone 1
	Village Organization Plan		Zone 2
	No Hazard		Zone 3

Figure 5.6-2

Rockfall Hazard Zones

The Villages of Lakeview EIR No. 471

Within the project vicinity are the Lake Perris and the Diamond Valley Lakes. Lake Perris is located approximately two miles west of the western extent of the project and Diamond Valley Lake is located approximately 10 miles to the south southeast of the project. These lakes are both man-made containment facilities. Their associated dams were both constructed to withstand seismic events. Therefore, the likelihood of either of these dams failing as a result of seismic ground shaking is low.

Organic-Rich Soil and Manure

Manure and organic-rich soil is considered unsuitable for support of fill embankments and structures as it will decay and breakdown with time, possibly resulting in settlement and loss of structural support. Organic-rich soil is defined as soil that contains visible organic material, but generally less than 10 percent organic content by weight. Organic-rich soil has significantly less organic content than manure. Manure is any animal excreta or compost and is typically visually classified as containing significant organic constituents and lesser amounts of soil. Such material is commonly present in areas where livestock are raised, in chicken farms, in compost areas, or in areas where garden soils and manure are packaged as fertilizer.

Portions of Specific Plan villages: Enclave, Town Center, Park, Pinnacle, and Garden are currently being used for agriculture and animal husbandry. As such, it is likely that manure and organic-rich soil is present in these areas and will be encountered during site grading. Based on the geotechnical studies conducted by Leighton, manure and organic-rich soils ranging in thickness from approximately 2 to 6 inches were encountered at the existing thoroughbred ranch and at the poultry facility. Thicker accumulations may also be present depending on the operations of the facility. Review of historic photographs as part of the Phase 1 Environmental Site Assessments (see Hazards section of this DEIR) reveal that no other areas of the project site have historically been used for dairies or animal husbandry.

High content of organic matter in soils (e.g., manure, organic-rich soils) may result in the potential hazards due to methane generation. Methane generation and accumulation in soil is a result of decomposition of organic matter in oxygen deficient environments. Methane is a tasteless, colorless, and odorless gas which, when under pressure, can migrate upward through underground passages such as utility conduits, vaults and/or natural earth fractures. Methane gas can accumulate in basements, crawl spaces, utility vaults, or any confined space with little ventilation. Methane concentrations greater than 20,000 parts per million (ppm) are considered potentially explosive. Methane evaluation may be required for the site and should be conducted in accordance with Riverside County Standards as the project proceeds.

Thresholds of Significance

Riverside County has not established local CEQA significance thresholds as described in Section 15064.7 of the CEQA Guidelines. However, the Riverside County's "Environmental Assessment Form: Initial Study" (Environmental Assessment Number: 39816) which is part of the Notice of Preparation for the subject project (see Appendix A of this document (CD #3)) indicates that impacts may be considered potentially significant if the project would:

- A. 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, collapse, or rockfall hazards.
- B. 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 ground subsidence.
- C. Be subject to strong seismic ground shaking, expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death from seismic shaking; be subject to 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, or as delineated on County of Riverside Earthquake Fault Hazard Zones Maps or based on other substantial evidence of a known fault.
- D. Be subject to geologic hazards, such as seiche, mudflow, volcanic hazard, dam failure.
- E. Change topography or ground surface relief features, create cut or fill slopes steeper than 2:1(horizontal to vertical) or higher than 10 feet, or result in grading that affects or negates subsurface sewage disposal systems.
- F. Result in substantial soil erosion or the loss of topsoil, and/or be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.
- G. Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake.
- H. Result in any increase in water erosion either on or off site.

The property is located within one of the County of Riverside, Health Services Agency Department of Environmental Health Preliminary Methane Investigation Protocol areas, adopted January 19, 2001. As such, the following two thresholds are used to evaluate potential significant effects associated with organic-rich soils resulting from past or current agricultural uses:

- I. Methane levels, after grading, that exceed the Riverside County standard of 5,000 ppm.
- J. Organic material content in the soil exceeding County of Riverside maximum standards.

Related Regulations

The current California Building Code (CBC), as adopted by the County of Riverside, provides guidelines and parameters which help to reduce effects of ground shaking produced by regional seismic events. The project proponent shall perform the seismic design in accordance with the most recent edition of the CBC and the requirements of the County of Riverside. The Geotechnical Analysis included in Appendix F (CD #3) contains a detailed analysis on the CBC parameters related to the project. Updated parameters may be required as the project proceeds to meet then current requirements.

The County of Riverside General Plan Policies refer to the Uniform Building Code (UBC) with respect to various aspects of building code requirements. For clarification, the County of Riverside has adopted the California Building Code (CBC) and the International Building Code (IBC) with respect to overall and/or specific building code issues. For purposes of this DEIR, UBC, CBC, and IBC, whenever used in the text, refer to whatever building code is current and adopted by the County at the time of project development for the particular issue/regulation being referenced in the DEIR.

The Alquist-Priolo Special Studies Zones Act of 1972 was signed into law in 1972 and renamed the Alquist-Priolo Earthquake Fault Zoning Act in 1994. The primary purpose of this act is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the extent of an active fault. The Alquist-Priolo Act requires the State Geologist to delineate “Earthquake Fault Zones” along faults that are “sufficiently active” and “well defined.” Sufficiently active faults show evidence of Holocene surface displacement (movement within the past 11,000 years) along one or more of their segments. The boundary of an “Earthquake Fault Zone” is generally about 500 feet from major active faults, and 200 to 300 feet from well-defined minor faults.

The County of Riverside has established Earthquake Fault Hazard Management Zones around certain faults in the county in addition to those Earthquake Fault Zones established by the State of California. These zones have been established around faults that may be active. The County requires investigations within these zones to evaluate if faults are present and the activity of these faults in a manner similar to the State’s Alquist-Priolo Earthquake Fault Zones Act. No state or County Earthquake Fault Zones have been mapped on site and no active faults are known to trend toward the site.

Under California Geologic Survey’s (CGS) Seismic Hazards Mapping Act, seismic hazard zones are to be identified and mapped to assist local governments in planning and developing purposes. The intent of this publication is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes. CGS’s Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations.

No Seismic Hazard Maps have been developed by the state for Riverside County. However, the County of Riverside has developed maps identifying the potential for certain hazards in the County. Maps have been developed for liquefaction, slope stability, subsidence and others hazards. Geologic and geotechnical investigations prepared for development in hazard zones must consider the potential hazards. For properties within unincorporated areas of the County, the County Geologist reviews the adequacy of these reports in identifying the hazards and providing remedial recommendations to reduce the hazards to acceptable levels.

Portions of the Resort Village are located within the FEMA 100-year flood hazard zone; as such, the project design must adhere to the guidelines set forth in the **Lakeview/Nuevo Area Plan**. The following policies are designed to address the hazards associated with flooding:

- **LNAP 14.2** Adhere to the flood proofing, flood protection requirements, and Flood Management Review requirements of Riverside County Ordinance No. 458 Regulating Flood Hazard Areas.

The following policies were extracted from the RCIP General plan, and pertain to landslide and rockfall potential:

- **Safety Policy 2.5** Require that all engineered slopes be designed to resist seismically induced failure. For lower risk projects, slope design could be based on pseudo-static stability analyses using soil engineering parameters established on a site-specific basis. For higher risk projects, the stability analyses shall factor in the intensity of expected ground shaking, using a Newmark-type deformation analysis.
- **Safety Policy 3.5** During permit review, identify and encourage mitigation of on-site and off-site slope instability, debris flows, and erosion hazards on lots undergoing new development or on any lot undergoing substantial improvement.
- **Land Use Policy 11.1c** Require that areas with slopes be developed in a manner to minimize the hazards from erosion and slope failures.
- **Land Use Policy 11.1f** Limit grading, cut and fill to the amount necessary to provide stable areas for structural foundations, street rights-of-way, parking facilities, and other intended uses.

With respect to the issues of subsidence, seismic related ground failure, as well as soil and water erosion, the Riverside County General Plan and General Plan EIR direct all project development in the following manner:

- **Safety Policy 3.9** requires the creation of a liaison program with all County water districts to prevent water extraction-induced subsidence be implemented. The project will be served by EMWD, which is required to prepare a groundwater management plan on a yearly basis per California Assembly Bill 3030. Included in the groundwater management plan prepared by EMWD are the amount of groundwater that can be extracted and the amount of groundwater recharge that must occur to offset withdrawal, thus offsetting subsidence from groundwater withdrawal. The efforts of EMWD in maintaining groundwater levels in the Hemet/San Jacinto groundwater basin will help to reduce the

potential for subsidence within the project site. Thus reducing the potential impacts from groundwater related subsidence.

- **Safety Policy 7.7b.** requires that planned lifeline utilities, as a condition of project approval, be designed, located, and structural upgrades fit with safety shutoff valves, and be designed for easy maintenance, have redundant back up lines where unstable slopes, earth cracks, active faults, or areas of liquefaction cannot be avoided. Compliance with this safety policy will help to minimize impacts related to seismic related events.
- **Safety Policy 7.11** calls for coordination with the Public Utilities Commission and/or utilization of the Capital Improvement Program, to strengthen, relocate, or take other appropriate measures to safeguard high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits that: extend through areas of high liquefaction potential; cross active faults; or traverse earth cracks or landslides.
- **Safety Policy 7.12** Require extra design consideration for lifelines across subsidence areas.

Issues pertaining to dam failure will be addressed through adherence to the following RCIP GP safety policies:

- **Safety Policy 4.1** For new construction and proposals for substantial improvements to residential and nonresidential development in 100- and 500-year floodplains and dam inundation areas, Riverside County shall apply a minimum level of acceptable risk; and disapprove projects that cannot mitigate the hazard to the satisfaction of the Building Official or other responsible agency.

The relationship of the project to the above general plan policies is presented in Appendix N (CD #4) of this DEIR.

With respect to the modification of topography, the project will comply with:

- **Ord. No. 457**, which includes specific provisions that apply to all grading, buildings, or parts thereof in the unincorporated areas of the County of Riverside. Additionally, with respect to the modification of topography, deposition, siltation, and soil and water erosion, National Pollutant Discharge Elimination System (NPDES), Storm Water Pollution Prevention Plan (SWPPP), and water quality management plan (WQMP) requirements will be adhered to. As authorized by the Clean Water Act, the NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. Part of the project includes stormdrain facilities that will discharge into the San Jacinto River. As such, the project will be required to comply with the provisions of the NPDES permit.

In order to reduce the impact that construction of the project could have on increased water and soil erosion, siltation, and in general water quality the project proponent must prepare:

- A **SWPPP** must be prepared pursuant to the State Water Resources Control Board, Water Quality Order No. 99-08-DWQ, NPDES, General Permit No. CAS000002 *Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit)*. Under this order, a SWPPP is to be developed and implemented for each construction site covered by the NPDES General Construction Permit. The SWPPP was developed to meet the following objectives: Identify all pollutant sources that may affect the quality of discharges of storm water associated with construction activity (storm water discharges) from the construction site; Identify non-storm water discharges; Identify, construct, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction; Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs); Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharge directly to a water body listed for impairment due to sedimentation, in accordance with Section 303(d) of the Clean Water Act; Identify a sampling and analysis strategy and sampling schedule for discharges that have been discovered through visual monitoring to be potentially contaminated by pollutants not visually detectable in the runoff. The project will be required by the County of Riverside Building Department and Flood Control District to prepare a SWPPP prior to grading permits, and by preparing a SWPPP, it will reduce impacts erosion on and off site to less than significant levels.
- A project specific **WQMP** will also be required by the Flood Control District for the project. The WQMP provides guidance for the use of post-construction BMPs which are intended to create a hydrologically functional project design that attempts to mimic the natural hydrologic regime. This can be achieved through reducing the impervious surface area of the project site, providing for run-off storage, and implementing on-lot hydrologically functional landscape design. Through development of a WQMP for the project, impacts relating to on- or off-site water erosion will be reduced to less than significant levels. Please see the Hydrology/Water Quality section of this document for a more thorough discussion of the project's WQMP.

California Civil Code Section 1103-1103.4 applies to the transfers of real property between private parties, as defined therein, and requires notification upon transfer if the property is affected by one or more natural hazards. The following potential hazards must be disclosed, if known: FEMA flood hazard areas, dam failure inundation areas, very high fire hazard severity zone, wildland area with forest fire risks, earthquake fault zone, and seismic hazard zones including landslide and liquefaction on a standardized "Natural Hazard Disclosure Statement" (Section 1103.2). The proposed project site includes some of these potential hazards including FEMA flood hazard areas, dam failure inundation areas, very high fire hazard zones and wildland fire area.

The County of Riverside Building and Safety Department has requirements for methane mitigation protocol addressing new developments on a former dairy, and other animal husbandry sites affecting the Lakeview/Nuevo, San Jacinto, and Hemet area. The County Requirements for Methane Mitigation Protocol on Vacant Lots (version 11/1/04) are to require post-grading testing of compacted fill for residential lots. The County requirements for residential development include one test location for each slab or structure lot. One reading will be required at the base of the compacted fill at approximately 4 to 10 feet bgs. These sampling requirements address the potential methane accumulation at former sites where manure has accumulated. The County requires that the final organic content of the compacted fill be 1 percent or less. However, the soil can have up to 3 percent of organic content, provided Type V cement is used on site. The project will comply with current County requirements regarding methane at the time of project grading and development.

To address ground cracking on former animal husbandry sites, the County of Riverside requires a geotechnical assessment of the project site and recommendations as to amounts of manure to be removed from the site prior to grading. The project site will comply with any County requirements in place regarding surficial ground cracking, at the time of project grading and development.

Project Design Considerations

Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts to geologic hazards through the design of the project.

This section considers aspects of the design of the project which will lessen or mitigate potential impacts. The recommendations of the geotechnical reports will be adhered to and become part of the project. Grading will be performed in accordance with the General Earthwork and Grading Specifications located in required geotechnical reports as well as County of Riverside and CBC requirements. The following is a discussion of the design considerations that will be adhered to as part of the project.

Prior to initial grading activities, an update soils report and geotechnical study reviewing the most current development plan shall be prepared to analyze on-site soil conditions and slope stability and include appropriate measures to provide foundation stability, seismic design and limit damage from erosion.

In preparation of areas to be filled, vegetation, such as brush, grass, roots, and other deleterious material will be removed and properly disposed of off site in a method acceptable to the owner, governing agencies, and geotechnical consultant. Earth fill material shall not contain debris, significant organic material, or oversized material (rocks larger than 12 inches in dimension). Oversize material may be placed on site as fill subject to provisions provided by the geotechnical consultant and approved by the County of Riverside reviewing agency. Fill dirt shall be free of cultural resources. Borrow areas from within the project boundaries shall be monitored for archaeological and paleontological resources. Fill dirt from off-site resources shall be certified by the provider as being free of cultural or paleontological resources.

Additional fill preparation methods, including processing, over-excavation, and benching will be required prior to fill placement. Removal of compressible surficial soils and near-surface hardpan will be required during grading, prior to fill placement thereon. The removed materials shall be moisture conditioned, as necessary, and re-compacted as structural fill.

All uncontrolled fill, manure, and organic rich soil shall be removed to native material. Uncontrolled fill is not located everywhere on site, but where present varies up to about 15 feet thick. Uncontrolled fill may be reused as compacted fill provided it is free of debris, organic materials and oversized rocks.

In general, the depth of removal in native soils is expected to range from approximately 5 to 8 feet below existing or finished grade, whichever is deeper across the majority of the site. Hardpan was identified at depths ranging from 5 to 8 feet in sections of the Resort Village. Leighton has recommended removal of this relatively impervious layer where it is present at relatively shallow depths (8 feet or less). Locally deeper overexcavation may be required locally based on field observations by Leighton during grading.

Following overexcavation, prior to fill placement, the existing ground will be scarified to a minimum depth of 6 inches, moisture condition and compacted. In areas with the ground slopes steeper than 5:1, the ground will be stepped or benched.

Slopes on the project will be constructed at an inclination of 2:1 (horizontal to vertical) or flatter. Slopes steeper than 2:1 or higher than 10 feet, will be specifically evaluated by the geotechnical consultant. A geotechnical report addressing such slopes (if any) and their suitability for use on site will be prepared by a soils engineer and an engineering geologist, and must be approved by the County of Riverside. Also, where cut and fill slopes are created higher than ten feet (10') a landscaping and irrigation plan shall be submitted to the County Building and Safety Department with the Rough Grading Plan submittal. The plans shall be reviewed for type and density of groundcover, shrubs, and trees and system of irrigation.

Leighton anticipates that expansive soils will be encountered within the Lakeview project. The majority of the soils exposed at pad grade are expected to be in the very low-to-low range. Soils with a high expansion potential may be encountered. However, soils with a high Expansion Index (EI=98) were identified within the Resort Village. The soils in the other Villages, including Town Center, Enclave, Garden, Park, and Pinnacle all had Expansion Indices with very low to medium values. In order to reduce the adverse impacts associated with expansive soils, foundations should be designed in accordance with the current requirements of the CBC, the County of Riverside and the recommendations of the geotechnical consultant. Rough grading of the site will result in significant movement of soil on site; therefore it is unknown where expansive soils will be located at the completion of grading. Additional testing of the soils present near finish grade (during site grading) will be required to provide final foundation design recommendations.

The entire southern California region, as well as the entire project site, has potential for seismic related ground shaking. In order to reduce the effects of ground shaking produced by regional seismic events, seismic design will be preformed in accordance with the most recent addition of the CBC and the requirements of the County of Riverside.

Design requirements addressing geologic conditions for structures can be found within the CBC based on building type, use, and/or occupancy. The CBC provides guidelines and parameters in order to reduce effects of ground shaking produced by regional seismic events. The project proponent shall perform the seismic design in accordance with the most recent edition of the CBC. The classification of use and occupancy of all proposed structures at the site, and thus design requirements, shall be the responsibility of the structural engineer and the building official. The project will adhere to these design criteria designations pertaining to the CBC.

Project design includes surface drainage and underground storm drain improvements to reduce potential impacts related to erosion.

Environmental Impacts Before Mitigation

***Threshold A:** 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, collapse, or rockfall hazards.*

Alluvial soils are present throughout the San Jacinto Valley, and generally throughout the entire project site. These alluvial soils are derived from sediments deposited by the San Jacinto River, and are expected to underlay the site to depths of five (5) to more than 200 feet. Alluvial soils can be unstable in that they can be prone to liquefaction, lateral spreading, collapse, subsidence and compressibility. Lateral spreading (and liquefaction) and collapse are discussed in this section (Threshold A). Subsidence and compressibility are discussed in Threshold B.

Steep slopes surrounding the development may also present slope stability concerns in the form of rock fall.

Lateral Spreading

Lateral spreading is associated with liquefaction and is a phenomenon where soil moves downslope on a liquefied substrate of relatively large extent. The mass moves toward an unconfined area, such as a descending slope or stream-cut bluff. Lateral spreading is known to have occurred on slope gradients as gentle as 1 degree. The dominant mode of movement is lateral extension accompanied by shear or tensile fractures. The failure in a lateral spread event is caused by liquefaction, the process whereby saturated, loose, cohesionless sediments (usually sands and silts) are transformed from a solid into a liquefied state. As previously noted, three conditions must be present for liquefaction to occur: 1) shallow groundwater, 2) low-density silty or fine sandy soils, and 3) high intensity ground motion.

Information provided in EMWD's West San Jacinto Groundwater Basin Management Plan indicates that groundwater in the vicinity of the project is in the range of 87 to 286 feet below ground surface. Leighton reports that the depth to groundwater within the bounds of the project is greater than 200 feet below ground surface and no groundwater was encountered in their borings. In addition, based upon current management plans for the water basin, water levels are not expected to rise significantly above current levels. Based on these groundwater conditions Leighton has concluded that liquefaction and lateral spreading are not anticipated to occur on site. **No impacts are expected.**

Collapse

Collapse refers to a soil settling under its own weight when saturated with water. Remedial grading will be performed to remove and re-compact the upper 5 to 8 feet of the native soil in the areas proposed for development on-site. Field observations and laboratory tests of representative soil samples conducted by Leighton indicate that the soils on site below a depth of 5 to 8 feet have a low collapse potential when inundated with water. Therefore, following overexcavation and replacement with compacted fill as recommended by Leighton (**MM Geo 2**) significant collapse is not expected to occur on site. Thus the potential adverse impacts related to collapse within the development will be **less than significant**.

Landslide/Rockfall Hazards

The term "landslide" describes a wide variety of processes that result in the downward and outward movement of slope-forming materials including rock, soil, artificial fill, or a combination of these. The materials may move down slopes by falling, toppling, sliding, spreading, or flowing. **Figure 5.6-3, USGS Topography Map**, shows the general topography of the site. **Figure 5.6-4, Slope Analysis** indicates that the majority of the project site would not be subject to landslides because slopes are zero to fifteen percent. Steep slopes are present adjacent to the southern portion of the development. No large deep seated landslides were identified on the slopes by Leighton and the potential for large failures on the slopes is considered to be low. However, the slopes do present a rockfall hazard. A "rockfall" is a boulder or rock fragment that moves down slope due to the force of gravity. This downward movement may be initiated by an earthquake, erosion, or other force of nature or man. In general, the distance a rock may fall is based on a combination of factors including but not limited to: slope gradient, slope height, rock shape, adjacent obstacles, and soil development below the rocks. Leighton prepared a Preliminary Rockfall Hazard Evaluation, presented in Appendix F (CD #3), in which it was determined that a rockfall hazards exists for development along the foothills of the Lakeview Mountains. The general slope conditions and hazards that exist are divided into three separate categories. The first condition generally consists of exposed hard bedrock without surficial soil cover. This condition exists where the parent rock is exposed at the surface and, as such, is essentially one solid mass with the bedrock at depth. The second condition includes areas where boulders and/or rock fragments are exposed at the surface and have been eroded from their parent material. The third condition includes areas where rocks are exposed at the surface, have been eroded/weathered from the parent rock and now rest atop or behind other loose boulders and/or rock fragments. Each of these conditions are identified as Rockfall Zones 1 through 3, respectively. The Rockfall Hazard Zone locations can be found on **Figure 5.6-2, Rockfall Hazard Zones**.

The Garden, Park, Resort, and Town Center Villages:

This area of the project site is relatively flat, sloping gently to the north. Older alluvium is present across the entire site, and generally consists of sand, sandy silt, silty sand, and sandy clay, and is anticipated to exist up to a depth of 100 feet. No rockfall potential exists within these Villages because the slopes are generally flat and the majority of this area is not located adjacent to any slopes or mountains. **No rockfall hazard exists in these Villages.**

Mountains:

This area of the project is located in the Lakeview Mountains, and has characterized steep slopes containing all three of the rockfall Zones, as described in the Preliminary Rockfall Hazard Evaluation, located in Appendix F (CD #3). Landslide or rockfall hazards will be generated from this area that could impact development below. However, no development is planned in the Mountain area.

The Enclave, Foothill and Pinnacle Villages:

These villages are characterized with relatively flat areas in the northern and western sections, moderate slopes in the central portion, and the area bordering the Lakeview Mountains have relatively steep slopes rising abruptly from the valley floor. The elevation range for these villages is 1,460 to 1,906 feet above sea level. Within these villages, residential development as well as public facilities and open space are proposed; the areas that exist within the slopes of the Lakeview Mountains are proposed for conservation.

These villages are bordered on the southeast by the Lakeview Mountains which have steep slopes that present a potential for rockfall hazard. The slopes within this portion of the Study Area are considered grossly stable, but these slopes may be superficially unstable in the form of rockfall potential. As depicted in **Figure 5.6-2**, this portion of the project contains Rockfall Zones 1, 2, and 3. A No Hazard rockfall zone is present in the western portion of the Enclave Village. Although steep rocky slopes are present in this area, the development is expected to be setback from the slopes due to the presence of MWD property easement at the base of the slope. This easement is expected to provide a buffer for the development from the slopes where no development is planned. In the remaining area of the development adjacent to the toe of relatively steep slopes, the potential for rockfall damage would be **significant without mitigation**. Rockfall Zone 1, 2, and 3 parameters identified in **MM Geo 1**, shall be implemented in order to reduce the level of impact to **less than significant**.

Threshold B: *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 ground subsidence.*

The majority of soils within the project site, with the exception of the Lakeview Mountains, are composed of alluvial soil, which consists of fine to medium-grained silty sand, sandy silt, and sandy clay. This older alluvium is expected to underlay the project site to a depths ranging from about five (5) to over 200 feet.

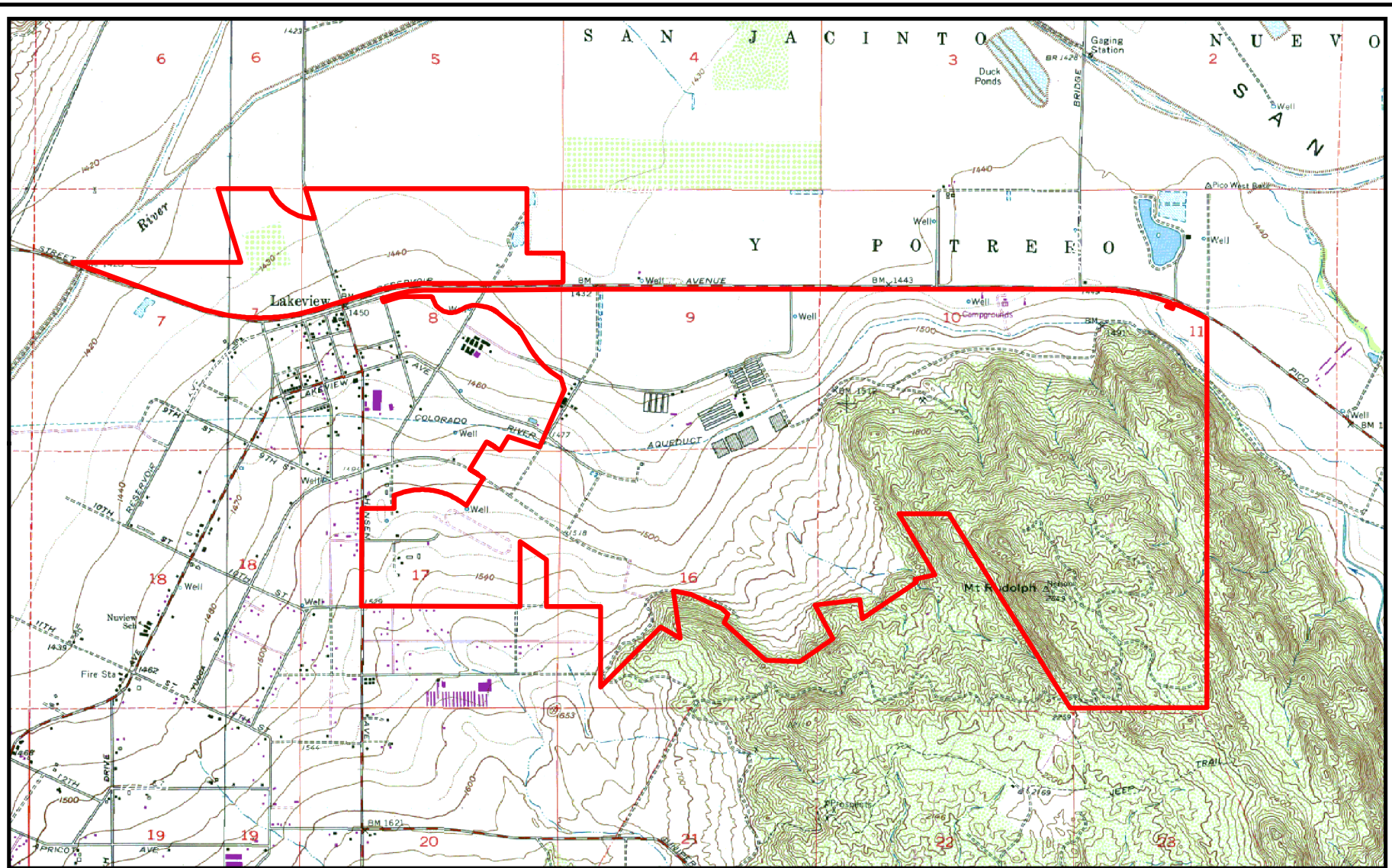
The Riverside County General Plan (Figure S-7, Documented Subsidence Areas) indicates, like many areas within the County, that the project site is located in an area susceptible to ground subsidence and regional ground subsidence has been documented in portions of the proposed development. Based on Leighton's review, this subsidence has been attributed to regional groundwater withdrawal. Groundwater levels have been decreasing in the general site vicinity for some time, historically starting with the disappearance of Mystic Lake and more recently due to domestic and agricultural uses. Groundwater in the general site vicinity has been regulated by the Eastern Municipal Water District since 1995 which is required to prepare a groundwater management plan on a yearly basis per California Assembly Bill 3030. Included in the groundwater management plan prepared by EMWD are the amount of groundwater that can be extracted and the amount of groundwater recharge that must occur to offset withdrawal. This should prevent subsidence from groundwater withdrawal. The efforts of EMWD in monitoring/maintaining groundwater levels in the Hemet/San Jacinto groundwater basin will reduce the risk of future subsidence within the valley and the project site

Furthermore, based on the current depth to groundwater (200± feet) within the site and the nature of the broad alluvial valley, significant ground subsidence due to further groundwater withdrawal (historic high groundwater level is approximately 30 to 40 feet below ground surface) is not anticipated. Therefore, since the project will not include direct groundwater extraction (see Utilities Section, Threshold B, for additional water source information), retain recharge capacity along the river, include over 1,100 acres of open space and parks, and because depth to groundwater is approximately 200 feet in this area, groundwater depletion caused by over-extraction of groundwater at levels capable of causing subsidence are not expected to result from development of the site; **no impacts are expected.**

Compressible Soils

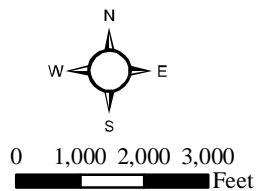
Soil compressibility refers to a soil's potential for settlement when subjected to increased loads, such as from a fill surcharge. If unmitigated compressible soils cause settlement beneath fill embankments and structures resulting in distress to surface improvements. Based on Leighton's investigation, the upper 3 to 15 feet of the on-site native alluvial soil is generally considered slightly to moderately compressible, becoming less compressible with depth. The localized uncontrolled fill on site is considered to be highly compressible.

Partial removal and re-compaction of the near surface soils will be necessary to reduce the potential for excessive total and differential settlement associated with compressible soils. Leighton has recommended overexcavation of all uncontrolled fill and the upper 5 to 8 feet of alluvial soil across the majority of the project with deeper overexcavation required locally. In addition, the County requires geotechnical studies for specific development proposals within the SP (MM Geo 3). With this recommended overexcavation (**MM Geo 2**) and additional soils evaluations (MM Geo 3), the potential of adverse impacts associated with compressible soils will be **less than significant.**



Source: USGS, Lakeview & Perris Quadrangles

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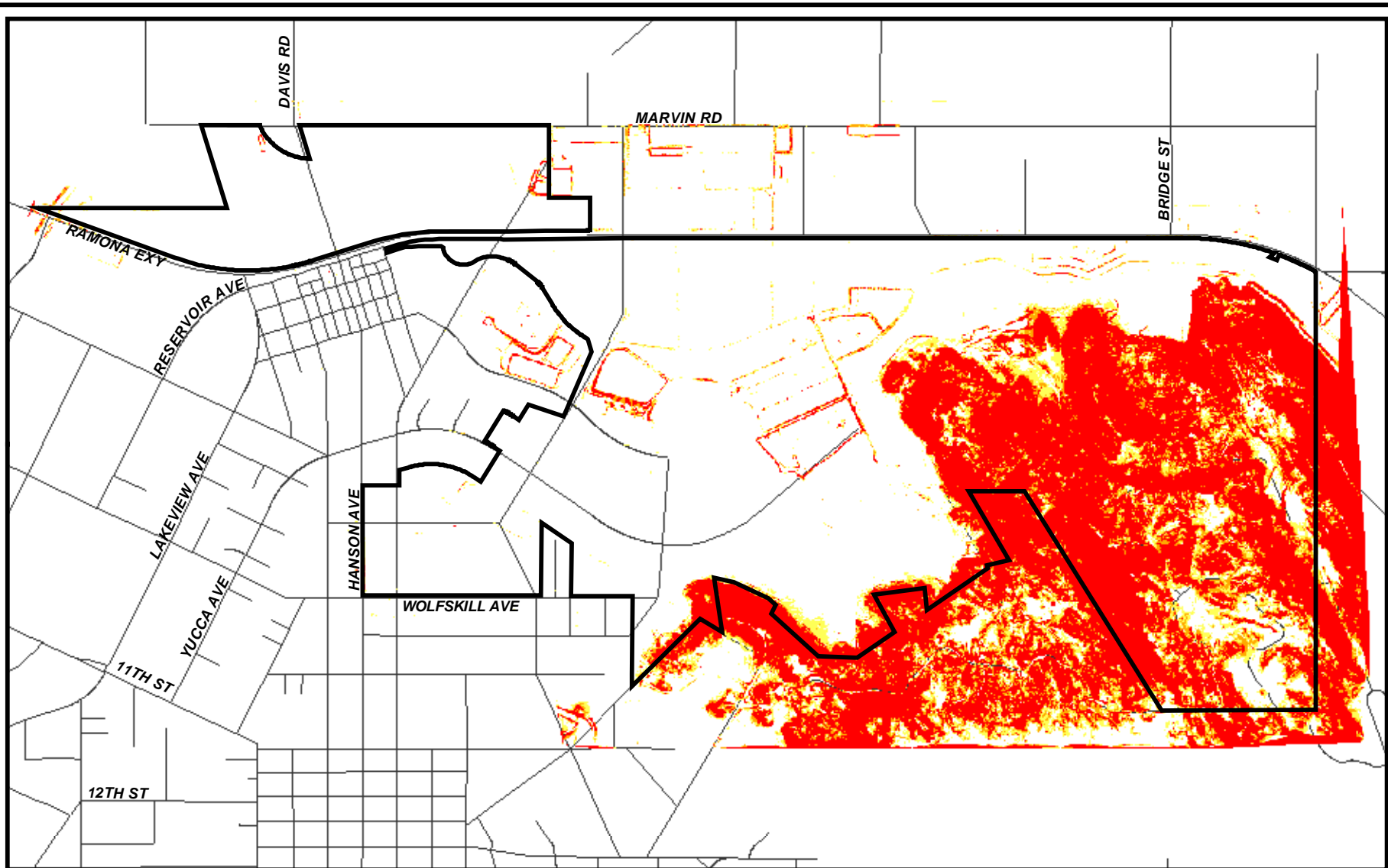
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Project Boundary

Figure 5.6-3

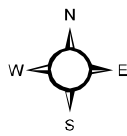
USGS Topography Map

The Villages of Lakeview EIR No. 471



Source: Inland Aerial Survey

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0 1,000 2,000 3,000
Feet

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- | | |
|--------------|--------------|
| Project Site | 20-25% Slope |
| 0-15% Slope | > 25% Slope |
| 15-20% Slope | |

Figure 5.6-4

Slope Analysis

The Villages of Lakeview EIR No. 471

***Threshold C:** Be subject to strong seismic ground shaking, expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death from seismic shaking; be subject to 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, or as delineated on County of Riverside Earthquake Fault Hazard Zones Maps or based on other substantial evidence of a known fault.*

Fault Rupture

The site is not located within an Alquist-Priolo Earthquake Fault Zone (CGS, 2000), nor a County of Riverside Earthquake Fault Hazard Management Zone. In addition, no evidence of active faults was observed on site during Leighton's investigation of the site. As such, the potential for fault-induced ground rupture is considered to be **less than significant**.

Seismic Shaking

The intensity of ground shaking at a given location depends on several factors, but primarily on the earthquake magnitude, the distance from the hypocenter to the site of interest, and the response characteristics of the soil or bedrock units underlying the site. The San Jacinto Fault Zone is currently known to be potentially capable of producing the most intense ground accelerations at the site, due to its location and potential magnitude. The maximum earthquake expected from the San Jacinto Fault Zone in this area is of magnitude 6.9 (Mw). Peak Horizontal Ground Accelerations (PHGA) for the site were modeled based on currently available earthquake and fault information. A probabilistic seismic hazard analysis was performed to estimate the PHGA that could occur at the site. The PHGA with a 10 percent probability of exceedence (Recurrence interval of 475 years) varies across the site from about 0.75g to 0.81g (where g is the acceleration of gravity). In the site area, the hazard posed by seismic shaking is considered high, due to the proximity of known active faults.

There is no realistic way in which the hazard of seismic shaking can be totally avoided. However, exposure to future ground shaking at the site is no greater than at many other sites in southern California. Furthermore, it should be recognized that while it is not considered feasible to make structures resistant to seismic shaking, they are designed not to collapse. The effects of seismic shaking on structures can be reduced through conformance with the recommendations of the geotechnical consultant for the project, the Structural Engineers Association of California, the California Building Code, and/or other local governing agencies' codes or requirements. This will promote safety in the event of a large earthquake and minimize damage. Design in accordance with these measures as required by typical Riverside County Standards is expected to reduce the impact of ground shaking to **less than significant**.

Threshold D: *Be subject to geologic hazards, such as seiche, mudflow, volcanic hazard, dam failure.*

Potential project-related impacts related to seiches, mudflows, and volcanic hazards were all found to be less than significant in the NOP prepared for this project (Appendix A (CD #3)). Therefore, dam failure which could cause inundation will be analyzed.

The Lakeview “Dam” is located immediately south of the project site). The Lakeview Dam was built in 1994 and is owned by Riverside County Flood Control and Water Conservation District. According to the California Department of Conservation, Division of Safety of Dams, the Lakeview Dam has a storage capacity of approximately 530 acre feet behind a 37-foot high, 3,100-foot long earthen dam. This dam is not designed for water storage, rather it was designed to control stormwater flows therefore, would only hold maximum capacity standing water in a major storm (530 acre feet = 100-year storm). It should be noted that, although there are no dam inundation maps available for Lakeview Dam, the site will be subject to inundation should the dam fail during a flooding event. The probability that an earthquake capable of rending the dam happening at the same time it was holding a 100-year storm would be so small as to be **less than significant**.

The project site is located within the Dam Inundation Zones of Lake Perris, Diamond Valley Lake, and Lake Hemet. Within the project vicinity, these Inundations Zones follow closely the contours of the FEMA 100-Year flood plain.

In June of 2005, the California Department of Water Resources (CDWR) identified potential seismic safety risks in a section of the foundation of Perris Dam. There is no imminent threat to life or property. However, in the interest of ensuring the maximum public safety for those using and living downstream of the lake, the state determined that it was necessary to lower the water level while additional analysis was performed. Following an independent expert analysis, CDWR announced in October 2005 it will move ahead with its plans to repair Perris Dam. The independent consulting board released its findings to CDWR, owner of the dam, the Division of Safety and Dams, which regulates the safety and integrity of California dams, and the Metropolitan Water District of Southern California (MWD), the principal user of water from Lake Perris. As a result, the storage capacity of the lake is significantly lower. The lake level now stands at approximately 30 feet below the maximum dam elevation.

The project site contains only a small portion of the Lake Perris Inundation Zone (see **Figure 5.6-5, Dam Inundation Area, Lake Perris**) which is located in the western portion of the project site. Lake Perris is located approximately 2 miles west of the project site. The lake is contained by one dam and has a storage capacity of approximately 131,000 acre feet. The dam is constructed of earth and rock material, and stands 128 feet in height, and is approximately 2 miles in length. The inundation area associated with this dam does not impact areas proposed for habitable structures, therefore impacts associated from the failure of Lake Perris Dam are considered **less than significant**.

The Diamond Valley Reservoir is located approximately 10 miles south-southeast of the project site. The reservoir is contained by a total of three dams (East, West, and Saddle dams) and has a

storage capacity of approximately 800,000 acre feet. The dams are of earth and rock construction; on the west side of the reservoir, the dam height is 268 feet and the length is 1.9 miles, and on the east side of the reservoir the dam stands at 180 feet and is 2.2 miles in length. In order to contain stormwater flows during a 100-year storm event, the reservoir is designed to have a freeboard space (the distance between the top of the water and the top of the dam face) of 13 feet. This freeboard space will allow for the lakes relatively small drainage area overflow to be contained within the reservoir.

The Saddle Dam inundation zone could potentially impact a very small portion of planning area 1 (see **Figure 5.6-6, Dam Inundation Area, Saddle Dam**). Planning areas 1 does not have habitable structures associated with it. Therefore, potential impacts from the failure of the Saddle Dam are considered **less than significant**.

The West Dam inundation zone could potentially impact all or portions of planning areas 1 through 5 (see **Figure 5.6-7, Dam Inundation Area, West Dam**). However, planning areas 1-5 do not have habitable structures associated with them. Therefore, potential impacts from the failure of the West Dam are considered **less than significant**.

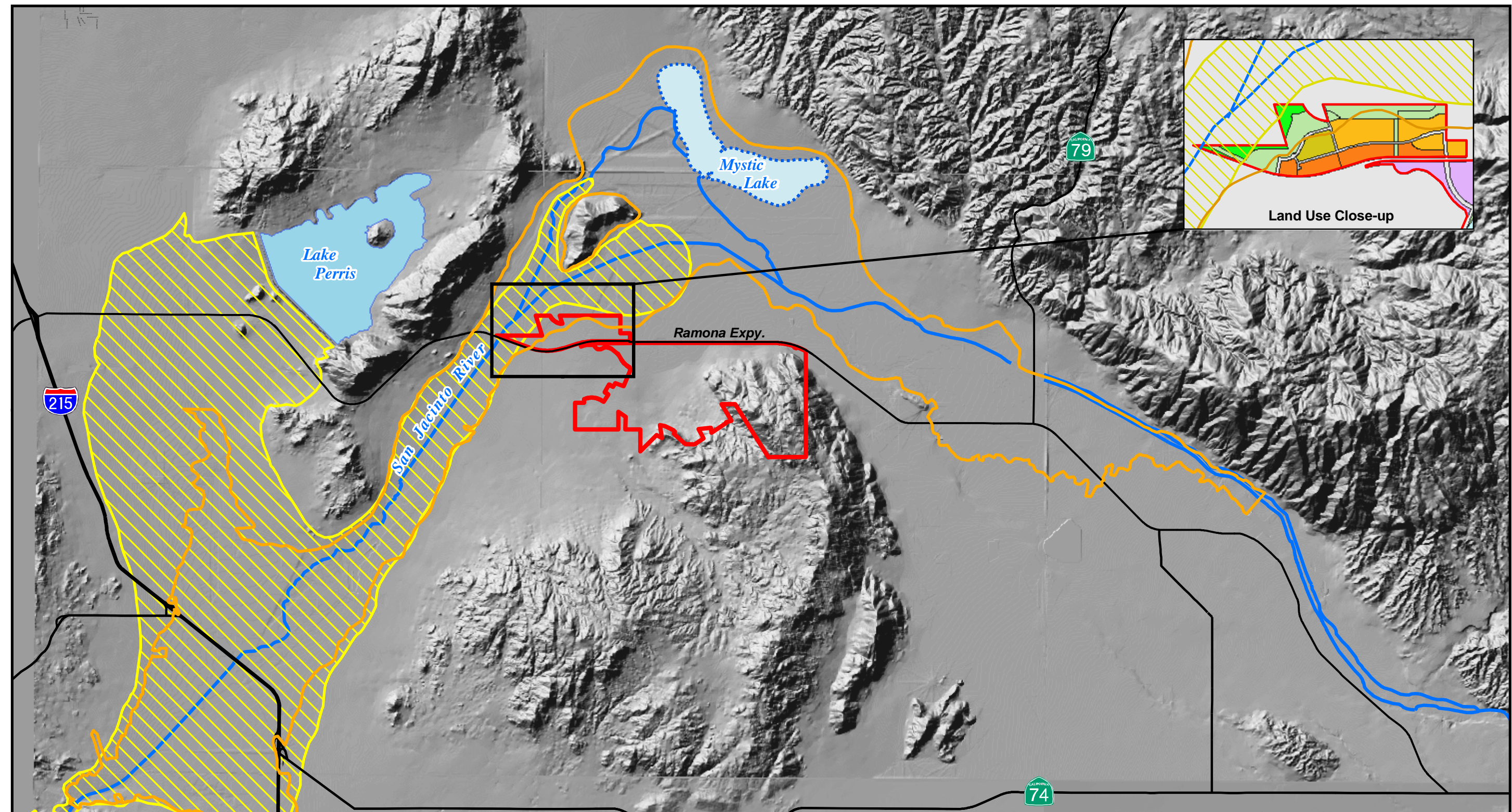
The East Dam inundation zone could potentially impact all or portions of planning areas 1-10, 12, 14-17, 19-22, 26-31, 33, 36-39, 75, 76, and 77 (see **Figure 5.6-8, Dam Inundation Area, East Dam**). Planning areas 1-8, 21-22, 37-39, and 78 do not have habitable structures associated with them, so impacts from failure of the East Dam on these planning areas are considered less than significant. Planning areas 9, 10, 12-17, 19, 20, 26-31, 33, 36, 75, and 77 have habitable structures associated with them; therefore, impacts from the failure of the East Dam are considered **potentially significant**.

Lake Hemet is located at the headwaters of the San Jacinto River, in the San Jacinto Mountains, approximately 24 miles southeast of the project site, at an elevation of 4,340 feet above sea level. The lake is contained by one dam and has a storage capacity of approximately 13,000 acre feet. The dam is constructed of earth and rock material and stands 122 feet in height. The inundation area associated with this dam could potentially impact all or portion of planning areas 1-8, 10, 12 and 14 (see **Figure 5.6-9, Dam Inundation Area, Lake Hemet**). Planning areas 1-8 do not have habitable structures associated with them. Therefore, potential impacts to planning areas 10, 12 and 14, from the failure of Lake Hemet Dam are considered **potentially significant**.

The CDWR Division of Safety of Dams (DSOD) has recommended that dams in heavily populated areas be designed to handle a 25-year flood without the risk of increasing downstream flows to larger than what would naturally occur. The Diamond Valley Lake West Dam has the capability of releasing flows in order to accommodate 25-year flood flows. This flow would not be larger than what would naturally occur. As for 100-year flood waters, it is expected that approximately 1,025 acre-feet of water in a 24-hour period would enter the reservoir from its drainage area. An emergency outlet to the dam will permit rapid drawdown of the reservoir leveling an emergency situation such as a 100-year flood. As per the DSOD requirements, the reservoir can be lowered from the normal maximum level by 10% of its maximum depth, a volume of 129,600 acre-feet, in 10 days (*Specific Plan No. 322 and Final Environmental Impact Report No. 426*).

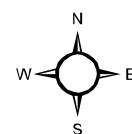
The future residents of THE VILLAGES OF LAKEVIEW who will live within a dam inundation area could be exposed to a risk involving flooding if a dam failed. Even though new development is required to be designed to avoid standard 100-year flood areas, new development within a dam inundation area could not be built to avoid flooding that would result from dam failure. The “instantaneous failure of the dam,” as assumed for purposes of mapping on the dam inundation **Figures 5.6-5 through 5.6-9**, is unlikely however, because repairs could be made to a leaking or unsafe dam to avoid significant damage to life and/or property. Such improvements are currently being made to the Lake Perris Dam.

Division 3 of the California Water Code places supervision of non-federal dams with the responsibility of the DSOD. The DSOD routinely inspects operating dams to ensure that they are adequately maintained, and to direct the dam owner to correct any deficiencies. Implementation of DSOD recommendations, will mitigate this impact to the degree feasible, but will not completely eliminate the risk of dam failure. Other than avoidance of the possible inundation areas, no other feasible mitigation measures exist to eliminate this impact completely. Compliance with State Civil Code Section 1103 through 1103.4 simply serves to notify those potentially affected of the risk involved in locating within a flood hazard or dam inundation area, but does not reduce or eliminate the potential impact. General Plan Safety Policy 4.1 for new construction and proposals for substantial improvements to residential and nonresidential development in 100- and 500-year floodplains and dam inundation areas, states that Riverside County shall apply a minimum level of acceptable risk; and disapprove projects that cannot mitigate the hazard to the satisfaction of the Building Official or other responsible agency. Due to oversight by DSOD, implementation of General Plan Policy 4.1, and the extremely low likelihood that such catastrophic dam failure will occur, potential impacts associated with dam failure are considered **less than significant**.



Sources: Office of Emergency Services,
State of California; Riverside County GIS

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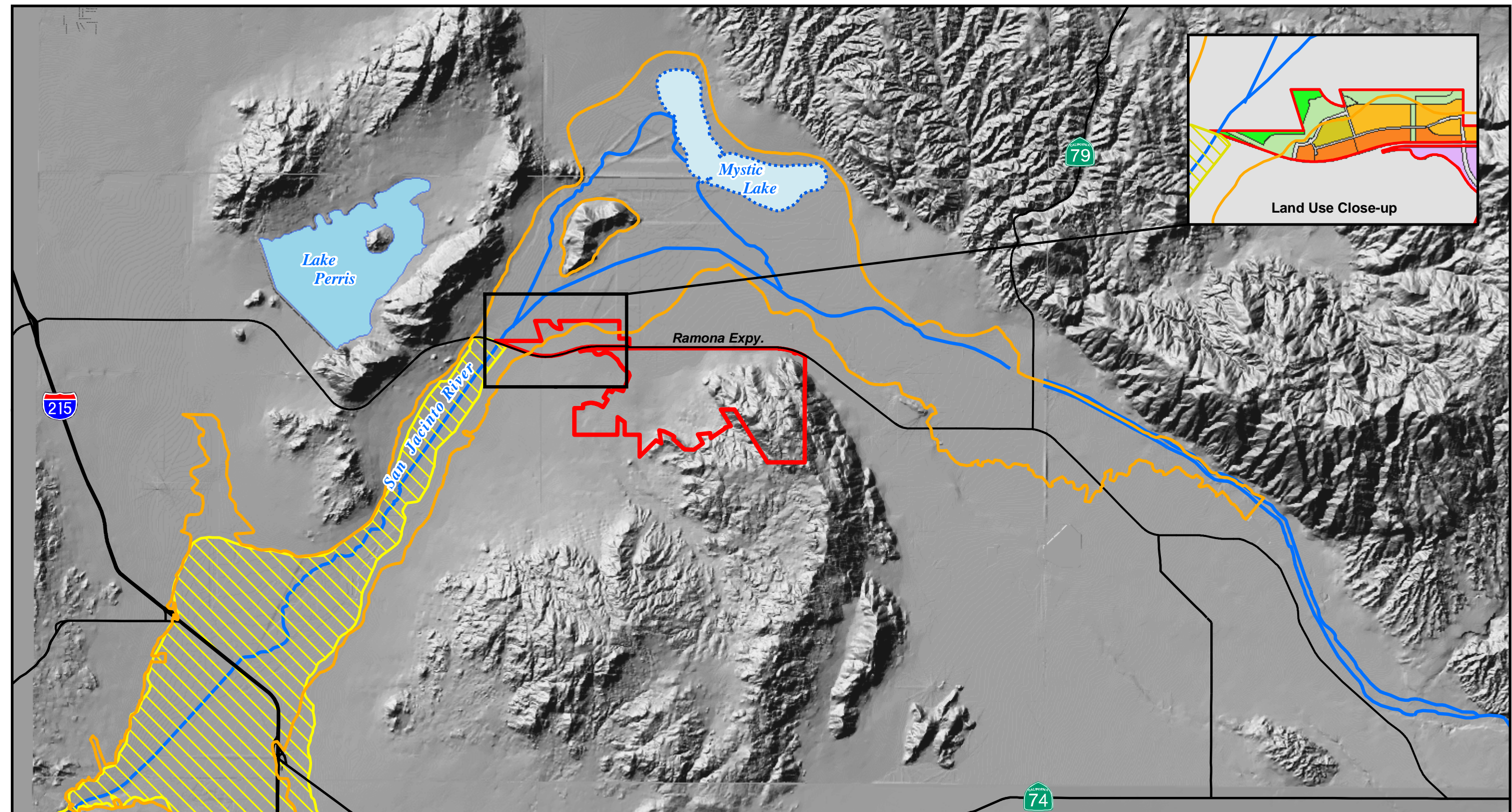
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| Project Site | 100yr Floodplain |
| Lake Perris Dam Inundation Area | |

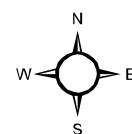
Figure 5.6-5

**Dam Inundation Area,
Lake Perris**

The Villages of Lakeview EIR No. 471



Sources: Office of Emergency Services,
State of California; Riverside County GIS



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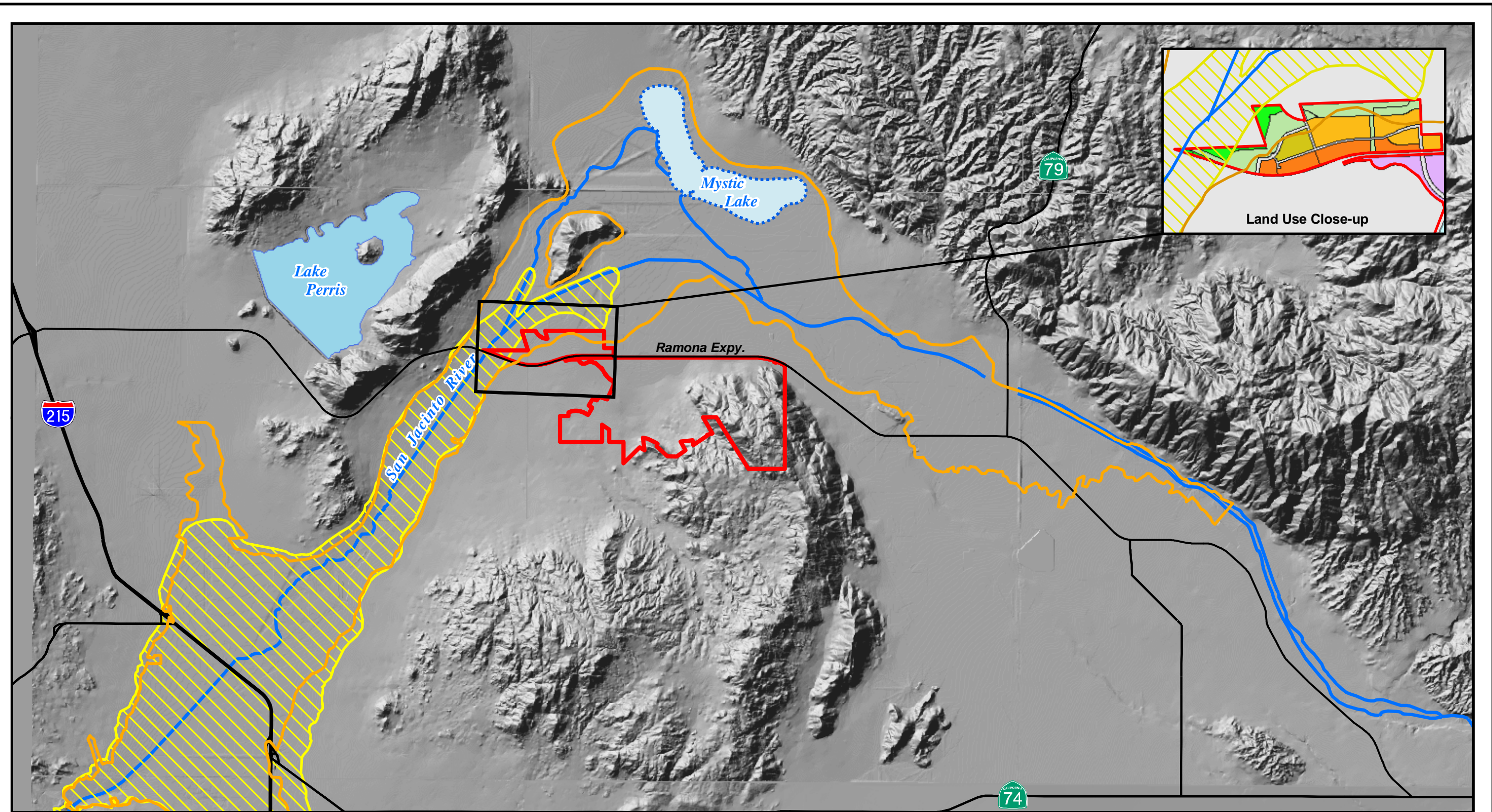
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|  Project Site |  100yr Floodplain |
|  Saddle Dam Inundation Area | |

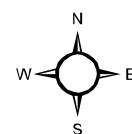
Figure 5.6-6

**Dam Inundation Area,
Diamond Valley Reservoir, Saddle Dam**

The Villages of Lakeview EIR No. 471



Sources: Office of Emergency Services,
State of California; Riverside County GIS



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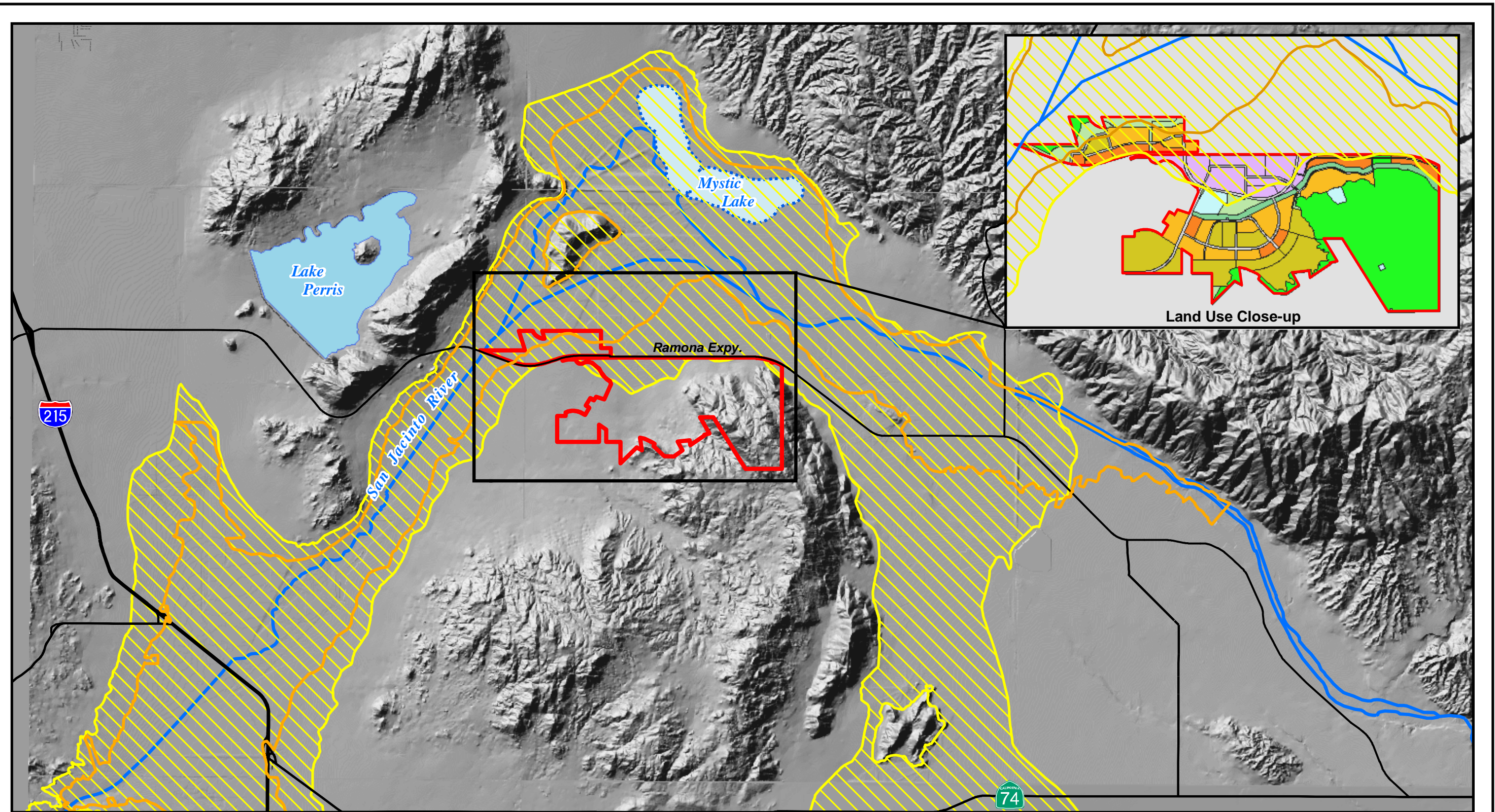
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| Project Site | 100yr Floodplain |
| West Dam Inundation Area | |

Figure 5.6-7

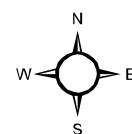
**Dam Inundation Area,
Diamond Valley Reservoir, West Dam**

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Sources: Office of Emergency Services,
State of California; Riverside County GIS

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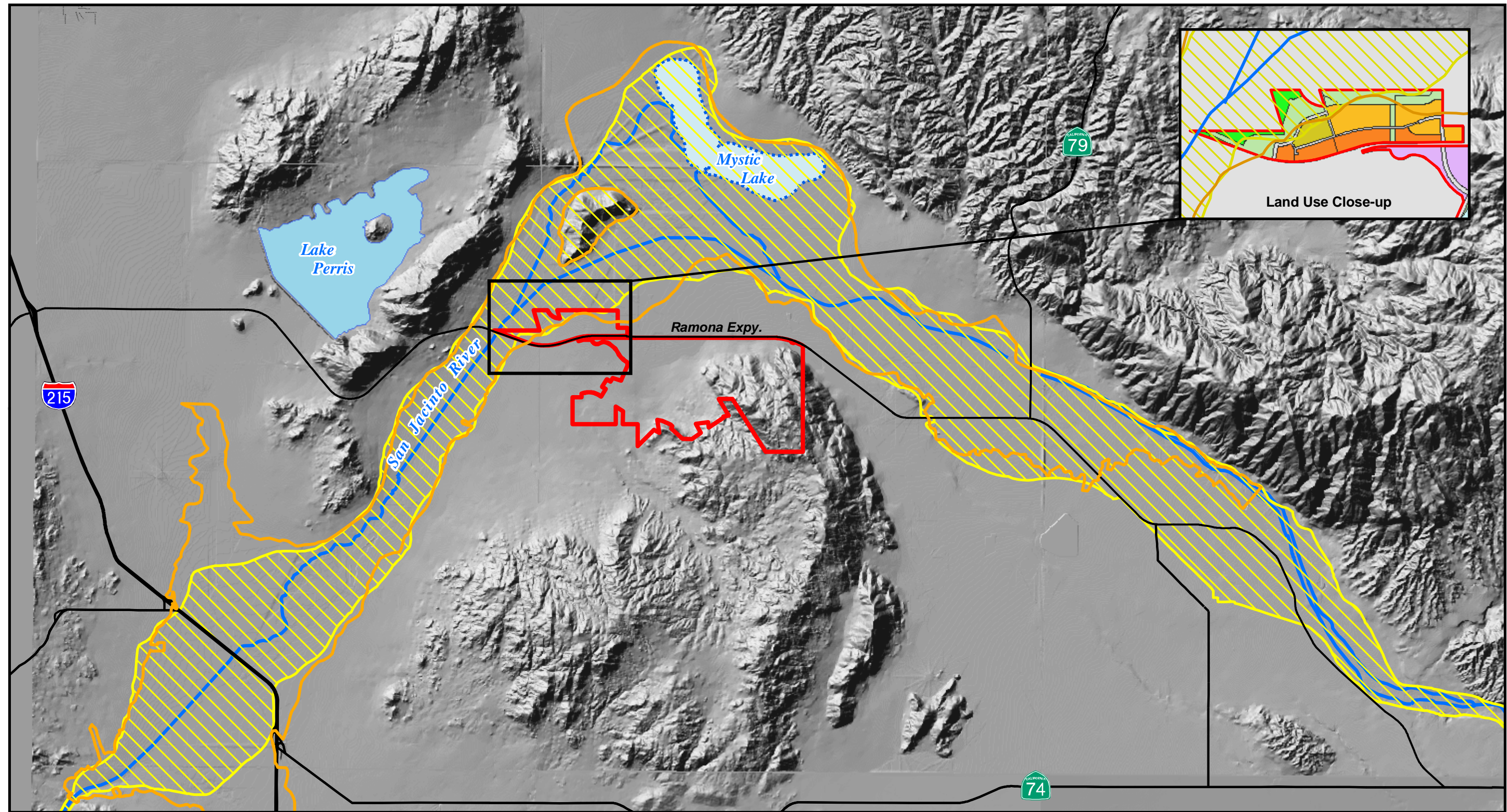
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- Project Site
- 100yr Floodplain
- East Dam Inundation Area

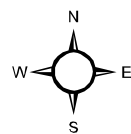
Figure 5.6-8

**Dam Inundation Area,
Diamond Valley Reservoir, East Dam**

The Villages of Lakeview EIR No. 471



Sources: Office of Emergency Services,
State of California; Riverside County GIS



0 0.5 1 2 3
Miles

LEGEND

- Project Site
- 100yr Floodplain
- Lake Hemet Dam Inundation Area

Figure 5.6-9

**Dam Inundation Area,
Lake Hemet**

The Villages of Lakeview EIR No. 471

In addition to potential for flooding due to dam inundation, large water pipelines cross the site which, if ruptured in an earthquake or other accident, could cause on-site flooding to sensitive receptor areas such as residences or schools. The project is proposing four K-8 schools within the project boundary, as shown on **Figure 5.7-3, Proposed Schools**. One of the proposed schools is located within the Park Village of Specific Plan 342 within a medium high-density residential area, next to a park. The second proposed school is located within the Resort Village (identified as NUSD School #2) within a high-density residential area, next to a park, and a medium high residential area. The third proposed school is located within the Enclave Village within a high-density residential area, surrounded by open space and a park. The fourth school site is located within the Town Center Village. The proposed land use around three of the schools is residential development, each with a neighboring park buffering the school site from the surrounding uses. The fourth school is located within the Mixed-Use land use designation, which has the possibility of both commercial and residential development within the planning area. It also has a neighboring park buffering from the surrounding uses.

The project site contains or is located adjacent to existing underground pipelines of various kinds, which could pose a flooding hazard to schools or residences if ruptured. The major water pipelines located within the project vicinity are the Metropolitan Water District Colorado River Aqueduct (184.5-inch inside diameter unenforced cast-in-place concrete pipe with 15-inch walls, not under pressure), the Inland Feeder pipeline (145.5-inch outside diameter steel pipe), and the Inland Feeder Lakeview line (133.5-inch outside diameter steel pipe), all of which are located within the same MWD property that runs east-west through the project site. Other large water lines include a 36-inch recycled water line the full length of Ramona Expressway right-of-way adjacent to the project and a 12-inch raw water line in Ramona east of 5th Street.

The CDE provides oversight and ultimately grants approval for school site acquisition and expansion of school site capacity whenever state funding is requested for school building projects. One of the criteria that is reviewed by CDE during the school site acquisition process is the proximity of high pressure pipelines to the school site. The school district must either certify that there are no pipelines within 1,500 feet of any portion of the site, or if an easement containing a pipeline with a maximum allowable operating pressure at or above 80 PSI is within 1,500 feet of a school site, a pipeline risk analysis must be prepared by a competent professional according to the California Code of Regulations (Title 5, Division 1, Chapter 13, Subchapter 1, Article 2, Section 14010h) in order to be considered for a setback exemption. These studies must determine whether, in the case of rupture of the line, there would be any safety hazard including subsidence of soil on the schools site or if flooding would occur.

Existing pipelines may pose a flooding hazard to proposed schools if ruptured, however, the siting of schools can be adjusted as a part of the implementation of the Specific Plan and ultimate location of schools rests with the school district. Therefore, potential impacts of locating proposed schools within the proximity of high pressure pipelines will be **less than significant** through detailed site evaluations which are conducted by the school district and by the possibility for school sites to be adjusted to meet the needs of the schools and requirements of the CDE.

Metropolitan Water District (MWD) prepared environmental documentation for the pipelines located within the project site. The Final Environmental Impact Report and Environmental Assessment (MWD 1993) for the Inland Feeder Project pipelines reviewed seismic data and

concluded that the pipelines within the project site would be subject to similar seismic impacts as described in the Setting section, above, related to Regional Faulting and Seismicity, as the summary from the MWD Inland Feeder Final EIR indicates, below.

Fault	Slip Rate mm/ Year	Maximum Historic Earthquake Magnitude and Year of Occurrence	Estimated Maximum Earthquake	Distance from Lakeview Segment of Inland Feeder Pipeline (miles)
San Jacinto Valley Segment of the San Jacinto Fault Zone	11	6.5 (1942)	6.75	5

Source: MWD 1993, Tables 5-2 and 5-2a.

With the pipelines designed to these seismic parameters using all current engineering requirements and codes as mitigation for seismic activity, the MWD Inland Feeder Final EIR determined that potential significant impacts resulting from seismic activity that could cause pipes to rupture would be reduced to less than significant levels. In the extremely unlikely event of a leak or rupture of the pipelines, the streets and parkway swales, detention basins and major drainage channel would direct water released into the storm drain system to avoid flooding and inundation of the site. Therefore, flooding due to the rupture of pipelines within the site is considered **less than significant**.

The County of Riverside recently adopted the 2007 California Building Code which requires as much or more structural safety design features as the Uniform or California Building Codes previously used. Thus, standards for design of structures will withstand ground shaking, as discussed in the NOP for this project.

Threshold E: *Would the project change or modify site topography or ground surface relief features and/or create cut or fill slopes greater than 2:1 or higher than 10 feet, or result in grading that affects or negates subsurface sewage disposal systems.*

The project site includes the Lakeview Mountains to the east and south central portion, where these areas are being proposed as conservation areas, with no proposed grading. North and west of the Lakeview Mountains, the topography becomes flatter as it leaves the foothills (refer to **Figure 5.6-3, USGS Topography Map**). In concept, this project proposes to develop a similar topography, leaving the hills in their natural state, and gradually transition into foothill type of grading, with more substantial slopes and grades, into areas further north that are flatter and with gentler grades all the way to Ramona Expressway. The project will move an estimated 17 million cubic yards of earth, excluding remedial grading which will be balanced on the site. Grading on this site against the foothills, and in other locations, may require slopes of over 30 feet in depth, and some terraces which will be contour graded to mitigate the manufactured look against the natural hills.

The conceptual grading plan shows a ridge line at the easterly edge of the project approximately at the extension of Bridge Street, where 138 acres to the east of the ridge line will stay as natural topography, and will continue to drain to the north crossing under Ramona Expressway and eventually into the San Jacinto River. The balance of the project drains to the north and to the west following the natural drainage patterns from the hills to the south of the project to Ramona

Expressway. Grading within this project will be tailored to the existing topography, where lower and gently sloping areas may need to be raised creating fill areas, and the areas at the foothills may need to be lowered to provide needed dirt to balance the project site. Grades range from a flat 1% in the lower areas to 10% in the foothills. For the conceptual grading, cut-fill, and slope analysis maps refer to exhibits 15, 16a, and 16b of Specific Plan No. 342.

The elevation range within the project site ranges from 1,415 to 1,906 feet above sea level and in general slopes to the north. The Lakeview mountains are located along the south and southeastern portion of the project site (refer to **Figure 5.6-3, USGS Topo**). The majority of the project site is characteristically flat, so engineered slopes greater than 2:1 or higher than ten feet are not anticipated. Areas planned for development that are located adjacent to the Lakeview Mountains could include engineered slopes greater than 2:1 or higher than ten feet.

As indicated in the Specific Plan Development Standards, in order to reduce impacts from slopes greater than 2:1 or higher than 10 feet, that may occur in any of the Specific Plan villages, a Slope Stability Report, prepared by a soils engineer or an engineering geologist, and approved by the County Geologist, is required. Also, where cut and fill slopes are created higher than ten feet (10') a landscaping and irrigation plan shall be submitted to the County Building and Safety Department with the Rough Grading Plan submittal. The plans shall be reviewed for type and density of groundcover, shrubs, and trees, access for maintenance, and system of irrigation. Therefore, potential impacts resulting from the creation of slopes over 10-feet in height and/or greater than 2:1 slopes will be reduced to **less than significant** through the implementation of Specific Plan Development Standards and additional geotechnical studies for specific development proposals within the SP (MM Geo 3).

The project site includes several individual residences that rely upon underground septic systems. Any uses reliant upon subsurface sewage disposal systems will be removed from the site as a result of the proposed project. Pursuant to the Water and Sewer Development Standards in Specific Plan No. 342, wastewater facilities shall be removed in accordance with the requirements and specifications of the Riverside County Health Department. Therefore, potential impacts to septic systems as result of grading will be addressed per County standards and are considered **less than significant**.

Threshold F: *The proposed project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.*

Expansive soils are soils having a significant amount of clay particles which can give up water (shrink) or take on water (swell). The Expansive Potential of soils range from very low to very high, as indicated in **Table 5.6-A, Expansion Potential**. On-site soils considered to have a high expansive or shrink swell potential are of the Willow series and include Wf, Wg, and Wn, all of which are silty clays. The change in volume exerts stress on buildings and other loads placed on these soils. Soils on site exhibit expansive indices ranging from low to high, as such, expansion testing is required by current grading and building codes. Special engineering designs are used effectively to alleviate problems caused by expansive soils. These designs include the use of reinforcing steel in foundations, post-tensioned foundations or other foundation designs, drainage

control devices, over-excavation, and backfilling with non-expansive soil. Excessive swelling and shrinkage cycles can result in distress to improvements and structures.

Table 5.6-A
Expansion Potential

0 to 20 Very Low
21 to 50 Low
51 to 90 Medium
91 to 130 High
>130 Very High

The proposed project has five (5) phases of development, organized according to a logical development pattern, based on marketing needs, the utilization of existing improvements, traffic patterns, and proposed backbone improvements. The five different project phases are depicted in **Figure 3-11, Conceptual Phasing Plan**. As a result of the project phasing, and pursuant to the Conceptual Grading Plan in THE VILLAGES OF LAKEVIEW Specific Plan, rough grading of the project site will result in significant movement of soil throughout specific phasing areas on site. As indicated in the Specific Plan Development Standards, additional geotechnical studies must be conducted by the geotechnical engineer which would indicate where expansive soils exist. Mitigation measure MM Geo 3 requires these additional studies, also. In addition, Leighton has recommended that additional Expansion Index tests be conducted during grading so the location of expansive soils after grading can be determined and appropriate foundation design and other measures can be provided. With the additional testing, ~~and~~ design recommendations, and implementation of MM Geo 3, impacts from expansive soils are anticipated to be **less than significant**.

Threshold G: *The proposed project would change deposition, siltation, or erosion which may modify the channel of a river or stream or the bed of a lake.*

Implementation of the proposed project will involve grading, excavation, trenching, temporary stockpiling, and construction work in areas of varying terrain. Standard construction procedures and best management practices (BMPs) implemented in conjunction with the SWPPP required under the State NPDES construction permit will minimize potential for erosion and siltation during construction. The intent of incorporating BMPs into the site design is to prevent any net detrimental change in run-off quantity or quality resulting from the project. BMPs can be both structural and nonstructural stormwater management control measures taken to mitigate changes to both quantity and quality of runoff caused through construction activities. BMPs are designed to reduce volume, peak flows, and/or non-point source pollution through evapotranspiration, infiltration, detention, and filtration or biological and chemical actions.

Compliance with NPDES requirements will also necessitate the development of a storm water quality management plan (WQMP), which includes the following: a site and watershed assessment, how the site will ultimately impact the watershed; comprehensive understanding of the hydrologic conditions of concern; evaluation of pollutants of concern; source control and/or

treatment control BMP selection and sizing; the development of a long term BMP maintenance agreement and schedule. Post construction development includes an on-street and underground storm drain system. On site erosion will be minimized post-construction through the use of landscaping, stormwater BMPs, and the stormdrain system; which will reduce the chance of on- and off-site erosion. Through the above mentioned planning actions post-construction and post-project runoff will be reduced and/or eliminated, sources of pollutants will be controlled, and contaminated stormwater run-off will be treated prior to exiting the site and entering any local water body. Implementation of NPDES requirements in the SWPPP and WQMP will reduce potential impacts that would create substantial soil erosion or loss of top soil to **less than significant levels**.

Since the proposed development will be discharging stormwater flows directly into the San Jacinto River Channel, the Hydrology Section of this DEIR discusses potential impacts related to water quality, erosion, and impacts to water bodies with respect to the project's water quality plan.

***Threshold H:** The proposed project would result in an increase in water-induced erosion either on or off site.*

Water-induced erosion generally results from decreased levels of infiltration in upstream locations, which occur when the natural terrain (vegetation and soil units) are disturbed. As implementation of the proposed project will involve grading, excavation, trenching, temporary stockpiling, and construction work in areas of relatively flat terrain, these construction activities related to site development will reduce the infiltration rates of the site, as compared with the natural site setting which includes tilled agricultural fields; therefore, standard construction procedures and best management practices (BMPs) implemented in conjunction with the SWPPP will be prepared in order to comply with required State NPDES construction permit requirements, which will minimize potential for erosion and siltation during construction.

Post-construction water-induced erosion could occur on un-maintained, manufactured slopes or open areas such as parks. As indicated in the Specific Plan Development Standards, where cut and fill slopes are created higher than ten feet (10'), a landscaping and irrigation plan shall be submitted to the County Building and Safety Department with the Rough Grading Plan submittal. The plans shall be reviewed for type and density of groundcover, shrubs, and trees, access for maintenance, and system of irrigation. Likewise, the Open Space, Conservation, and Recreational Plan Development Standards in Specific Plan No. 342 require all common areas and opens space to be maintained and all recreational facilities to be landscaped and irrigated. In addition, the County requires geotechnical studies for specific development proposals within THE VILLAGES OF LAKEVIEW Specific Plan (MM Geo 3). The additional soils evaluations (MM Geo 3) will also assist in identifying areas that may be susceptible to post-construction erosion. Therefore, chances of post-construction erosion will be minimized, and impacts related to water-induced erosion will be **less than significant** after NPDES, Specific Plan requirements and MM Geo 3 are implemented.

Post-construction infiltration rates will be reduced as compared with the natural setting of the site; consequently, a Water Quality Management Plan (WQMP) will be prepared in order to

reduce the effects that such development will have on the surrounding area. However, since the proposed development will be discharging stormwater flows directly into San Jacinto River Channel, the Hydrology Section of this DEIR discusses potential impacts related to erosion and impacts to water bodies.

Threshold I: *The proposed project would result in methane levels, after grading, that exceed the Riverside County standard of 5,000 ppm.*

Subsurface methane generation is possible in areas where the McAnally Chicken Ranch and the thoroughbred farms, shown on Figure 5.6-1, are located (THE VILLAGES OF LAKEVIEW Specific Plan Planning Areas 29, 33, 34, 35, 53 and 57). Leighton has determined that the majority of the manure spreading area, relating to the McAnally Chicken Ranch to be within the eastern-most portion of that site, or portions of planning areas 29, 33, 34, and 35. With respect to manure laden soils found on the thoroughbred farm property, Leighton determined through conversations with the farm manager and site observations, that the manure cleaned from the horse stalls is placed within the southeastern corner that site, and has been tilled into the soils there. These tilling activities have rendered all or portions of planning areas 53 and 57 soils with manure mixed into the surficial soils to approximately 1 foot in depth.

Since methane accumulation appears to be a concern after grading activities, the exact impacts on the project site cannot be fully characterized at this time. However, pursuant to County of Riverside methane protocol, post-grading sampling, and analysis will be conducted in areas where methane generation could be expected (in the thoroughbred farms and chicken ranch area) no sooner than 30-days after grading in order to fully understand the impacts of methane accumulation on-site. Additionally, the project proponent is required to prepare a detailed soils report and geotechnical investigation (per Section 7 or the Specific Plan Standards and MM Geo 3), prior to initial grading activities, which will analyze on-site soil conditions and will be used as a guide to soils placement for the final grading plan. Therefore, through compliance with the Specific Plan Design Standards, and the implementation of MM Geo 3, impacts of methane generation are considered **less than significant**.

Threshold J: *The proposed project would result in areas with organic material in soil that exceed County of Riverside requirements.*

Manure has a tendency to compress and settle over time. As a result of decomposition and/or desiccation of organic material, settlement and ground cracking can occur. Settlement and ground cracking is thought to be a result of shrinkage and decomposition of manure and organic-rich soils.

The near surface soil within the poultry ranch and thoroughbred farm areas may have high concentrations of manure/organic matter. Such soils are, unsuitable to support structures or the loads from fill placement. Removal of manure and organic-rich soil prior to overexcavation and recompaction of the on-site alluvial soil will reduce the potential for settlement and surface soil cracking. In addition, minor amounts of organic-rich soil may be blended and mixed with “clean” soil to reduce the final organic content to levels acceptable to the geotechnical consultant and the County of Riverside.

By removing manure and organic-rich soil to levels acceptable to the geotechnical consultant and the County of Riverside, the potential for adverse impacts from organic materials is considered to be **less than significant**.

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts related to landslide risk (rockfall hazard), dam failure, slope stability, expansive soils, soil erosion, and deposition.

County Ordinance No. 457 will be observed regarding setback requirements with regard to slopes.

MM Geo 1: To protect life, occupied buildings and water tanks, rockfall hazards shall be addressed for Planning Areas adjacent to the Lakeview Mountains. Evidence of past rockfalls exist on site; consequently, based upon field investigation, the majority of the areas adjacent to the slopes have at least a minimal level for rockfall hazard. Therefore, slope areas have been delineated by three distinct rockfall hazard zones, RH Zone 1 has the least potential, and RH Zone 3 has the highest potential. The following recommendations for remediation are based upon the Preliminary Rockfall Hazard Evaluation. Adherence to these remediation measures will reduce the level of impact to less than significant.

RH Zone 1 – Due to the isolated nature of hazards within this zone, the hazard of individual rock falls can be generally neutralized by the removal of individual rocks and/or construction of low impact walls. Blasting may be required in this zone in order to completely remove the individual rock hazard.

RH Zone 2 – Local areas in this zone may only require a few isolated rocks to be removed while other areas may require a more regional alternative. The following measures are provided as options for remediation in Zone 2.

- Construction of a debris ditch with a 5-foot tall, 1.5:1 (horizontal to vertical) manufactured slope, which will capture falling debris. Due to the granular nature of on-site soils, the slope will need to be reinforced with geogrid, which is a synthetic polymer-coated material that is used to reinforce an earth-fill slope, wall, and base layer construction. Geogrid provides a stabilizing force within the soil structure itself and will improve the surficial stability of fill slopes inclined at 1.5:1. This manufactured slope should be a minimum of 15 feet from the toe of the natural slope. Fencing at the top of the manufactured slope will be constructed to provide additional protection.
- Construction of a debris ditch with a 5-foot tall, 2:1 manufactured slope and 3-foot tall, top of slope impact wall. The impact wall should be designed using an equivalent fluid pressure of 125 pounds per cubic foot (pcf). The toe of the manufactured slope should be a minimum 15 feet from the toe of the natural slope.

- Construction of a debris ditch with a 3-foot tall retaining wall. The base of the wall should be a minimum 15 feet from the toe of the natural slope.
- Construct a 6-foot tall Caltrans-type rock fence that should be setback a minimum of 15 feet from the toe of the natural slope.
- Implementation of a 50-foot setback from the toe of the natural slope to the property line of the proposed lots and construct fencing that will provide some additional measure of protection from rockfall hazards.

Specific Details for construction of these remediation options are provided in Geotechnical reports prepared by Leighton provided in Appendix F (CD #3).

RH Zone 3 – Due to the abundant hazards in this zone, a regional remediation measure is recommended, as opposed to individual remediation/removal of specific hazardous rocks. However, due to the existence of local, large, rounded boulders located high up on the perimeter slopes in these areas, local blasting of these large fragments may be required in addition to the implementation of rockfall zone mitigation measures.

- Construction of a debris ditch with an 8-foot tall, 1.5:1 (horizontal to vertical) manufactured slope. Due to the granular nature of on-site soils, the slope will need to be reinforced with geogrid. This manufactured slope should be a minimum of 15 feet from the toe of the natural slope. A 5-foot tall fence constructed at the top of the manufactured slope will provide additional protection.
- Construction of debris ditch with a 5-foot tall, 2:1 manufactured slope and 5-foot tall top of slope impact wall. The impact wall should be designed using an equivalent fluid pressure of 125 pcf. The toe of the manufactured slope should be a minimum 15 feet from the toe of the natural slope.
- Construction of a debris ditch with a 5-foot tall retaining wall. The base of the wall should be a minimum 15 feet from the top of the natural slope.
- Construct a 6-foot tall Caltrans-type rock fence that should be setback a minimum of 15 feet from the toe of the natural slope.
- Implementation of a 75-foot setback from the toe of the natural slope to the future property line of the proposed lots and construct fencing that will provide some additional measure of protection from rockfall hazards.

Specific Details for construction of these remediation options are provided in geotechnical reports prepared by Leighton provided in Appendix F (CD #3).

MM Geo 2: The upper 5 to 15 feet of alluvial soil is considered to be slightly, to moderately compressible, therefore, partial removal and re-compaction of this material will be necessary in areas where structures are planned, in order to reduce the potential for excessive total and differential settlement of the structures. The depth of removal and recompaction will be determined in the field based on conditions exposed but is expected to include complete removal

of manure and organic-rich soil, complete removal of uncontrolled fill soils and removal of the upper 5 to 8 feet of alluvial soil.

MM Geo 3: Prior to issuance of a grading permit on any implementing project, an updated soils report and geotechnical study reviewing the most current development plan shall be prepared to analyze on-site soil conditions and slope stability and include appropriate measures to provide foundation stability, seismic design, and limit damage from erosion.

Summary of Project-Specific Environmental Effects After Mitigation Measures Are Implemented

All potential significant adverse environmental effects are reduced to **below the level of significance** following implementation of regulations, General Plan policies, design considerations, and incorporation of the proposed mitigation measures outlined above.

Summary of Cumulative Environmental Effects After Mitigation Measures Are Implemented

As defined in Section 15355 of the CEQA Guidelines, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the DEIR together with other projects causing related impacts. Geologic hazards are localized by nature, as they are related to the soils and geologic character of a particular site. Cumulative impacts could occur related to an earthquake, if the magnitude of the quake and location of the fault(s) traversed the region. Impacts due to seismic activity would be cumulative if state and local building and development codes and regulations (existing regulatory requirements) were not being implemented throughout the region. Pursuant to County and State Building Code requirements, all new development will be required to incorporate appropriate design and construction measures to guard against ground shaking hazards. Further, the project and all other projects and structures will be constructed in compliance with existing seismic safety regulations of the California Uniform Building Code and International Building Code, which requires the use of site-specific engineering and construction standards identified for each class of seismic hazard. In addition, Riverside County requires geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process.

Riverside County is subject to a number of potential geologic hazards that have the potential to impact future build-out of the Riverside County General Plan. These hazards, including fault rupture hazards, ground shaking, liquefaction, landslides and rockfalls, seismically-induced settlement, subsidence and collapsible soils, and soil erosion and loss of topsoil were addressed in the RCIP EIR and Section 5.6, herein. Cumulatively, however, build-out of the Riverside County General Plan and the project will contribute significantly to the increased exposure of people and property to seismic, slope, soil instability, and wind hazards. It was determined that these impacts will be reduced to below the level of significance through implementation of General Plan policies, RCIP EIR mitigation measures, and mitigation measures discussed in Section 5.6, Geology and Soils, and existing regulatory requirements.

Subsurface methane generation is possible in some locations within THE VILLAGES OF LAKEVIEW Specific Plan area. Since methane accumulation is a concern after grading activities, the exact impacts on the project site cannot be fully characterized at this time. However, pursuant to the County of Riverside protocol, post grading sampling and analysis would be conducted no sooner than 30 days after grading in order to fully understand the impacts of methane accumulation on site. Therefore, since the effects of post-grading conditions cannot be characterized in this DEIR, the impacts of methane generation are considered potentially significant. This potential impact can be mitigated to **less than significant** levels through implementation of mitigation measures and these project-specific impacts will not contribute to a cumulatively significant impact.

Since all local jurisdictions in the region are subject to local, state and federal laws, including CEQA, cumulative impacts related to geologic and soils safety are **less than significant**.

Section 7.1 of the DEIR includes additional information about cumulative impacts.

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

5.7 HAZARDS

This section describes existing and potentially occurring hazards and hazardous materials that may result from implementation of the project on the project site. The section discusses potential impacts posed by these hazards to the environment, as well as to workers, visitors, and residents within and adjacent to the project site. More specifically, the focus of this section describes potential effects on human health that could result from the routine transport, use, or disposal of hazardous materials; accidental conditions involving the release of hazardous materials into the environment; generated by project activities or was in the area affecting the project whether the project interferes with an adopted emergency response plan or an emergency evacuation plan; hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school located in the project area; the potential environmental impacts of the project area were located on site which is included on a list of hazardous materials sites; and/or whether the project would expose people or structures to a significant risk of loss, injury, or death as a result of wildland fires. Potential impacts related to hazards from close proximity to an airport were found to be less than significant in the Initial Study/NOP prepared for this project (Appendix A (CD #3)).

In addition to other documents, the following references were used in preparation of this section of the DEIR:

- County of Riverside, *County of Riverside General Plan, Lakeview/Nuevo Area Plan*, October 2003. (Available at County of Riverside and at www.rctlma.org/genplan/content/ap2/lnap.html)
- LOR Geotechnical Group, *Additional Waste Characterization, Lakeview Burn Dump*, August 2004. (Available at County of Riverside.)
- LOR Geotechnical Group, *Phase 1 Environmental Site Assessment Abudayyeh Land*, August 2003. (Appendix G (CD #3))
- LOR Geotechnical Group, *Phase 1 Environmental Site Assessment Amway Property*, May 2003. (Appendix G (CD #3))
- LOR Geotechnical Group, *Phase 1 Environmental Site Assessment and Limited Site Characterization, La Certe Property*, June 2004. (Appendix G (CD #3))
- LOR Geotechnical Group, *Phase 1 Environmental Site Assessment and Limited Site Characterization, Lakeview Thoroughbred Farm*, September 2003. (Appendix G (CD #3))
- LOR Geotechnical Group, *Phase 1 Environmental Site Assessment and Limited Site Characterization, Sherman Ranch*, November 2003. (Appendix G (CD #3))
- LOR Geotechnical Group, *Phase 1 Environmental Site Assessment Pfeifer Property*, April 2004. (Appendix G (CD #3))
- County of Riverside, *Ordinance No. 787.1, an Ordinance for the County of Riverside Amending Ordinance 787 and Chapter 8.32 of the Riverside County Code Adopting the 2000 Edition of the Uniform Fire Code as Adopted by the State of California with*

Revisions and the Uniform Fire Code Standards. (Available at County of Riverside and at <http://www.clerkoftheboard.co.riverside.ca.us/ords.htm>)

- County of Riverside, *Riverside County Emergency Operations Plan*, February 2006. (Available at County of Riverside.)
- City of Perris, *Comprehensive General Plan 2030*, October 2004. (Available at the City of Perris.)
- County of Riverside, *Multiple Species Habitat Conservation Plan*, June 17, 2003. (Available at the County of Riverside and at http://www.rctlma.org/online/content/rcip.report_generator.aspx)
- The Fire Safe Council, <http://www.firesafecouncil.org/> viewed May 21, 2007.
- California Fire Alliance, <http://www.cafirealliance.org/> viewed May 21, 2007.
- CAL FIRE, Maps of Fire Hazard Severity Zones in the State Responsibility Area of California, November 7, 2007. (Available at <http://frap.cdf.ca.gov/data/frapgismaps/select.asp>)
- California Energy Commission, *Scenarios of Climate Change in California: An Overview*, Publication CEC-500-2005-186-SF, Published December 2005. (Available at <http://www.energy.ca.gov/publications/index.php> as viewed on February 2006.) (CEC 2005)
- Windows Live Search Maps, *Microsoft Virtual Earth*. (Available at <http://maps.live.com/> as viewed on March 5, 2008.)
- Riverside County Waste Management Department, Lakeview Disposal Site Clean Closure Environmental Assessment No. 41223 (June 2008) (Available at County of Riverside)
- Riverside County Waste Management Department, Board of County Supervisors' approval of the Lakeview Disposal Site Clean Closure Project (July 2008) (Available at County of Riverside)
- Riverside County Waste Management Department, Notice of Determination, and Adoption of the Mitigated Negative Declaration for Environmental Assessment No. 41223 (July 2008) (Available at County of Riverside)

Setting

The following section includes a discussion regarding existing conditions on the proposed project site including the current on-site structures. Six Phase I Environmental Site Assessments (ESA's) were prepared by LOR Geotechnical Group for specific areas and properties within the project site and one outside THE VILLAGES OF LAKEVIEW Specific Plan. See **Figure 5.7-1, Village Organization Plan and Phase I ESAs** for ESA Analysis Areas and **Table 5.7-A, LOR Phase I Reports**, below. All ESA's are located in Appendix G (CD #3) of this DEIR.

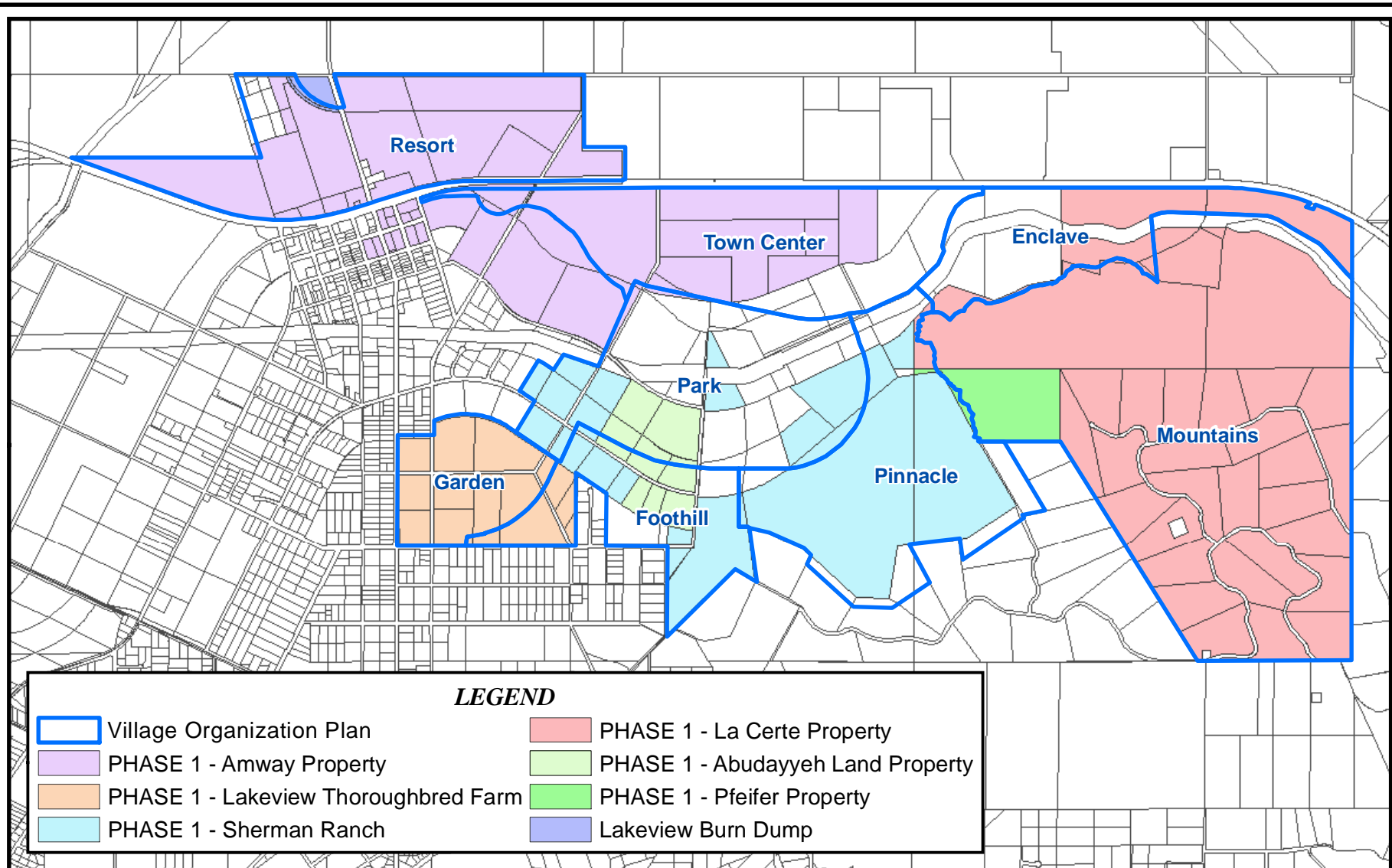
On Site Properties Evaluated in Phase I ESA's

Amway Property Phase I

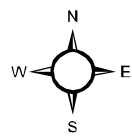
A Phase I Environmental Site Assessment covering portions of the site's Resort Village and Town Center Village (see **Figure 5.7-1**) was completed by LOR Geotechnical Group, Inc. on May 20, 2003 for the Amway Property. The extent of the Phase I ESA consisted of approximately 556 acres of agricultural property which has been associated with the existing Nutrilite facility since the 1950s. During research by LOR, various public agencies and individuals were contacted in order to provide information regarding the previous and current uses of the site with respect to hazardous materials and wastes. Aerial photographs from 1949 through 2000 were also reviewed by LOR to provide information regarding the past history of the site. In addition, federal, state, and local databases were reviewed to ascertain the presence of known environmentally impaired sites within one mile of the property and to determine their impact to the site. The table below lists the database search results applicable to these areas.

Table 5.7-A
LOR Phase I Reports

Phase I Report	Location Within Village Organization Plan
<i>Amway Property</i>	Resort and Town Center Villages
<i>La Certe Property</i>	Mountains and Enclave Village
<i>Pfeifer Property</i>	Mountains and Pinnacle Village
<i>Sherman Ranch</i>	Pinnacle, Foothill, and Park Villages
<i>Abudayyeh Land</i>	Foothill and Park Villages
<i>Lakeview Thoroughbred Farm</i>	Garden and Foothill Villages
<i>Lakeview Burn Dump</i>	Out of project area



Sources: LOR Geotechnical Group Environmental Site Assessments, Riverside County GIS, 2007



0 1,000 2,000 3,000
Feet

Figure 5.7-1

Village Organization Plan and Phase I ESA's

The Villages of Lakeview EIR No. 471

Table 5.7-B
Amway Property Phase I ESA Database Results

Database	Distance in miles	Results	Summary
Federal Database			
RCRIS – Sm. Quantity Generator	0.25	1 site	The site, Innovation Industries, is listed for its generation of paint and solvent waste.
State Database			
CHMIRS	1.0	3 sites	The three sites identified within one mile of the site involved small quantities of chemicals found during police raids of illicit drug labs.
CORTESE	1.0	3 sites	All three sites were listed due to leaking underground storage tank releases.
State Landfills	0.5	1 site	The site is a solid waste disposal site that was closed in 1976.
WMUDS/SWAT	0.5	1 site	The site is wastewater brine ponds at the Nutrilite facility.
LUST	0.5	4 sites	Two LUSTs are located at the Nutrilite facility, one which was removed in 1995. The two other sites are the Hy-Line International and the Nuview Union School District. All of the sites are listed as a case closed status.

Table 5.7-B, Amway Property Phase I ESA Database Results, above, shows the sites that are listed within one mile of the Amway Property. Two of the listings were for the Nutrilite facility, located immediately adjacent to the project site. The LUST database indicates that one of two leaking underground diesel and gasoline storage tanks was removed from the Nutrilite facility in 1995. The LUST resulted in soil contamination only and is listed as case closed status. The other LUST on the Nutrilite site is listed as case closed status. The WMUDS/WAT database identifies the wastewater brine ponds at Nutrilite. The two other LUST sites listed are Hy-Line International and Nuview Union School District. The Hy-Line site, located immediately south of the Resort Village, had a gasoline tank leak and has been successfully closed. The Nuview site had a leaking underground gasoline tank removed. These LUSTs resulted in soil contamination only and are listed as case closed status. Three of these LUST sites were also listed on the CORTESE list.

LOR's additional research with the County of Riverside indicated that three LUSTs were removed from the Nutrilite facility. These LUST sites did not appear to have contaminated groundwater.

Innovation Industries was listed on the RCRIS list due to the nature of the materials the company handles on-site. The State Landfills list identifies a solid waste disposal site, closed in 1976, referred to as the Lakeview Burn Dump. Additional information about both of these off-site facilities is discussed later in this section.

Along with governmental agency interviews and literature research, an on-site visit of the Amway Property was conducted. A Limited Site Characterization was conducted by LOR to

determine if potential pesticide use at the site had included organochlorine pesticides. No significant levels of pesticides were found to be present in the near-surface soils at the locations sampled. No pesticide storage facilities were indicated during the site visit which would be considered spots for high concentrations of pesticides.

La Certe Property Phase I

A Phase I Environmental Site Assessment covering a portion of the Enclave Village and Lakeview Mountain area was completed by LOR Geotechnical Group, Inc. in June 18, 2004; referred to as La Certe Property. The extent of the Phase I ESA consisted of approximately 943 acres of mostly native vacant land with a portion, approximately 120 acres, that has been used agriculturally and commercially throughout its researched history, including dry land farming and an RV Park.

During LOR's research, various public agencies and individuals were contacted in order to provide information regarding the previous and current uses of the site areas. The County of Riverside Building and Safety Department and Community Health Agency, Department of Environmental Health, were contacted for information regarding permits for the site, underground storage tanks, hazardous materials incidents, and general information about the subject site to determine the past uses that may raise environmental concerns. The investigation found no records for the subject site.

Federal and state lists and databases were reviewed to determine the presence of known environmentally impaired sites within the immediate area of the property and to determine their impact, if any, to the subject site. The search radius extended one mile. No database mapped sites were found in EDR's search of available government records for the study area, other than those already identified for the La Certe Property.

Aerial photographs on file at the Riverside County Flood Control and Water Conservation District were examined by LOR at various time intervals from 1949 through 2000 to investigate the past use of the site and the surrounding region. EDR provided historic aerial photographs from 1953 through 2002, which were also examined. Along with the public and governmental agency interviews and literature research, a site visit of the property was conducted. The site visit was conducted in order to determine current uses of the site and the potential for soil or possible groundwater contamination based on above-ground visual observation.

A Limited Site Characterization was conducted to determine if potential pesticide use at the site had included organochlorine pesticides, because of the history of farming activities since at least the 1940s. The results of the initial analysis indicated relatively low concentrations of organochlorine pesticides near the surface soils. Trace concentrations of DDE, a metabolite of DDT, detected in ten of the soil samples, indicates that DDT was used on the site a long time ago. The concentrations reported are below the EPA's preliminary remediation goals for residential soils. According to LOR, the results indicate no further testing for pesticides is necessary and unrestricted use of the property is warranted.

During a site visit, observations were made of existing structures on the subject site. Structures include a small shed near an irrigation groundwater production well near the northeast corner of

the site, a pool at the former RV Park, and a 20,000-gallon water AST. Power lines and associated poles were present along Ramona Expressway, but there were no signs of leaking transformers noted. High voltage power transmission lines and associated towers were present. Illegal dumping of household trash and debris occurred at portions of the site. According to LOR, all of the material appeared suitable for disposal in a Class III landfill.

Pfeifer Property Phase I

A Phase I Environmental Site Assessment was completed by LOR Geotechnical Group, Inc. in April 27, 2004 for the Pfeifer Property which includes a small portion of the Lakeview Mountains and a very small portion of the Pinnacle Village. The extent of the Phase I ESA consisted of approximately 57 acres of mostly vacant land with a small part that had been used agriculturally throughout its researched history, including dry land farming.

During LOR's research, various public agencies and individuals were contacted in order to provide information regarding the previous and current uses of the site areas with respect to environmental impairments. Federal and state lists and databases were reviewed to determine the presence of known environmentally impaired sites within the immediate area of the study area and to determine their impact, if any. The search radius was expanded one mile, and no database mapped sites were found in EDR's search of available government records within the expanded search radius, other than those already identified in the Lakeview Thoroughbred Farm and Amway Property Phase I ESA's.

Aerial photographs were examined by LOR at various intervals between 1949 through 2000 to investigate the past use of the site and the surrounding region. Also, a site visit was conducted to determine current uses of the site and the potential for soil and/or possible groundwater contamination based on above-ground visual observation. The site visit concluded that there were no structures or utilities observed at the site, no significant trash or debris was present, and no drums, barrels, or other containers were found at the site.

Sherman Ranch Phase I

A Phase I ESA covering the Park Village, Foothill Village, and the Pinnacle Village was completed by LOR Geotechnical Group, Inc., as shown on **Figure 5.7-1, Village Organization Plan and Phase I ESAs**. The ESA, referred to as the Sherman Ranch Phase I, was completed on November 18, 2003 and assesses the south-central portion of THE VILLAGES OF LAKEVIEW Specific Plan property consisting of approximately 441 acres of agricultural property. The property covered by Sherman Ranch Phase I ESA had been used agriculturally throughout its researched history, for both dry land farming and pasture land. A single-family residence and associated structures were formerly present at the site from at least the late 1940s to no later than the early 1960s.

A review of the aerial photographs and owner interviews confirmed the subject site was historically used as dry land farming. Farming at the site began in the 1920s. Recent dry land farming activities include potato crops.

The County of Riverside Department of Public Health identified no records of accidental spills of hazardous materials on the subject site. An environmental database search for information regarding landfills, underground storage tanks, and hazardous waste sites was performed. Mapped sites were found in EDR's search of available government records. **Table 5.7-C, Sherman Ranch Phase I ESA Database Results**, identifies recorded sites.

Due to this extended agricultural history, LOR performed a Limited Site Characterization which involved sampling of the near surface soils for organochlorine pesticides. There were 42 soil samples taken, and trace concentrations of DDE were detected in twenty-two samples, which indicate that DDT was used on the site a long time ago. The concentrations reported were well below the EPA's preliminary remediation goals in residential soils. According to LOR, these tests indicate no further testing for pesticides is necessary and unrestricted use of the property is warranted.

Table 5.7-C
Sherman Ranch Phase I ESA Database Results

Database	Distance in miles	Results	Summary
State Database			
CHMIRS	2.0	4 sites	The closest site is approximately 2,300 feet west-southwest of the subject site, and involved drug waste found during a drug bust. The other three sites were listed for drug lab wastes and an envelope with sugar.
CORTESE	2.0	3 sites	The closest site is approximately 1,700 feet away, and listed as having leaking underground storage tanks.
WMUDS/SWAT	1.5	2 sites	One site, the composting plant, is listed with prime waste that is nonhazardous solid waste. The second site is the brine facility, described as the former Nutrilite plant that had a brine pond for its vegetable process wastewater, which has been closed.
LUST	1.5	2 sites	Both sites were listed at the Nutrilite facility, one tank was removed while the other site was a case closed status.
UST	0.75	2 sites	The site is the MWD Inland Feeder Pressure Control Structure.

Table 5.7-C, Sherman Ranch Phase I ESA Database Results, above, shows the sites that are listed within two miles of the properties covered in the Sherman Ranch ESA. Four of the listings involved drug wastes and do not pose a hazard to future development. The CORTESE and LUST database lists three leaking underground storage tanks, which are closed and are discussed in more detail above in connection with the Nutrilite facility discussion (see **Table 5.7-B**). The WMUDS/SWAT lists the Lakeview Burn Dump, which is in the process of being remediated, and the Nutrilite brine pond, which was tested and closed. The UST lists the MWD Inland Feeder Pressure Control which is not in violation nor have any reports been made regarding the site.

Abudayyeh Land Phase I

The Abudayyeh Land Phase I ESA, completed on August 29, 2003 by LOR, covers the center of the Foothill Village and the south-central portion of the Park Village. This Phase I ESA included eight parcels, which are approximately 75 acres of vacant agricultural property. This property has been used agriculturally throughout its researched history, for both dry land farming and pasture land.

Based on a review of aerial photos from 1949 through 2000, the site was comprised of agricultural land used for dry land farming. There was evidence of recent sheep grazing across the site. Site vegetation was primarily dry stubble from farming activities with some native vegetation. Some minor drainage features were observed across the site. Some concrete irrigation structures were observed along the northeast side, and some utility poles were noted along the eastern half of the northern border. A significant amount of household trash and debris consisting of green waste, appliances, furniture, carpet, roofing material, vehicle remnants, and empty oil containers were also noted on the site, but according to LOR, the material appears suitable for disposal within a municipal landfill or recycling.

Information regarding landfills, underground storage tanks, and hazardous waste sites were found in EDR's search of available government records, as shown in **Table 5.7-D, Abudayyeh Land Phase I ESA Database Results**.

Table 5.7-D
Abudayyeh Land Phase I ESA Database Results

Database	Distance in miles	Results	Summary
State Database			
CHMIRS	2.0	4 sites	The closest site is approximately 2,300 feet west-southwest of the subject site, and involved drug waste found during a drug bust. The other three sites were listed for drug lab wastes and an envelope with sugar.
CORTESE	2.0	3 sites	The closest site is approximately 1,700 feet away, and listed as having leaking underground storage tanks
WMUDS/SWAT	1.5	2 sites	One site is the composting plant with prime waste that is nonhazardous solid waste. The second site is the Brine Facility. The former Nutrilite plant that had a brine pond for its vegetable process wastewater, which has been closed.
LUST	1.5	2 sites	Both sites were listed at the Nutrilite facility, which was closed.
UST	0.75	2 sites	The site is the MWD Inland Feeder Pressure Control Structure.

The results of the database search were the same listed sites as the Sherman Ranch Phase I ESA.

Research indicated that the site has had farming activity, mostly dry land, since at least the 1940s. Due to the extended agricultural history, LOR performed a Limited Site Characterization

which involved sampling of the near surface soils for organochlorine pesticides. Seven samples were tested, and trace levels of DDE were detected in all seven samples, which indicate that DDT was used on the site a long time ago. According to LOR, the levels reported were below the EPA's preliminary remediation goal for DDE in residential soils. These tests results indicate no further testing for pesticides is deemed necessary.

Lakeview Thoroughbred Farm Phase I

The Lakeview Thoroughbred Farm Phase I ESA, completed on September 22, 2003, covers the Garden Village and the western portion of the Foothill Village, which includes 12 parcels, totaling approximately 153 acres. The present and past site usage has generally been a horse farm and rural residential. Based on a study of historical aerial photos, site usage prior to the horse farm and residential uses, which was first present in photos from 1974, was dry land farming, which was present in photos dated 1948 and 1962.

The Thoroughbred Farm Phase I ESA documented that the structures on the site included seven residences, a large maintenance shop, several stables, corrals, and three water wells. The three water wells, two existing and one abandoned, are known to be present on the site. One of these water wells is used primarily for irrigation purposes. The depth to groundwater for these wells is estimated to be approximately 300 feet below the ground surface, according to the owner of the well. Subsurface structures such as septic tanks, leach lines, irrigation lines, and underground utilities are expected to be encountered during site demolition and grading. Due to the age of some of the structures addressed in this Phase I ESA area, materials containing asbestos and lead based paint may be present; however suspected asbestos containing materials were not observed in the buildings during the site visit.

Debris, trash, drums, and containers with waste petroleum products and two ASTs were noted at the site. Based on LOR's observation of the debris and trash on the site, the trash appears suitable for disposal in a municipal landfill, and the drums and ASTs can be recycled.

Information regarding landfills, underground storage tanks, and hazardous waste sites were found in EDR's search of available government records as shown in **Table 5.7-E, Lakeview Thoroughbred Farm Phase I ESA Database Results**.

Table 5.7-E
Lakeview Thoroughbred Farm Phase I ESA Database Results

Database	Distance	Results	Summary
Federal Database			
RCRIS- Sm. Quantity Generator	0.75	2 sites	Sites were the Miller Hunter Trucking Co. and Innovative Industries. Neither had reported violations. Innovation Industries was listed for its generation of paint and solvent waste, and manufacturing of fiberglass products.
ERNS	0.5	1 site	The site was reported for drug lab waste
State Database			
CHMIRS	1.5	5 sites	Three sites were listed because of drug labs. One site

			was listed because of a report of white powder which ended up being sugar, and the last site was reported as an incident involving a combination of cleaning solutions and materials.
CORTESE	1.5	3 sites	All three sites were due to leaking USTs. One site at the Nutrilite facility had a soil-only diesel contamination, and was closed in 1995. Two sites, Hy-Line International and Nuview Union School District were closed in 1997 and 1999.
WMUDS/SWAT	1.0	1 site	The site is the Lakeview Composting Plant.
UST	0.75	1 site	The site is the MWD Inland Feeder Pressure Control Structure. The site is listed with two USTs.
Hist. UST	0.75	1 site	The site is AAA Egg Farms, and is listed as having a 1,000-gallon waste UST and a 5,000-gallon diesel UST.

The results of the database search included the sites listed in the above tables as well as the AAA Egg Farm and the Miller Hunter Trucking Company, which were listed sites in previous Table 5.7-E.

LOR's research indicated that the site has had farming activities dating back to at least the 1940s. Due to the extended agricultural history, a Limited Site Characterization was performed involving fifteen samples taken near the surface soils for organochlorine pesticides. The results of the testing indicated no significant organochlorine pesticides were present in the surface soils. Trace levels of DDE were detected in two of the fifteen samples, which indicate that DDT was used on the site a long time ago. The concentrations reported are all below the EPA's preliminary remediation goals for residential soils. These test results indicate that no further testing for pesticides is deemed necessary and unrestricted use of the property is warranted.

Based on review of LOR's six Phase I ESA's for property within the project site, including the database reviews, aerial photographs and soils tests, there does not appear to be any recognized environmental conditions within or near the proposed project.

Properties Not Covered by Phase I ESAs

Some of the LOR Phase I ESAs include aerial photographs from various years between 1938 and 2002. Between all the photos in the various reports, all of THE VILLAGES OF LAKEVIEW site is covered. In addition, current (2007) aerial photographs were used. These photographs were reviewed to determine if site characteristics of the properties "not covered by the Phase I ESA's" exhibit the same characteristics as adjacent properties covered by the reports, or if additional information is needed. This evaluation, coupled with the Database Results which overlap all properties within the site, present a setting for these "not covered" properties and complete the total site characterization.

The "not covered" property located adjacent to and south of the Abudayyeh Land Phase I is consistent with the Abudayyeh Land Phase I analysis as identified through historic photos of the property. Prior to 1990, the property was vacant. Photos reveal that beginning in 1990 dry land farming consistent with that conducted on the Abudayyeh was commenced on this property. (Figure 5.7-1)

Property which is “not covered” and located northwest of the Amway Property ESA is identified in that ESA as a fenced-in compound for a compost processing operation. The property includes large stockpiles of vegetation debris and manure, which it processes through blending then trucks out the final compost. This activity would result in a setting similar to the Thoroughbred Farm in terms of organic materials in the soils. Potential contamination from farm equipment used on the site would be similar to the Amway and other ESA’s where agricultural activities are present. Historically, photographs back as far as 1938 show that the northern two thirds of the area “not covered” was in the floodway and left in a natural state. The first photo showing human activity on this portion of the area was in 1989. The southern third of this area appears to have been actively farmed as early as 1953.

Property located between the Sherman Ranch and Abudayyeh Land is consistent with the Sherman Ranch and Abudayyeh Land Phase I’s analyses, as identified through historic photos of the property. The property was historically used as dry land farming and appears to have the same uses as the Sherman Ranch property.

The McAnally Chicken Ranch is located south of the Amway Property. The Amway Property ESA identified the McAnally facility as containing an above-ground storage tank and a variety of hazardous materials used for operation and maintenance of its machinery and equipment. The McAnally Chicken Ranch property also includes a retention basin, stockpiles of manure waste for processing, an area of dumped debris, including vegetation, soil, household appliances, furniture, tires, and assorted trash. The Amway Phase I report identifies that no visual evidence of hazardous materials or wastes was observed amongst the debris. Drive-by observations indicated the facility is unlikely to pose a significant risk of environmental impact to the subject site.

Based on historic aerial photos and the *Microsoft Virtual Earth* 2007 photos, the property located between the Amway Property ESA and La Certe Property ESA has consistently contained a residence or other structures at the base of the hills since the 1950s. Currently the site contains fallow farmland, a possible vegetable stand, a residence with a hangar (airplane visible in current photos), other storage structures, and an above-ground unidentified storage tank. The majority of this property appears to have been used as agriculture since 1953, as determined by the historic aerial photographs.

The small strips of “not covered” property located south of Sherman Ranch above the toe of the slope, is generally undisturbed other than by off-road vehicle trails. No large areas of dumping were evident through review of current aerial photos. Historic photos show the area as undisturbed above the toe of the slope.

Surrounding Facilities

Lakeview Burn Dump

The Lakeview Burn Dump, listed as a state landfill through the State Landfills database search in the May 20, 2003 Phase I ESA, is located adjacent to the northern boundary of the project (see **Table 5.7-B and Figure 5.7-1**). It was listed as closed in 1976. A history of the burn dump was obtained by LOR from the ~~County of Riverside, Department of Environmental Health, Solid~~

~~Waste Division and the County of Riverside, Waste Management Division Riverside County Waste Management Department (RCWMD).~~ According to these sources, the Lakeview Dump was a burn site from 1951 through 1971, when it was closed. The site is 7.1 acres in size and based on County records, accepted municipal waste for burning. When closed in 1971, only a small layer of dirt was placed over the landfill. In 1997, the site was re-graded due to erosion problems and a two-foot cover of soil was placed over the burn dump.

In 2003, LOR conducted an Initial Draft Waste Characterization for the Lakeview Burn Dump in which seven trenches were excavated over the site with one sample taken within the trash layer and one sample of the underlying native soil. The seven trenches indicated there was approximately one-foot cover of clean soil over the trash layer. The trash varied in thickness from about 3.5 feet thick at the edges up to a maximum of 10 feet thick. The native soils underlying the trash layer were relatively fine-grained sandy silt soils. Lead was present in the five trash samples, as well as copper in one trash sample, at concentrations that exceed 10 times the Soluble Threshold Limit Concentration (STLC).

To comply with the State Department of Toxics Substances Control (DTSC) “Protocol for Burn Dump Site Investigation and Characterization,” a Work Plan was submitted to and approved by Santa Ana Region of the California Regional Water Quality Control Board. In accordance with the Work Plan, eleven additional trenches were placed throughout the site to supplement information gathered in the Initial Draft Characterization. According to LOR, based on this additional data obtained, there is approximately 40,000 cubic yards of refuse buried at the site. The refuse covers approximately 6 acres and ranges in depth from less than one foot to about 10 feet. The most common Compound of Concern is lead and was detected in all samples. Also detected in some of the samples, were cadmium, copper, chromium, and zinc. Additional testing for these metals using the Soluble Threshold Limit Concentration, Toxicity Characteristic Leaching Procedure, and DI-Wet method was performed and the results were all below the regulatory limits except for one sample of cadmium and one for copper which were just above the Soluble Threshold Limit Concentration.

The burn ash compounds of concern are typically not readily soluble in water and represent a low probability of leaching to groundwater. Ph testing results indicate the material is normal to slightly alkaline, further confirming a low probability of potential leaching to groundwater.

~~As of December 2007, the status of the Lakeview Dump⁺ is that the County Solid Waste Management Division is in the process of completing the CEQA approvals necessary to address the potential impacts of remediation of the dump site. In July 2008, the County of Riverside Board of Supervisors approved the remediation and clean closure of the Lakeview Disposal Site under a mitigated negative declaration. The work will be conducted under the oversight of the RCWMD and other appropriate environmental oversight agencies. Following that process, the County will be contracting for remediation of the burn dumpsite which will include removal of materials to an appropriately-licensed facility and the replacement of the soil through import of clean dirt. Following remediation, the burn dumpsite will pose no threat to the public and~~

⁺ ~~Personal communication between Cathy Perring of Webb Associates, and Leslie Likins of County Solid Waste Management, 12-10-07.~~

limited passive uses can occur on the site; no setbacks for development will be required. ~~The project proposes a drainage channel through the dumpsite after it is remediated. The County Solid Waste Management Division and the Master Developer have negotiated a Memorandum of Understanding regarding such use of the dump site after remediation (see Appendix G (CD #3)).~~ The remediation of the burn dump is not a part of THE VILLAGES OF LAKEVIEW Specific Plan.

The Nutrilite Facility

Based on LOR's research and a public records request from the Southern California Air Quality Management District, the Nutrilite manufacturing facility, as shown on **Figure 5.7-1**, operated by Amway, processes food crops into food grade supplements and additives for a variety of their products, mostly vitamins and powdered drinks. The Nutrilite facility's manufacturing operation reportedly produces non-hazardous organic wastes. All industrial wastewater is discharged to lined evaporation basins adjacent to and southeast of the facility. Sanitary wastes from this facility are discharged into on-site septic systems. The facility has machinery and equipment which use petroleum products and other hazardous materials for their operation and maintenance. Small quantities of hazardous laboratory wastes are also generated at this facility. All hazardous waste materials generated at this facility are collected by a certified hazardous waste contractor for disposal or recycling. Examination by LOR of their hazardous material storage areas indicated this facility poses no significant risk of environmental impact to the subject site.

The Nutrilite compound facility exists southeast of the Nutrilite manufacturing facility. This compound facility handles the farming operations with a variety of farm related equipment, materials, and supplies stored there. An approximately 500-gallon above-ground diesel storage tank exists at this compound facility along with various containers of fluids for operation and maintenance of the farm equipment. The hazardous wastes generated by this farming operation are collected by a certified hazardous waste contractor for disposal or recycling. This facility formerly had a leaking underground storage tank which was remediated. LOR indicated that this facility is unlikely to pose a significant risk of environmental impact to the project site from its current operations. This facility is not a part of THE VILLAGES OF LAKEVIEW Specific Plan.

The Metropolitan Water District Facility

The Metropolitan Water District facility, as shown on **Figure 5.7-1**, consists of large subterranean valves and other pressure control structures for the underground aqueduct connecting Lake Mathews and Lake Perris to Diamond Valley Lake. A large detention basin exists in this facility to allow for evacuation of the water in the aqueduct pipeline. LOR indicated that there was no anticipated environmental impact related to hazardous materials from this facility to the proposed project. This project will not be developed by THE VILLAGES OF LAKEVIEW Specific Plan.

Innovation Industries

Innovation Industries is a manufacturer of fiberglass products, and was listed as an EPA RCRIS Small Quantity Generator on **Table 5.7-E, Lakeview Thoroughbred Farm Phase I ESA Database Results**, because of its generation of paint and solvent waste. The facility was reported

with no violations found. LOR has indicated that the site does not pose a significant hazardous material threat to the subject site or project due to lack of violations filed against this facility.

Emergency Response Plan

The increased use, storage, and transportation of numerous hazardous materials throughout the County as a whole, creates additional hazardous materials threats to people and the environment. The threat is further complicated by the September 11, 2001 terrorist attacks on the World Trade Center in New York, causing federal mandates for all localities to prepare for potential terrorist activities. The County Office of Emergency Services (OES) is located in downtown Riverside.

County OES is responsible for developing emergency plans and actions in response to actual or potential disasters which may impact all or part of Riverside County. County OES designs and conducts exercises for different scenarios and coordinates emergency management training to ensure that the County is able to respond to natural, human caused and technological emergencies. OES coordinates the interagency response for a wide range of emergencies including: earthquake, terrorism, wildfires, flooding, extreme heat and severe weather, utility outages, droughts, transportation accidents, hazardous materials releases and civil unrest.

County OES fulfills a wide variety of roles, from the field response to emergency incidents within the County, to operating the County EOC in supporting and recovering from major emergencies and disasters. All County OES activities are focused around the four primary phases of emergency management; Mitigation, Preparedness, Response and Recovery. OES is the lead agency in fulfilling the County's responsibility under the California Emergency Services Act (Chapter 7 of Division 1 of Title 2 of the CA Government Code) and also serves as the Operational Area Coordinator for Riverside County under the Standardized Emergency Management System (CA Government Code 8605).

The Office of Emergency Services prepared the Riverside County Operational Area Emergency Operations Plan (EOP), which addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies in or affecting Riverside County. This EOP was designed to establish the framework for implementation of the California Standardized Emergency Management System for Riverside County, which is located within Mutual Aid Region VI as defined by the State OES.

Along with the Office of Emergency Services, the CDF/Riverside County Fire Department's main Emergency Command Center is located in the City of Perris at CDF's Riverside Unit and Riverside County Fire Department's headquarters. It is one of the largest regional fire service organizations in California. This facility is located approximately eight miles from the project site.

CDF/Riverside County Fire Department is dedicated to cooperative fire services and the Perris Emergency Command Center (ECC) is responsible for three primary functions:

1. The Perris ECC is a full service regional command center providing dispatch service to all unincorporated County areas, 16 contract cities, and one Community Services District. The

Perris command center is staffed 24 hours a day, 7 days a week, 365 days year and utilizes three overlapping shifts. This allows for at least eight Public Safety Communication Officers (PSCO) plus a Senior PSCO and a Fire Captain to be on duty during daily high activity periods, usually 10:00 a.m. to 10:00 p.m. Fully trained, volunteer call-takers augment the career Public Safety Communication Officers.

2. The Perris ECC command center is part of CDF's three-level command and control structure utilized for the day-to-day operations of the department and for dealing with emergency incidents. The purpose of the command center is to receive reports of emergencies from a variety of sources, allocate resources based on preplanned response criteria, coordinate interagency incident activities, support the incident as needed, provide internal and external information, and document the activity.

CDF crews and equipment are a familiar sight throughout the state with responsibility for the protection of over 31 million acres of California's privately-owned wildlands. The Perris ECC is directly responsible for command and control as these resources respond up and down the state.

3. The Perris ECC is the Governor's Office of Emergency Services (OES) Local Area Coordinator for the California Fire Service and Rescue Emergency Mutual Aid System. The purpose of the plan is to provide for systematic mobilization, organization, and operation of necessary fire and rescue resources of the state and political subdivisions in mitigating the effects of disasters, whether natural or man-caused.

This is a statewide plan to facilitate mutual aid to local fire departments, which are faced with a disaster: fire, flood, earthquake, hazmat, or other emergency, that is beyond the ability of the local fire department to mitigate without loss of life or property.

Surrounding Areas Emergency Response Plans

The Disaster Mitigation Act of 2000 was passed by the United States Congress and signed into law on October 20, 2000. The Act reinforces the importance of planning and preparation for disasters in an effort to reduce disaster losses. The Act streamlines administration of disaster relief and programs to promote mitigation activities.

According to the City of Perris's General Plan, the City adopted a Multi-Hazard Functional Plan in 1995. The plan was designed to address planned response to extraordinary emergency situations, either man-made or naturally caused. Riverside County prepared a revised multi-agency Multi-Hazard Functional Plan, in response to the directives of the Disaster Mitigation Act. The revised plan includes the City of Perris, and the current multi-agency plan replaced the City of Perris' 1995 Multi-Hazard Functional Plan. This plan covers the project's planning area in regards to emergency response and emergency evacuations and is applied to the County of Riverside's Fire Departments practices.

Wildland Fires

Due to its weather, topography, and native vegetation, nearly all Southern California is at some risk from wildland fires. The extended droughts characteristic of California's Mediterranean climate result in large areas of dry vegetation that provide fuel for wildland fires which can spread into urban areas.

Wildland-urban fires occur when a fire burning in wildland vegetation gets close enough to ignite urban structures. Areas of dense, dry vegetation, particularly in canyon areas and hillsides, pose the greatest wildland fire potential.

Many factors contribute to an area being at risk or structural fire in terms of the local fire departments capabilities to control them, including the construction size and type, built-in protection, density of construction, street widths, and occupancy size.

According to the California Fire Alliance, the Lakeview Community within Riverside County is listed as a "community at risk." To help protect people and their property from potential catastrophic wildfire, the National Fire Plan (NFP) directs funding to be provided for projects designed to reduce the fire risks to communities. The USDA Forest Service and the Department of the Interior agencies are in the third year of successful implementation of NFP activities. The NFP was developed in August 2000, following a landmark wildland fire season, with the intent of actively responding to severe wildland fires and their impacts to communities while assuring sufficient firefighting capacity for the future. The NFP addresses five key points: firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

A step towards obtaining this goal was the identification of communities that are at high risk of damage from wildfire. These high-risk communities, identified within the wildland-urban interface, the area where homes and wildlands intermix, were published in the Federal Register in 2001. The list represents the collaborative work of the 50 states and five (5) federal agencies using a standardized process, whereby states were asked to submit all communities within their borders that met the criteria of a structure at high risk from wildfire.

Also, Riverside County has adopted Public Resource Code 4290, stating that regulations shall include all of the following:

- 1) Road standards for fire equipment access.
- 2) Standards for signs identifying streets, roads, and buildings.
- 3) Minimum private water supply reserves for emergency fire use.
- 4) Fuel breaks and greenbelts.

These regulations apply to the perimeters and access to all residential, commercial, and industrial building construction within state responsibility areas approved after January 1, 1991. In addition to these regulations, Riverside County Ordinance No. 787 applies to all projects within the County. Ordinance 787 requires all water mains and fire hydrants providing fire flow be

constructed per the California Fire Code. It also requires review and approval from the County Fire Department.

Sources of wildland fire risk to the project site from surrounding properties include the open and natural state of the San Jacinto Wildlife Area and the abutting Lakeview Mountains.

The changing climate resulting from global warming could alter fire regimes in ways that could have social, economic, and ecological consequences. As discussed in Section 5.3, Air Quality, another impact of climate change/global warming is increased fire hazard. Background information on climate change/global warming can also be found in Section 5.3, Air Quality.

According to the California Climate Change Center (CEC 2005), there are three projected warming scenarios referred to as the low, medium, and high range. These increases from 2000 to 2100 vary from approximately 1.7°C–3.0°C (3.0°F–5.4°F) in the lower range of projected warming, 3.1°C–4.3°C (5.5°F–7.8°F) in the medium range, and 4.4°C–5.8°C (8.0°F–10.4°F) in the higher range. Conservative estimates indicate the risk of large statewide wildfires, characterized as approximately 500 acres or larger, would rise almost 35 percent by 2050 and 55 percent by 2100 under the medium temperature increases described previously. Under the low warming range, the increased risk of wildfires is nearly cut in half (CEC 2005).

Thresholds of Significance

Riverside County has not established local CEQA significance thresholds as described in Section 15064.7 of the CEQA Guidelines. However, the Riverside County’s “Environmental Assessment Form: Initial Study” (Environmental Assessment Number: 39816) which is part of the Notice of Preparation for the subject project (see Appendix A (CD #3) of this document), indicates that hazard impacts may be considered potentially significant if the project would:

- A. Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials;
- B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- C. Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan;
- D. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- E. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; and
- F. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Potential impacts related to hazards from close proximity to an airport were found to be less than significant in the Initial Study/NOP prepared for this project (Appendix A (CD #3)).

Related Regulations

A number of federal, state, and local laws have been enacted to regulate the management of hazardous materials. Implementation of these laws and management of hazardous materials are regulated independently of the CEQA process through programs administered by various agencies at the federal, state, and local levels. An overview of the key hazardous materials laws and regulations that apply to the proposed project are provided below.

Federal and state regulations govern the renovation and demolition of structures where materials containing lead and asbestos are present. These requirements include: Part 61, Subpart M of the Code of Federal Regulations (pertaining to asbestos) and lead exposure guidelines provided by the U.S. Department of Housing and Urban Development (HUD). Some structures on the site will be demolished, therefore, these regulations will be required to be met.

Federal

Several federal agencies regulate hazardous materials. These include the EPA, the Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Applicable federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). In particular, CFR Title 49 governs the manufacture of packaging and transport containers; packing and repacking, labeling, and the marking of hazardous material transport. Other federal regulations such as the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), and the Superfund Amendments and Reauthorization Act (SARA), regulate the cleanup of known hazardous waste sites. These agencies keep lists of known sites; these and other lists of known sites with hazardous materials contamination potential are checked to determine if any portion of the project site will be affected.

The EPA is the primary federal agency responsible for the implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the federal level is delegated to state and local environmental regulatory agencies.

In addition, with respect to emergency planning, the Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency management at the federal, state, and local levels. This includes the development of a national capability to mitigate against, prepare for, respond to and recover from a full range of emergencies.

State

Primary state agencies with jurisdiction over hazardous chemical materials management are the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB). Other state agencies involved in hazardous materials management are the

Department of Industrial Relations (State OSHA implementation), Office of Emergency Services (OES-California Accidental Release Prevention implementation), Department of Fish and Game (DFG), Air Resources Board (ARB), Caltrans, State Office of Environmental Health Hazard Assessment (OEHHA-Proposition 65 implementation) and the California Integrated Waste Management Board (CIWMB). The enforcement agencies for hazardous materials transportation regulations are the California Highway Patrol (CHP) and California Department of Transportation (Caltrans). Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulation. In addition, South Coast Air Quality Management District Rules and Regulations pertaining to asbestos abatement (including rule 1403), Construction Safety Orders 1529 (pertaining to asbestos) and 1532.1 (pertaining to lead) from Title 8 of the California Code of Regulations will be required due to demolition of the chicken ranch and other structures on the project site which were constructed prior to 1978.

California Environmental Protection Agency

The California EPA (Cal/EPA) has broad jurisdiction over hazardous materials management in the state. Within Cal/EPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law.

Along with the DTSC, the RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

Department of Toxic Substances Control

The DTSC regulates hazardous waste in California primarily under the authority of the Federal Resource Conservation and Recovery Act (RCRA), and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reductions, cleanup, and emergency planning. Under RCRA, DTSC has the authority to implement permitting, inspection, compliance, and corrective action programs to ensure that people who manage hazardous waste follow state and federal requirements. As such, the management of hazardous waste of the nature and quantities which are regulated that is disposed of, treated, stored, or handled in THE VILLAGES OF LAKEVIEW project site would be under regulation by the DTSC to ensure compliance with state and federal requirements pertaining to hazardous waste. California law provides the general framework for regulations of hazardous wastes by the Hazardous Waste Control Law (HWCL) passed in 1972. DTSC is the state's lead agency in implementing the HWCL. The HWCL provides for state regulation of existing hazardous waste facilities, which include "any structure, other appurtenances, and improvements on the land, used for treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous waste," and requires permits for, and inspections of facilities involved in generation and/or treatment, storage and disposal of hazardous wastes.

Hazardous Materials Management Plans

In January 1996, Cal/EPA adopted regulations implementing a “Unified Hazardous Waste and Hazardous Materials Management Regulatory Program” (Unified Program). The six program elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, above-ground storage tanks, hazardous materials release response plans and inventories, risk management and prevention program, and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency-the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. For the County of Riverside, CUPA jurisdiction is under the Department of Environmental Health Services. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where the materials are stored on site, to prepare an emergency response plan, and to train employees to use the materials safely. Thus, although it is not anticipated that many businesses within the project will handle the quantities of hazardous materials that require regulations, all businesses within the proposed project will be required to comply with this law if they store or use sufficient quantities of hazardous substances on-site. A gas station, for example would be required to comply.

California Accidental Release Prevention Program (CalARP)

The CalARP program (CCR Title 19, Division 2, Chapter 4.5) covers certain businesses that store or handle more than 500 pounds, 55 gallons, or 200 cubic feet of gas of specific regulated substances at their facilities. The CalARP program regulations became effective on January 1, 1997, and include the provisions of the Federal Accidental Release Prevention program (Title 40, CFR Part 68) with certain additions specific to the state pursuant to Article 2, Chapter 6.95, of the Health and Safety Code.

The list of regulated substances is found in Article 8, Section 2770.5 of the CalARP program regulations and include common cleaning products. However, as the minimum quantity that is regulated is 500 pounds or 55 gallons, it is unlikely that the types of businesses expected to locate within THE VILLAGES OF LAKEVIEW will use such quantities. Such substances in the required quantities might be used by adjacent facilities such as Nutrilite or Innovation Industries.

Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist in federal and state laws 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 obligates 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. For example, manufacturers are to appropriately label containers, Material Safety Data Sheets are to be available in the workplace, and employees are to properly train workers.

Hazardous Materials Transportation

The CHP and Caltrans are the enforcement agencies for hazardous materials transportation regulations. Transporters of hazardous materials and waste are responsible for complying with all applicable packaging, labeling, and shipping regulations. The Office of Emergency Services (OES) also provides emergency response services involving hazardous materials incidents.

Investigation and Cleanup of Contaminated Sites

The oversight of hazardous materials release site often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and RWQCB are the two primary state agencies responsible for issues pertaining to hazardous materials release sites. Air quality issues related to remediation and construction at contaminated sites are also subject to federal and state laws and regulations that are administered at the local level.

Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. These regulations would be applied during demolition, grading activities if previously unknown underground tanks were uncovered, and known remediation activities such as clean-up of the adjacent burn dump.

Siting of Schools

The California Education Code (Section 17210 *et seq.*) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. The code requires that, prior to commencing the acquisition of property for a new school site, an environmental site investigation be completed to determine the health and safety risk (if any) associated with a site. Recent legislation and changes to the Education Code identify DTSC's role in the assessment, investigation, and cleanup of proposed school sites. All proposed school sites that will receive state funding for acquisition and/or construction must go through a comprehensive investigation and cleanup process under DTSC oversight. DTSC is required to be involved in the environmental review process to ensure that selected properties are free of contamination, or if the property is contaminated, that it is cleaned up to a level that is protective of students and faculty who will occupy the new school. All proposed school sites must be suitable for residential land use, which is DTSC's most protective standard for children. The school district will be required to meet these regulations when siting/accepting school sites within the project boundary.

Local

Fire Regulations

Fire codes are important to all building construction. Some additional regulations and safeguards apply to this project due to portions of the site being identified by the state as very high fire risk.

Riverside County has adopted Public Resource Code 4290, stating that development shall include all of the following:

- 1) Road standards for fire equipment access.
- 2) Standards for signs identifying streets, roads, and buildings.
- 3) Minimum private water supply reserves for emergency fire use.
- 4) Fuel breaks and greenbelts.

The Uniform Fire Code established by the International Fire Code Institute and the Uniform Building Code established by the International Conference of Building Officials, both prescribe performance characteristics and materials to be used to achieve acceptable levels of fire protection. Fire policies and regulations include Riverside County Ordinance No. 787, Riverside County Master Fire Protection Plan, the Uniform Fire Code, and the California Building Code. Riverside County Ordinance No. 787 outlines fire protection standards for the safety, health, and welfare of the citizens of the County. Among the items regulated by Ordinance No. 787 are access to a project, storage of hazardous materials, building design, water supply, and brush clearance.

The County of Riverside General Plan Policies, below, refer to the Uniform Building Code (UBC) with respect to various aspects of building code requirements. For clarification, the County of Riverside has adopted the California Building Code (CBC) and the International Building Code (IBC) with respect to overall and/or specific building code issues. For purposes of this DEIR, UBC, CBC, and IBC, whenever used in the text, refer to whatever building code is current and adopted by the County at the time of project development for the particular issue/regulation being referenced in the DEIR.

The Riverside County Master Fire Protection Plan outlines the fire protection performance standards for both rural and urban areas, and establishes guidelines for facility and personnel minimum requirements.

In 2005, the California Building Commission adopted the Wildland-Urban Interface codes which will be effective in 2008. Project proposed development adjacent to the Lakeview Mountains will be subject to these codes. The codes will require local building officials to enforce the use of appropriate construction materials for new buildings in the Wildland-Urban Interface, and the imposition of a 100-foot defensible space clearance.

Riverside County requires the payment of mitigation fees to collect revenue for the establishment of new stations. Riverside County currently requires new development proponents to pay

mitigation fees to help offset the cost of providing new fire facilities. The current Riverside County fire fees are \$400.00 per single-family dwelling unit and \$0.25 per square foot for all other types of development.

Pesticide Contamination

The County of Riverside has not established protocol for the cleanup and handling of pesticide-contaminated soil in agricultural areas. The State Department of Toxic Substance Control is the responsible agency to see that investigations and cleanup of contaminated sites is handled appropriately. As the project contains agricultural properties, DTSC would be responsible if cleanup of pesticide-contaminated soil is required.

General Plan Policies

The following are applicable policies from the County of Riverside General Plan related to hazards. The project's consistency with these policies related to hazards can be found in the General Plan Consistency Table located in Appendix N (CD #4) of the DEIR.

Policies Related to Fire Hazards

S 5.1 Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features through the following:

- a. All proposed construction shall meet minimum standards for fire safety as defined in the County Building or Fire Codes, or by County zoning, or as dictated by the Building Official or the Transportation Land Management Agency based on building type, design, occupancy, and use.
- b. In addition to the standards and guidelines of the Uniform Building Code and Uniform Fire Code fire safety provisions, continue additional standards for high-risk, high occupancy, dependent, and essential facilities where appropriate under the Riverside County Fire Protection Ordinance. These shall include assurance that structural and nonstructural architectural elements of the building will not:
 - impede emergency egress for fire safety staffing/personnel, equipment, and apparatus; nor
 - hinder evacuation from fire, including potential blockage of stairways or fire doors.
- c. Proposed development in Hazardous Fire areas shall provide secondary public access, unless determined otherwise by the County Fire Chief.
- d. Proposed development in Hazardous Fire areas shall use single loaded roads to enhance fuel modification areas, unless otherwise determined by the County Fire Chief.

S 5.6 Ensure coordination between the Fire Department and the Transportation Land Management Agency, Environmental Health Department, and private and public water purveyors to improve fire fighting infrastructure, during implementation of the County's capital improvement programs, by obtaining:

- replacement and/or relocation of old cast-iron pipelines and inadequate water mains when street improvements are planned;
- assessment of impact fees as a condition of development; and
- redundant emergency distribution pipelines in areas of potential ground failure or where determined to be necessary.

S 5.8 Periodically review inter-jurisdictional fire response agreements, and improve fire fighting resources as recommended in the County Fire Protection Master Plan to keep pace with development, including construction of additional high-rises, mid-rise business parks, increasing numbers of facilities housing immobile populations, and the risk posed by multiple ignitions, to ensure that:

- Fire reporting and response times do not exceed those listed in the County Fire Protection Master Plan identified for each of the development densities described;
- Fire flow requirements (water for fire protection) are consistent with Insurance Service Office recommendations; and
- The planned deployment and height of aerial ladders and other specialized equipment and apparatus are sufficient for the intensity of development desired.

S 5.9 Continue County Fire Department collaboration with the Transportation Land Management Agency (TLMA) to update development guidelines for the urban/wildland interface areas. These guidelines should include increasing the development area to at least 30 feet past the usual boundary.

S. 5.10 Continue to utilize the Riverside County Fire Protection Master Plan as the base document to implement the goals and objectives of the Safety Element.

S 6.1 Enforce the policies and siting criteria and implement the programs identified in the County of Riverside Hazardous Waste Management plan, which includes the following:

- a. Comply with federal and state laws pertaining to the management of hazardous wastes and materials.
- b. Ensure active public participation in hazardous waste and hazardous materials management decisions in Riverside County.
- c. Coordinate hazardous waste facility responsibilities on a regional basis through the Southern California Hazardous Waste Management Authority (SCHWMA).
- d. Encourage and promote the programs, practices, and recommendations contained in the County Hazardous Waste Management Plan, giving the highest waste

- S 7.1 Continually strengthen the Multi-Hazard Functional Plan and maintain mutual aid agreements with federal, state, local agencies and the private sector to assist in:
- clearance of debris in the event of widespread slope failures, collapsed buildings or structures, or other circumstances that could result in blocking emergency access or regress;
 - heavy search and rescue;
 - fire suppression;
 - hazardous materials response;
 - temporary shelter;
 - geologic and engineering needs;
 - traffic and crowd control; and
 - building inspection.

Policies Related to Emergency Response Plans:

- S 7.2 Encourage the utilization of multilingual staff personnel to assist in evacuation and short-term recovery activities, and meeting general community needs. (AI 97)
- S 7.4 Use incentives and disincentives to persuade private businesses, consortiums, and neighborhoods to be self-sufficient in an emergency by:
- maintaining a fire control plan, including an on-site fire fighting capability and volunteer fire response teams to respond to and extinguish small fires; and
 - identifying medical personnel or local residents who are capable and certified in first aid and CPR.

Policies Related to Hazardous Wastes and Materials:

- S 7.3 Require commercial businesses, utilities, and industrial facilities that handle hazardous materials to:
- install automatic fire and hazardous materials detection, reporting and shut-off devices; and
 - install an alternative communication system in the event power is out or telephone service is saturated following an earthquake.
- S 7.6 Improve management and emergency dissemination of information using portable computers with geographic information systems and disaster-resistant Internet access, to obtain:
- hazardous Materials Disclosure Program Business Plans regarding the location and type of hazardous materials;
 - real-time information on seismic, geologic, or flood hazards; and
 - the locations of high-occupancy, immobile populations, potentially hazardous building structures, utilities and other lifelines.

Project Design Considerations

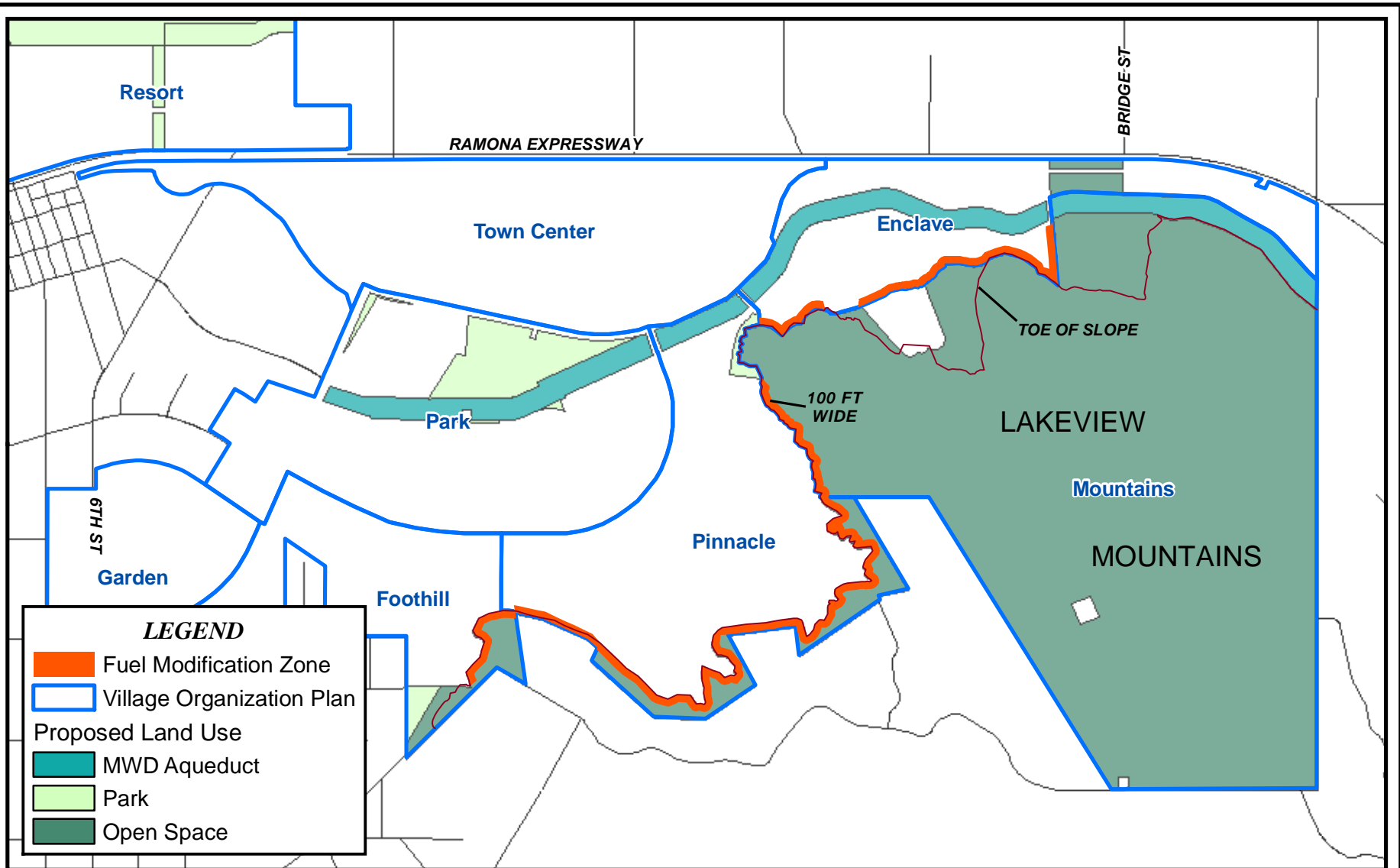
Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts through the design of the project. The proposed residential and commercial uses within the project are not expected to generate substantial use, storage, or handling of hazardous materials.

All private and public roads will be designed to meet fire code to allow emergency access and proper evacuation routes; and all buildings will be constructed to current building code to decrease the risk of potential fire damage. As shown on **Figure 5.7-2, Fuel Modification Zone**, a fire fuel modification zone will be created along the urbanized edge of the Lakeview Mountains to protect any adjacent development from wildland fires. The 100-foot wide fuel modification zone will be located within the affected Planning Areas, not within the Open Space Conservation area. To address impacts related to wildland fires, the project incorporates the following methods to decrease wildland fire potential: (1) creates a fuel modification zone setback that buffers development from high fire risk areas, which includes maintaining brush clearance to reduce potential fuels; (2) establishes design guidelines that recommend low fuel landscaping; (3) utilizes fire-resistant building techniques and materials; and (4) establishes a strategy around cultural resources for protection during fire suppression, fuels reduction activities, and damage assessment by qualified archaeologists.

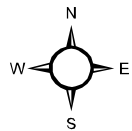
THE VILLAGES OF LAKEVIEW Specific Plan includes Circulation System Development Standards in Section B.2.d., Standard 14, related to emergency access as listed below. These Development Standards are required of the project.

B.2.d. Circulation System Development Standards:

14. To meet fire and emergency services needs, the tentative tract map(s) shall provide adequate access per County Fire Department requirements.



Source: SP No. 342



0 1,000 2,000 3,000 Feet

Figure 5.7-2

Fuel Modification Zone

The Villages of Lakeview EIR No. 471

Environmental Impacts Before Mitigation

Threshold A: *Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials.*

The proposed project will consist of the construction of a predominantly residential community, including some commercial uses, schools, parks, public facilities, and open space; which are not uses which typically require the routine transport, use, or disposal of hazardous materials. The introduction of new commercial uses may result in the use of hazardous materials and/or the generation of hazardous materials.

While there is a possibility that new commercial uses that are proposed could transport, use, store, or dispose of small quantities of hazardous materials, at the specific plan level, it is impossible to know which specific commercial uses will be built and to quantify the future amount of hazardous materials that might be used by future commercial uses.

Exposure of persons to hazardous materials could occur in the following manners: improper handling or use of hazardous materials or hazardous wastes during construction or operation of future developments, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion or other emergencies. The types and amounts of hazardous materials would vary according to the nature of the activity. In some cases, it is the type of hazardous material that is potentially hazardous; in others, it is the amount of hazardous material that could present a hazard.

Whether a person exposed to a hazardous substance would suffer adverse effects depends upon a complex interaction of factors that determine the effects of exposure to hazardous materials: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form (e.g., liquid, vapor) and characteristics (e.g., toxicity) of the material; the frequency and duration of exposure; and the individual's unique biological characteristics such as age, gender, weight, and general health.

Although the overall quantity of hazardous materials and waste generated in the project area could increase, all new developments that handle or use hazardous materials would be required to comply with the regulations, standards, and guidelines established by the EPA, state and County of Riverside related to storage, use, and disposal of hazardous materials.

Both the federal and state governments require all businesses that handle more than a specified amount of hazardous materials to submit a business plan to the appropriate regulating agency. Specifically, any new business that meets the specified criteria must submit a full hazardous materials disclosure report that includes an inventory of the hazardous materials generated, used, stored, handled, or emitted; and emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. The plan needs to identify the procedures to follow for immediate notification to all appropriate agencies and personnel in the event of a release, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators of the business, a listing and location of emergency equipment at the business, an

evacuation plan, and a training program for business personnel. Therefore, any potential commercial/non-residential use built within the project which might utilize hazardous materials, would be regulated under the federal and state requirements as listed above, and any potential impacts regarding the handling of hazardous materials will be **less than significant without mitigation**.

***Threshold B:** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.*

The Phase I reports evaluated whether there is a potential for certain hazardous materials to exist on the properties via a records search, site reconnaissance, interviews, review of aerial photographs and historical maps. Not all properties located within Specific Plan No. 342 were evaluated in these Phase I reports as identified in the Setting section above. The current use of properties “not covered” are similar to the portions of the site which were evaluated. It can be projected that the types of hazards and hazardous materials identified in the Phase I reports prepared for the various on-site properties would be similar to the other properties which exist on site, with respect to agriculture-related issues and issues associated with the age of existing structures, however, as required in **MM Hazards-Mat 1**, herein, Phase I Environmental Site Assessments and CEQA compliance for all properties will be required prior to tentative tract approvals.

As implementation of the proposed project would result in a new residential community, existing structures as indicated in the Phase I ESA’s, need to be demolished prior to the construction of new buildings. Demolition of existing structures could result in exposure of construction personnel and the public to hazardous substances such as asbestos and lead from building materials and paints in older structures, pesticides from past agricultural uses, or other hazardous materials used or dumped on the site. Exposure to contaminated structures or soil could occur from any of the following:

- Possible asbestos-containing materials and lead-based paints associated with the existing on-site structures, pipes, and/or debris
- Unknown contaminants that have not previously been identified.

With that activity, construction workers and nearby residents and/or workers could potentially be exposed to airborne lead-based paint dust, asbestos fibers, and/or other contaminants. In addition, there is the possibility that project construction activities may also uncover previously undiscovered soil contamination as well as result in the release of potential contaminants that may be present in building materials. This could result in a significant impact. However, compliance with existing regulations and implementation of **MM Hazards-Mat 2**, which requires implementation of the recommendations provided in a required asbestos and lead paint survey, would reduce impacts to less than significant levels. Additionally, removal of structures will require monitoring to ensure impacts to cultural resources is minimized. Implementation of **MM Hazards-Mat 3** will reduce potential impacts to cultural resources.

Federal and state regulations govern the renovation and demolition of structures where materials containing lead and asbestos are present. These requirements include: SCAQMD Rules and Regulations pertaining to asbestos abatement (including rule 1403), Construction Safety Orders 1529 (pertaining to asbestos) and 1532.1 (pertaining to lead) from Title 8 of the California Code of Regulations, Part 61, Subpart M of the Code of Federal Regulations (pertaining to asbestos), and lead exposure guidelines provided by the U.S. Department of Housing and Urban Development (HUD). Asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the State Department of Health Services. In addition, Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. **Adherence to existing regulations**, which require appropriate testing and abatement actions for hazardous materials, would ensure that impacts are **less than significant**.

It is also possible that old underground storage tanks (USTs) could have been in use prior to permitting and record keeping and as a result would not have shown up on the database search results. If an unidentified UST were uncovered or disturbed during construction activities, it would be closed in place or removed. Removal activities could pose both health and safety risks, such as the exposure of workers, tank-handling personnel, and the public to tank according to existing standards as stated above. The extent to which groundwater may be affected, if at all, depends on the type of contamination, the amount released, and depth to groundwater at the time of the release. If groundwater contamination is identified, remediation activities would be required by the Santa Ana Regional Water Quality Board (SARWQCB) prior to the commencement of any new construction activities. With **implementation of existing state and local regulations**, impacts associated within known contamination at sites would be **less than significant**.

The United States Department of Transportation (DOT) Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in Title 49 of the *Code of Federal Regulations*, and implemented by Title 13 of the CCR.

The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. It is possible that licensed vendors could bring some hazardous materials to and from new retail-commercial sites within the project area as a result of the proposed project or along Ramona Expressway as pass through traffic. However, appropriate documentation for all hazardous waste that is transported in connection with specific project-site activities would be provided as required for compliance with existing hazardous materials regulations codified in Titles 8, 22, and 26 of the California Code of Regulations, and their enabling legislation set forth in Chapter 6.95 of the *California Health and Safety Code*. In addition, specific transporters shall comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to Title 49 of the *Code of Federal Regulations*. **Compliance with all applicable federal and state**

laws related to the transportation of hazardous materials, would reduce the likelihood and severity of accidents during transit, thereby impacts would be **less than significant**.

Hazardous materials are required to be stored in designated areas designed to prevent accidental release to the environment. The California Building Code (CBC) requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. **Compliance with all applicable federal and state laws** related to the storage of hazardous materials would maximize containment and provide for prompt and effective clean-up if an accidental release occurs, and therefore impacts are **less than significant**.

In summary, with implementation of mitigation measures **MM Hazards-Mat 1 through 3** and compliance with existing regulations such as SCAQMD Rules and Regulations pertaining to asbestos, DOT office of Hazardous Materials Safety regulations, and Titles 8, 22, and 26 or the CCR, would ensure that the public would not be exposed to any unusual or excessive risks related to hazardous materials. As such, impacts associated with the upset and accident conditions involving the release of hazardous materials into the environment would be less than significant. Therefore, the impacts to the public or environment from accidental release of hazardous materials either used on site or off site, or from pass through traffic along roadways will be **less than significant with adherence to existing regulations and mitigation measures**.

***Threshold C:** Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.*

According to the location and geography, Ramona Expressway is the current evacuation route for the project and surrounding properties including the city of San Jacinto and city of Perris. With development of the proposed project, additional roads, and the widening of existing roads in the project are will result, increasing possible evacuation routes in the area.

Surrounding cities, including the city of Perris, and city of San Jacinto, along with the unincorporated Riverside County areas are contracted with the Riverside County Fire Department, and California Department of Forestry and Fire Protection for emergency response. Emergency response and emergency evacuation are regulated under one agency in the project area and surrounding areas. Therefore, project development will not interfere with existing emergency response and evacuation, but will be consistent with the existing system because the same agency regulates all of the surrounding areas.

Along with the Fire Department, there are two alternate Emergency Command Centers, located in Riverside and Indio which are maintained to provide redundancy as a backup to Perris and as communication centers in support of Riverside County Emergency Services Division (ESD) to coordinate multi-agency disaster management within Riverside County.

The County of Riverside's Ordinance No. 787.1, the Uniform Fire Code, sets standards for emergency access to any new development, including fire escape routes, and fire apparatus access roads for every facility and building, along with required access during construction, alteration, or demolition of a building. The proposed project will conform to this ordinance, thus not interfering any emergency evacuation plan, or response plan, but as a result help implement and facilitate the existing plans in place. Therefore, the impacts on emergency evacuation plans

and response plans are considered **less than significant without mitigation** because of the required development standards and compliance with existing plans.

Threshold D: *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile [1,320-feet] of an existing or proposed school.*

The increase of residential and commercial land uses could increase the quantity of sensitive receptors, including schools, in areas adjacent to commercial land uses, thereby potentially increasing the risk of exposure to hazardous materials, waste, or emissions. Commercial land uses are only allowed within the Town Center Village and Central Park Overlay within the project. Consequently, these commercial uses may be located within ¼-mile from school sites. In addition, pipelines are located on or adjacent to the site which could pose a hazard if ruptured.

The project is proposing four K-8 schools within the project boundary, as shown on **Figure 5.7-3, Proposed Schools**. One of the proposed schools is located within the Park Village of Specific Plan 342 within a medium high density residential area, next to a park. The second proposed school is located within the Resort Village (identified as NUSD School #2) within a high density residential area, next to a park, and a medium high residential area. The third proposed school is located within the Enclave Village within a high density residential area, surrounded by open space and a park. The fourth school site is located within the Town Center Village. The proposed land use around three of the schools is residential development, each with a neighboring park buffering the school site from the surrounding uses. The fourth school is located within the Mixed Use land use designation, which has the possibility of both commercial and residential development within the planning area. It also has a neighboring park buffering from the surrounding uses. If schools are constructed and occupied during construction of the surrounding residential structures, there is a potential for accidental release of petroleum products from construction vehicles which might pose a hazard to the school children.

It is anticipated that the project as proposed will not include land uses which result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile (1,320-feet) of an existing or proposed school. The proposed school sites described above are subject to review and acceptance by the Nuvew Union School District, however, and the California Department of Education (CDE).

The quantity of hazardous materials used in proposed commercial developments within the vicinity of the project is currently unknown. Accidental release or combustion of hazardous materials at new or existing commercial developments could endanger residents or students in the surrounding community. However, three of the proposed schools are not within any of the commercial land uses in the project area, and one of the proposed schools is within a mixed-se land use designation which can include both residential and commercial land uses.

Federal, state, and local governments require all businesses that handle more than a specified amount of hazardous materials will be required to comply with the provisions of the County's Fire Code and any additional element as required in the California Health and Safety Code Article 1 Chapter 6.95 for the Business Emergency Plan. With compliance to existing regulations, impacts associated with the exposure of sensitive receptors to hazardous materials

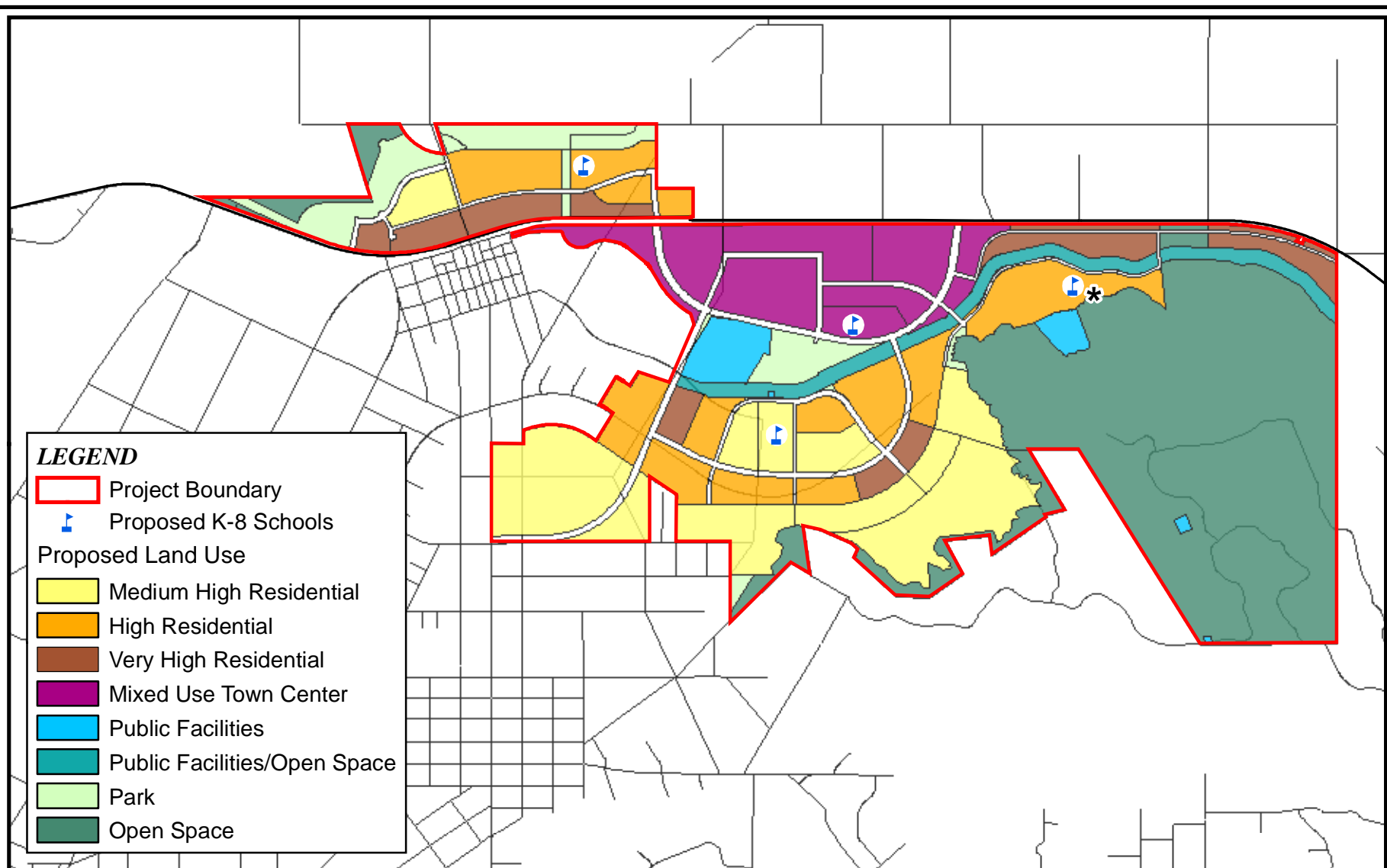
are considered less than significant. It is not anticipated that land uses on site will store or handle hazardous materials in quantities which will require regulation with the possible exception of gasoline stations. Therefore, the impacts to existing or proposed schools from hazardous emissions or materials caused by the project will be **less than significant without mitigation**.

The project site contains or is located adjacent to existing underground pipelines of various kinds, however, which could pose a hazard if ruptured. Southern California Gas Company owns and operates a high pressure (650-720 pounds per square inch (PSI)), 36-inch gas line located in Davis Road and Reservoir Avenue (running parallel to Ramona Expressway for a short distance before heading south) west of Davis Road. An 8-inch high-pressure (300-400 PSI) gas line exists the full length of the Ramona Expressway located approximately in the middle of the proposed Ramona right-of-way. The other major pipelines located within the project vicinity are water pipelines of various types and are discussed in Section 5.8 Hydrology under Threshold K.

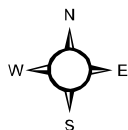
The CDE provides oversight and ultimately grants approval for school site acquisition and expansion of school site capacity whenever state funding is requested for school building projects. One of the criteria that is reviewed by CDE during the school site acquisition process is the proximity of high-pressure pipelines to the school site. The school district must either certify that there are no pipelines within 1,500 feet of any portion of the site, or if an easement containing a pipeline with a maximum allowable operating pressure at or above 80 PSI is within 1,500 feet of a school site, a pipeline risk analysis must be prepared by a competent professional according to the California Code of Regulations (Title 5, Division 1, Chapter 13, Subchapter 1, Article 2, Section 14010h) in order to be considered for a setback exemption. These studies must determine whether, in the case of rupture of the line, there would be any safety hazard such as explosion or fire, and including subsidence of soil on the schools site or if flooding would occur.

Existing pipelines may pose a hazard to proposed schools, however, the siting of schools can be adjusted as a part of the implementation of the Specific Plan and ultimate location of schools rests with the school district. Therefore, potential impacts of locating proposed schools within the proximity of high pressure pipelines will be **less than significant** through detailed site evaluations which are conducted by the school district and by the possibility for school sites to be adjusted to meet the needs of the schools and requirements of the CDE.

The school site located within the Resort Village is located approximately 500' from the SJWA and approximately 500' from Ramona Expressway. Hunting is allowed within the SJWA. Any hazards associated with hunting are discussed in the land use compatibility discussions of Section 5.9, Land Use and Planning, of this DEIR. Any health hazards associated with Air Quality from Ramona Expressway are discussed in Section 5.3, Air Quality, of this DEIR. And noise impacts associated with hunting are discussed in Section 5.10, Noise. This school site is also located more than 1500' from the 36" gas line in Davis Road.



Source: SP No. 342



0 1,000 2,000 3,000 Feet

* To be built if student generation in the future warrants

Figure 5.7-3

Proposed Schools

The Villages of Lakeview EIR No. 471

Threshold E: *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 [CORTESE] and, as a result, would it create a significant hazard to the public or the environment.*

According to the LOR Phase I ESA's, three properties within the project site, or in close proximity to the site, were listed on the CORTESE list. All three CORTESE properties were listed as having had leaking underground storage tanks. The three properties are Amway (aka Nutrilite), Hy-Line International, and Nuview Union High School District.

Amway LUST Sites

One of the sites associated with Nutrilite (Amway) farming operations was located at 19741 Fifth Street, within the Town Center Village of the proposed project. Two tanks were involved, one diesel fuel and one gasoline. Soil contamination was found to be present as the tanks were being closed. Tank removal occurred June 15, 1995 with oversight from County Department of Environmental Health Services (DEHS). These contaminated soils were excavated and removed from the site to the satisfaction of DEHS. Final review by the County DEHA and Santa Ana Regional Water Quality Control Board (RWQCB) indicates that this case was closed on November 1, 1995. (Amway Property Phase I ESA, page 20 and 29)

Although not listed as a CORTESE site, a second tank site located at the Nutrilite manufacturing facility was found to have contaminated soils as tank closure was initiated in May 1995. The tank was located and determined to have been used to stored isopropyl alcohol and acetone. Significant levels of isopropyl and acetone were detected in subsurface borings to a depth of 30 feet. Clean-up occurred from July of 1998 to May of 1999. The level of total contaminant concentration was reduced by 99.5% resulting in "very minimal likelihood that groundwater will be impacted with any residual [volatile organic compounds] remaining in the soil." County DEHS closed the case stating that no further action is required on June 21, 1999. (Amway Property Phase I ESA, page 21)

Based on the clean-up reports reviewed by LOR and closure of the cases by DEHS and RWQCB, these LUST sites do not appear to have contaminated groundwater and are considered unlikely to pose a significant hazard to the public or the environment.

Hy-Line International LUST Site

Hy-Line International is located at 31111 Reservoir Avenue, just south of the Resort Village portion of the project site. Soil contamination was detected when an underground gasoline tank was to be removed in May of 1994. Clean-up using vapor extraction was successful and both RWQCB and DEHS list the case status as closed as of September 1997. This LUST site does not appear to have contaminated groundwater and is considered unlikely to pose a significant hazard to the public or the environment. (Amway Property Phase I ESA, page 29 and Appendix E (CD #3))

Nuvview Union High School District (USD) LUST Site

The third location identified pursuant to Government Code Section 65962.5 was the Nuvview USD property at 29780 Lakeview Avenue, located about three miles south of the Resort Village and approximately 1.5 miles southwest of the Garden Village portion of the project. Soil contamination only from the underground gasoline tank was detected upon removal of the tank. “This LUST resulted in soil contamination only and is listed as “Case Closed” status.” (Amway Property Phase I ESA, page 29) This LUST site does not appear to have contaminated groundwater and is considered unlikely to pose a significant hazard to the public or the environment.

Based on the above analysis and findings in the Phase I ESA’s, impacts from properties listed pursuant to Government Code 65962.5 (CORTESE) will not result in significant hazard to the public or environment and are **less than significant**.

Although not a listed site issue, past use of chemicals and fertilizers for farming and proximity to the former County burn dump were evaluated by LOR. Because of concerns of past farming activities on several of the properties evaluated in the Phase I ESA’s, a Limited Site Characterization was completed, taking tests of the soil to determine pesticide residue in the soil. All tests concluded that there would be no restrictions on development, given the levels reported, therefore, no substantial environmental impact is anticipated.

If remediation of the burn dump site adjacent to the project has been completed prior to development of the project adjacent to the burn dump, then no impacts result. However, if the burn dump is not fully remediated by the time development occurs adjacent to it, potential adverse impacts could result without mitigation. According to RCWMD County Waste Management¹, development should occur no less than 300-feet from this unremediated burn dumpsite. With **MM Hazards-Mat 4** implemented and development at least 300-feet away, or other measure acceptable to the RCWMD to eliminate exposure pathways, impacts related to land uses adjacent to the burn dump site will be reduced to **less than significant** even if remediation of the burn dump site adjacent to the project has not been completed prior to development of the project.

Properties not covered through the Phase I ESA’s were evaluated through adjacent property analysis and review of historic and current aerial photographs. The “not covered” properties within THE VILLAGES OF LAKEVIEW Specific Plan which are or have been used for agricultural purposes, may include pesticides, high organics in the soil, and other issues identified in the LOR ESA’s for similar properties. The McAnally property was identified as having on-site storage tanks, hazardous materials, and manure stockpiles and the property located between the Amway Property ESA and La Certe Property ESA has an above-ground storage tank and a hangar on site. Without full evaluation of these properties, some hazards presently on site could be missed and leave potentially significant hazards unremediated. With implementation of all state, federal and local regulations related to hazardous materials including asbestos and lead, and **MM Hazards-Mat 1**, which requires future Phase I ESA’s, impacts will be **less than significant with mitigation and compliance with regulations**.

Based on the findings of the site investigations, the subject property exhibits no evidence of recognized environmental conditions and contains no locations that are listed as a hazardous materials site. Through compliance with the proposed mitigation measures listed below, ensuring potential sites not previously surveyed through Phase I studies are evaluated, and proper remediation of the neighboring burn dump site, the project would not create a significant hazard to the public or the environment and impacts will be **less than significant with mitigation measures MM Hazards-Mat 1 and 4**.

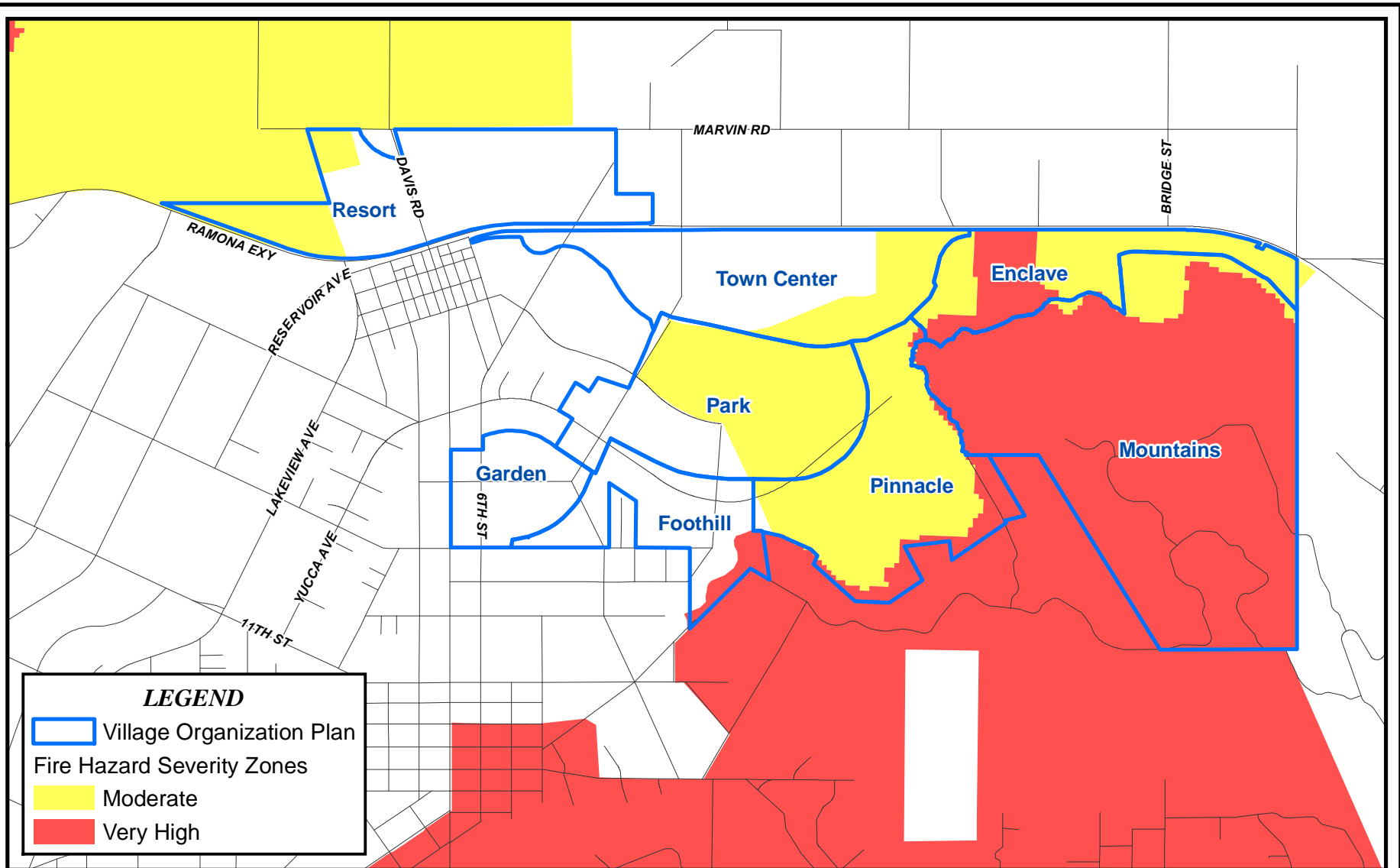
***Threshold F:** Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.*

The project lies within an area which is subject to a risk of wildland fires mainly from the Lakeview Mountains and San Jacinto Wildlife Area. The highest danger of wildfires can be found in the most rugged terrain, especially in the Lakeview Mountains. The vegetation included within the Lakeview Mountains contains coastal shrub and chamise redshank chaparral. These are prime fuel sources for wildfires. The steep terrain in these areas also contributes to the rapid spread of wildfire when one occurs.

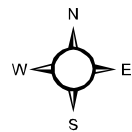
The southeast area of the project site, along the Lakeview Mountains, is designated as a “Hazardous Fire Area” in the Riverside County General Plan. A hazardous fire area is land which is covered with grass, grain, brush, or forest, whether privately- or publicly-owned, which is so situated or is of such inaccessible location that a fire originating upon such land would present an abnormally difficult job of suppression or would result in great and unusual damage through fire or resulting erosion.

Subsequent to the adoption of the Riverside County General Plan, the state mapping, upon which the General Plan maps were based, has been updated. Government Code 51175-89 directed the California Department of Forestry and Fire Protection (CAL FIRE) to map areas of very high fire hazard within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on relevant factors such as fuels, terrain, and weather. The VHFHSZ maps were initially developed in the mid-1990s, but are currently being updated based on improved science, mapping techniques, and data. **Figure 5.7-4, Fire Hazard Severity Zones**, shows the updated VHFHSZ, adopted by CAL FIRE on November 7, 2007. According to the state mapping, in addition to unzoned (lower risk) areas, the south/southeast portion of the project site is located in areas of “moderate” risk and “very high” risk of fire hazards.

In 2005, the California Building Commission adopted the Wildland-Urban Interface codes which will be effective in 2008. Project proposed development adjacent to the Lakeview Mountains will be subject to these codes. The codes will require local building officials to enforce the use of appropriate construction materials for new buildings in the Wildland-Urban Interface, and the imposition of a 100-foot defensible space clearance.



Sources: CAL FIRE, Nov. 2007;
SP No. 342



0 1,000 2,000 3,000
Feet

Figure 5.7-4

Fire Hazard Safety Zones

The Villages of Lakeview EIR No. 471

Following the tragic Esperanza Fire that started on October 26, 2006 near Cabazon, the Riverside County Board of Supervisors created a Fire Hazard Reduction Task Force. The Task Force was charged with reviewing and providing recommended direction for the reduction of fire hazards and clarification of evacuation measures throughout the county. Task Force recommendations include adoption of the revised state fire codes discussed above, adoption of the VHFHSZ mapping into the County General Plan, and revision of Ordinance 787.

Hot, dry Santa Ana winds are common to areas within Riverside County. These winds constitute contributing factors which cause small fires to spread quickly and create the need for an increased level of fire protection especially within urbanized areas adjacent to VHFHSZ.

The changing climate resulting from global warming could alter fire regimes in ways that could have social, economic, and ecological consequences. As discussed in Section 5.3, Air Quality, another impact of climate change/global warming is increased fire hazard. Background information on climate change/global warming can also be found in Section 5.3, Air Quality.

According to the California Climate Change Center (CEC 2005), there are three projected warming scenarios referred to as the low, medium, and high range. These increases from the years 2000 to 2100 vary from approximately 1.7°C–3.0°C (3.0°F–5.4°F) in the lower range of projected warming, 3.1°C–4.3°C (5.5°F–7.8°F) in the medium range, and 4.4°C–5.8°C (8.0°F–10.4°F) in the higher range. Conservative estimates indicate the risk of large statewide wildfires, characterized as approximately 500 acres or larger, would rise almost 35 percent by 2050 and 55 percent by 2100 under the medium temperature increases described previously. Under the low warming range, the increased risk of wildfires is nearly cut in half (CEC 2005).

The project's Design Considerations which include setbacks from the Lakeview Mountains and the SJWA, as discussed above, will decrease the exposure to wildland fires. In addition, **MM Fire 1** requires fire stations to be provided to adequately serve the project. (See Section 5.12.1 Fire Services for additional details about fire protection requirements identified for this project.) Since climate change does not occur overnight, it is anticipated that the County of Riverside will adapt over time to meet the changing needs of the county in accordance with the applicable state government codes. At the current time it is too speculative to determine if any of the current planned fire protection measures are sufficient enough to address the possibility that fire risks will increase in the future, to varying degrees, by as much as 55 percent. However, implementing mitigation measures **MM Hazards-Fire 5 and 6** can help reduce such risks to areas adjacent to high fire hazard areas.

Methods to address high fire hazard areas include techniques such as avoidance of high-risk areas, creating setbacks that buffer development from high fire hazard areas, maintaining brush clearance to reduce potential fuel hazards, establishing low fuel landscaping, and utilizing fire-resistant building techniques. In still other cases, safety oriented organizations such as Fire Safe can provide assistance in educating the public and promoting practices that contribute to improved public safety. The Riverside County Fire Safe Council was formed in 1997 to mobilize residents, organizations, and agencies in Riverside County to make their homes and properties fire safe.

The Council utilizes a diverse membership of fire agencies, property owners, realtors, insurance companies, utilities and others to form a unified approach to fire safety. Projects and activities sponsored by the Council include distributing fire safe educational materials, maintaining a demonstration garden, providing community disaster planning, and community brush collection and chipping events. This added protection, including but not limited to, on-site protection, will supplement normal Fire Department response available for new development, and provide immediate fire protection during fires.

In conclusion, the future developed areas of the project will be located within and adjacent to moderate and very high VHFHSZ, which render the project susceptible to wildland fires, as stated above, and the existing vegetation conditions and weather in the project area increase the chance of fires. For any buildings constructed within a Hazardous Fire Area will comply with special construction provisions contained in the Riverside County Ord. No. 787. Part of the project design includes a 100-foot fuel modification zone (which is consistent with state and county requirements) around the southern border of the developed portions of the project site adjacent to the Lakeview Mountains. Additionally, 500' of open space/regional park is designated between proposed development and the San Jacinto Wildlife Area. With the implementation of such methods as maintaining brush clearance to reduce potential fuel hazards, establishing low fuel landscaping, and utilizing fire-resistant building techniques within the proposed fuel modification zone, and compliance with existing regulations, exposure of people and structures to wildland fires will be less than significant. Therefore, the impacts from wildland fires will be **less than significant** with design consideration and mitigation measures **MM Hazards-Fire 5 and 6**. Please see the Public Services section of this DEIR, 5.12.1, for discussion of fire protection facilities required by the project.

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation Measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts to hazards to below the level of significance.

To further reduce impacts associated with hazards, the following mitigation measures shall be implemented:

MM Hazards-Mat 1: To assure that contaminated soils are not used on-site or improperly exported off-site, appropriate soils testing and handling shall occur. Prior to approval of tentative tract maps, site plans, or other discretionarily approvals for a given phase of development or specific plan area, the County shall confirm that a Phase I ESA has been prepared for the area that is the subject of the discretionary action. If a Phase I ESA has not been previously prepared for the area, a Phase I ESA shall be performed by a registered environmental assessor (REA) prior to the approval of the discretionary action. If the property had historically been used for agricultural activities, the Phase I ESA shall address the potential for pesticide residues. If potential hazardous materials or conditions are identified in the Phase I report, the recommendations of the ESA shall be implemented. Such recommendations could include surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the County of Riverside and shall be included in

any CEQA analysis prepared in connection with the consideration of the future discretionary approvals for development.

MM Hazards-Mat 2: To address impacts related to a release of hazardous materials into the environment, an asbestos and lead paint survey will be required prior to issuance of a demolition permit for the demolition of existing site structures. Recommendations of the study shall be implemented in compliance with all applicable regulations.

MM Hazards-Mat 3: Removal of subsurface structures including tanks, or other buried materials from contaminated areas will require monitoring by a Hazardous Materials trained archaeologist approved by the County Planning Department. If buried materials of potential historical, cultural or archaeological significance are accidentally discovered during excavation of contaminated sites or soils associated with the proposed project, all work in that area shall be halted or diverted until the monitoring archaeologist on-site can evaluate the nature and significance of the finds. If the find is determined to be an historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State CEQA Guidelines), avoidance or other appropriate measures as discussed in the Cultural Resources Management Plan shall be implemented (See **MM Cultural 1** and **2** in Section 5.5 for further information).

MM Hazards-Mat 3a: If, while performing any excavation as part of project construction, material that is believed to be hazardous waste is discovered, as defined in Section 25117 of the California Health & Safety Code, the developer shall contact the County of Riverside Community Health Agency, Department of Environmental Health. Excavation shall be stopped until the material has been tested and the presence of hazardous waste has been confirmed. If no hazardous waste is present, excavation may continue. If hazardous waste is determined to be present, the County Department of Environmental Health will provide guidance regarding necessary oversight so that the material is be removed and disposed of pursuant to applicable provisions of California law.

MM Hazards-Mat 4: If the burn dump is not fully remediated by the time development starts, a 300-foot buffer from the burn dump site is required from any proposed development until remediation of the burn dump site is complete, or other measure acceptable to the RCWMD, such as a barrier, to eliminate exposure pathways will be completed. No setbacks or other measures to eliminate exposure pathways are required if remediation has been completed and cleared by the County and State Departments of Health.

MM Hazards-Mat 4a: To properly assess the suitability of on-site soils to be used as fill, a geotechnical evaluation shall be performed by a qualified professional prior to the approval of all Tentative Tract maps or site plans for a given phase of development. This evaluation will include an analysis of the organic matter content of soils on the site. If the organic matter content of the soils is greater than 2 percent when mixed with subsurface soils and/or imported fill, then manure will be removed from the site and properly disposed of, or mixed with other soils to reduce the organic matter to less than 2 percent prior to grading operations.

MM Hazards-Fire 5: All buildings shall be constructed with fire retardant roofing material as described in Section 1503 of the Uniform Building Code.

MM Hazards-Fire 6: Prior to the approval of any development plan for lands adjacent to the Lakeview Mountains open space areas (Planning Areas 58, 65, 66, 68, 69, 73, 76, 77, and 81), a fire protection/vegetation management (fuel modification) plan shall be submitted to the fire department for review and approval. The Homeowner's Association or appropriate management entity shall be responsible for maintaining the elements of the plan. If significant eligible cultural resources are located within or adjacent to a fuel modification zone, the fire protection/vegetation management plan shall be prepared in conjunction with parties knowledgeable about the cultural resources such as the County Archaeologist, and Native American representatives.

Summary of Project-Specific Environmental Effects After Mitigation Measures are Implemented

All potential significant adverse environmental effects are reduced to **below the level of significance** due to project design, compliance with existing regulations, and compliance with the mitigation measures, as detailed in the discussions above.

Summary of Cumulative Environmental Effects After Mitigation Measures Are Implemented

This cumulative impact analysis considers development of the proposed project in conjunction with other development in the County and neighboring jurisdictions, through reliance on the plan approach pursuant to CEQA Guidelines Section 15130(b)(1). (See Section 7.1, Cumulative Impact Analysis for more detailed explanation.) Other than transport and groundwater contamination, risks associated with hazardous materials are largely site specific and localized, and are thus limited to the project site. Additionally, site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers to hazardous substances. As such, the potential for cumulative impacts to occur is limited.

Although each development site has potentially unique hazardous materials considerations, it is expected that future growth will generally comply with the range of federal, state, and local statutes and regulations applicable to hazardous materials, and will be subject to existing and future programs of enforcement by the appropriate regulatory agencies. Thus, the project will not be subject to existing impacts, as discussed above, nor will it be exposed to future impacts. The RCIP EIR states that "compliance with federal, state, and local regulations concerning the storage and handling of hazardous materials and/or waste would reduce the potential for significant public health and safety impacts from hazardous materials to occur. Therefore, the impact of the proposed General Plan in addition to future development in surrounding areas is not expected to affect significantly the number of people exposed to public health and safety risks from exposure to hazardous materials." For these reasons, cumulative impacts resulting from the use, transport, and disposal of hazardous materials, would be **less than significant**. Consequently, because the project and all cumulative projects within the County and surrounding

jurisdictions must comply with federal, state, and local regulations, the proposed project's contribution to cumulative impacts associated with the transport, use, or disposal of hazardous materials would be less than cumulatively considerable and thus not significant.

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

5.8 HYDROLOGY/WATER QUALITY

The focus of the following section is the project's impact on existing hydrology of the project site and contributing watershed and the project's impact on water quality. The following potential impacts were identified in the NOP and are addresses: project impacts to: the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; violation of any water quality standards or waste discharge requirements; depletion of groundwater supplies or substantial interference with groundwater recharge; creation or contribution of runoff water which would exceed the capacity of existing or planned storm water drainage systems; and construction and operation of new or retrofit stormwater treatment control Best Management Practices (BMPs) which could result in significant environmental effects.

Potential impacts related to: (1) housing placed within a 100-year flood hazard area; and (2) placement of structures which would impede or redirect flows, were all deemed to have no impact or less than significant impact in the NOP prepared for this project (Appendix A (CD #3)). However, the proposed project has been modified and now proposes to modify the 100-year flood plain so these issue areas are discussed within this section of the DEIR.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Albert A. Webb Associates, *Preliminary Regional Water Quality Management Plan for The Villages of Lakeview*, May 2007, Revised August 2008. (Appendix H (CD #3))
- Albert A. Webb Associates, *Drainage Study, Overall Drainage Plan for The Villages of Lakeview, Volumes I–III of IV*, July 2008. (Appendix I (CD #4))
- Albert A. Webb Associates, *Drainage Study Addendum, Hydrology and Hydraulics for Lakeview Dam & Nuevo Channel, Volume III of IV*, August 2008. (Appendix I (CD #4))
- California Department of Water Resources, Division of Safety of Dams, *Statutes and Regulations Pertaining to Supervision of Dams and Reservoirs*, no date. (Available at http://damsafety.water.ca.gov/statutes_regulations.cfm)
- California Regional Water Quality Control Board, Santa Ana Region, *Water Quality Control Plan Santa Ana River Basin*, 1995 updated February 2008. (Available at Regional Water Quality Control Board and at http://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.shtml)
- California Stormwater Quality Association, *New Development and Redevelopment Handbook*, 2004. (Available at <http://www.cabmphandbooks.com/Development.asp>)
- County of Riverside Department of Environmental Health, *Vector Control Program-Year End Report 2006*. (Available at http://www.rivcoeh.org/open/cms/rivcoeh/ProgServices/Food_Program/Vector.html)
- County of Riverside, *BSA Properties Specific Plan No. 322 EIR*, June 2002. (Available

at Riverside County Planning Department.)

- Eastern Municipal Water District, *Eastern Municipal Water District Urban Water Management Plan*, 2005. (Available at Eastern Municipal Water District.)
- Eastern Municipal Water District, *Hemet/San Jacinto Water Management Plan, 2007 Annual Report*. (Available at http://www.emwd.org/news/pubs_hemet-subbasin.html)
- Eastern Municipal Water District, *Water Supply Assessment for The Villages of Lakeview*, December 20, 2006. (Available at Eastern Municipal Water District)
- Eastern Municipal Water District, *West San Jacinto Groundwater Basin Management Plan, 2007 Annual Report*. (Available at http://www.emwd.org/news/pubs_sj-subbasin.html)
- Federal Emergency Management Agency, *FEMA's Flood Management Modernization- Preparing for FY09 and Beyond: Integrated Flood Data Update, Risk Assessment, and Mitigation Planning; Draft Concept Paper, June 1, 2007*. (Available at <http://www.fema.gov/plan/ffmm.shtm>) (FEMA)
- Geosyntec Consultants, *Villages of Lakeview Water Quality Technical Report (Final)*, August 2008. (Appendix H (CD #3))
- Geosyntec Consultants, *Villages of Lakeview Hydromodification Technical Report (Final)*, August 2008. (Appendix I (CD #4))
- Glenn Lukos Associates, *General Biological Report for The Villages of Lakeview Specific Plan (SP 342, HANS 313)*, June 4, 2008. (Appendix D (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471 Preliminary Geotechnical Investigation, Proposed 550-Acre Mixed-Use Development, Amway Property, North and South Sides of Ramona Expressway, Lakeview, CA*, May 21, 2003. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471 Preliminary Geotechnical Investigation, Proposed 60-Acre Residential Development Ross Property, South of the Ramona Expressway and west of Bridge Street, Lakeview area of Unincorporated Riverside County, CA*, October 28, 2004. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471 Preliminary Geotechnical Investigation, Proposed 120-Acre Mixed-Use Residential Development, LaCerte Property, South of Ramona Expressway near Bridge Street, Lakeview Area of Riverside County, CA*, July 29, 2004. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471 Preliminary Geotechnical Investigation, Proposed 437-Acre Mixed-Use Sherman Ranch Development, Vicinity of Lakeview Avenue East and 4th Street, Lakeview, CA*, September 16, 2003. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471 Preliminary Geotechnical Investigation, Proposed Mixed-Use Residential Development, 75-Acre Abudayyeh Property, South of Lakeview Avenue East and East of 5th Street, Lakeview, CA*, September 17, 2003. (Appendix F (CD #3))

- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471 Preliminary Geotechnical Investigation, Proposed Cannata Mixed-Use Residential Development, 135-Acre Thoroughbred Farm, Northeast of Hansen Avenue and Wolfskill Avenue, Lakeview, CA*. September 22, 2003. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471 Preliminary Geotechnical Investigation, Rockfall Hazard Evaluation, The Villages of Lakeview, Lakeview Area of Unincorporated Riverside, CA*, December 10, 2004. (Appendix F (CD #3))
- Leighton and Associates, Inc., *The Villages of Lakeview Specific Plan No. 342/DEIR No. 471 Preliminary Geotechnical Investigation, Proposed 155-Acre Residential Development, McAnally Property, South of Ramona Expressway Between Second and Fourth Streets, Lakeview Area of Riverside County, CA*, March 24, 2005. (Appendix F (CD #3))
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- County of Riverside, *Riverside County Water Quality Management Plan for Urban Runoff*, September 17, 2004. (Available at Riverside County Planning Department and at <http://www.floodcontrol.co.riverside.ca.us/downloads/NPDES/APP-O-RC-WQMP.pdf>.)
- County of Riverside, *Rules and Regulations for Administration of Area Drainage Plans*, Adopted June 10, 1980, amended [latest] February 10, 1988. (Available at http://www.floodcontrol.co.riverside.ca.us/Downloads/plan%20check/Rules_and_Regulations.PDF)
- Riverside County Flood Control and Water Conservation District, *Stormwater Quality Best Management Practices Design Handbook*, July 6, 2004. (Available at Riverside County Flood Control District or at <http://www.floodcontrol.co.riverside.ca.us/stormwater/content/techinfo.htm>)

Setting

THE VILLAGES OF LAKEVIEW project site is located on approximately 2,800 acres, comprised of vacant land, agricultural land, and mountainous terrain within the unincorporated community of Lakeview/Nuevo, Riverside County, California. The project site is generally located to the north and south of the Ramona Expressway, southeast of the San Jacinto River, and west of the city of San Jacinto. The project area to the north of Ramona Expressway consists of approximately 350 acres, and is characterized by relatively flat terrain, which generally drains to the west towards the San Jacinto River. The project area to the south of Ramona Expressway consists of approximately 2,450 acres, with terrain varying from relatively flat along Ramona Expressway, to moderate slopes in the central and south-southwestern project area, to the steep mountainous terrain of the Lakeview Mountains. The elevation range to the south of Ramona Expressway is from 1,440 feet above mean sea level along Ramona Expressway, to 2,849 feet above mean sea level, at Mt. Rudolf, in the southeast (see **Figure 5.8-1, USGS Topography Map**).

Surface Water Resources

The region has historically been used for agricultural purposes. The location of the proposed project site and the site's proximity to surface waters in the region, are shown in **Figure 5.8-2, Hydrology of the San Jacinto River**. The project site is situated in the San Jacinto watershed, which is part of the larger Santa Ana River watershed. The San Jacinto River is the main drainage feature in the San Jacinto watershed; within the project area, it drains in an overall westerly direction from its headwaters at Lake Hemet, in the San Jacinto Mountains.

Flows in the headwaters of the San Jacinto River are affected by rising groundwater, interflow, and discharge from Lake Hemet. As the San Jacinto River leaves the San Jacinto Valley, it passes through the San Jacinto fault zone. This fault zone is responsible for relatively high subsidence rates within the San Jacinto River Valley, which have resulted in the formation of Mystic Lake, an ephemeral lake that fills with water during late winter and spring when the river is flowing¹. This depression is referred to as Mystic Lake. Downstream of Mystic Lake, the San Jacinto River forms a wide fluvial plain. When formed, the lake is relatively shallow with a large surface area, up to 4,000 acres.

THE VILLAGES OF LAKEVIEW Specific Plan involves on-site and off-site tributary areas of approximately 10,600 acres including the Lakeview Dam tributary areas. In general, storm runoff sheet flows northerly across the project site toward the San Jacinto River. The Lakeview Mountains and dam in the southern parts of the project, as well as the Ramona Expressway, play an important part in the existing hydrology of this site. The hills on site and south of the project are sloped in a northerly and westerly direction. Storm runoff comes into the site from its southerly boundary and continues towards the Ramona Expressway. The area tributary to the east boundary of the project site is approximately 1,785 acres, most of which is easterly and southerly of the project.

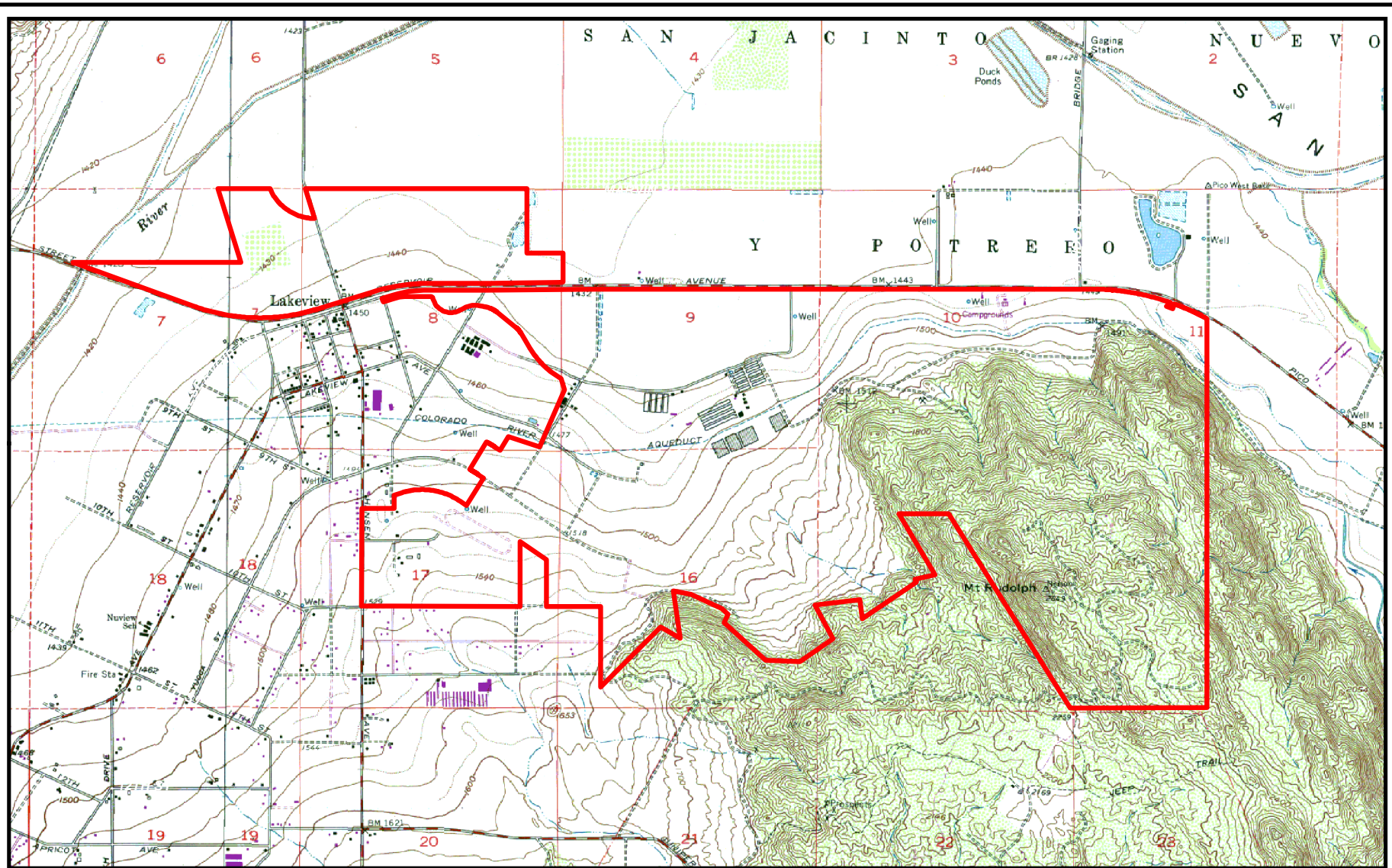
¹ San Jacinto River Watershed Council, *The San Jacinto Watershed Component of the Santa Ana Integrated Watershed Plan, Prop 50, Chapter 8, Planning Grant Application*, May 11, 2005.

The majority of the project is outside the San Jacinto River floodplain. That portion of the project north of Ramona Expressway (a portion of Phase 1A) is within the 100 year Zone AE floodplain and floodway limits as delineated on Panel No. ~~060245-06065C~~ 1435G, ~~and 1455G,~~ and 1465G of the Flood Insurance Rate Maps issued in conjunction with the National Flood Insurance Program (NFIP) administered by the Federal Emergency Management Agency (FEMA). The flooding source for this floodplain is the San Jacinto River floodplain. the balance of the site is within shaded or un-shaded Zone X. for any work within the floodplain and/or floodway, the project will request a Letter of map Revision (LOMR) from FEMA in accordance with NFIP rules.

In the existing condition, 145 acres of this project are within the SJR Q100 floodplain, with 625 acre-feet of floodplain storage. While this Specific Plan proposes to alter the floodplain line, it proposes to keep the same acreage within the SJR Q100 floodplain, and increase storage from 625 to 750 acre-feet; an increase of 19% in storage. **Figure 5.8-3, 100-Year Post-Development Floodplain**, shows both pre- and post-project floodplain locations. It shall be noted that the post-project limits will likely be different from what is shown on the exhibit.

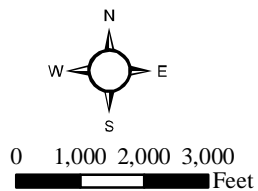
According to the Jurisdictional Delineation found within the General Biological Report prepared by Glenn Lukos Associates for the project (see Appendix D (CD #3)), the project site contains 11 drainages that ultimately connect to waters of the U.S., and are therefore, considered to be water of the U.S. themselves; this includes a very small portion of the San Jacinto River, and 10 other drainage features that are ultimately hydrologically connected to the San Jacinto River. Additionally, the project site contains other areas that convey either open sheetflows or confined sheet flows. In the case of the latter, sheetflows that originate from a portion of the Lakeview Mountains are confined between artificially constructed berms that protect adjacent agricultural fields from flooding.

During small or medium rainstorms, storm water sheetflows across undeveloped/vacant land and agricultural land towards the north-northwest, where it evaporates and/or percolates into the soil. During large storm events however, storm water on the project site could sheetflow all the way, via surface sheetflow, to the San Jacinto River diversion channel, located approximately 1.9 miles north of Ramona Expressway (refer to **Figure 5.8-2, San Jacinto River Hydrology**).



Source: USGS, Lakeview & Perris Quadrangles

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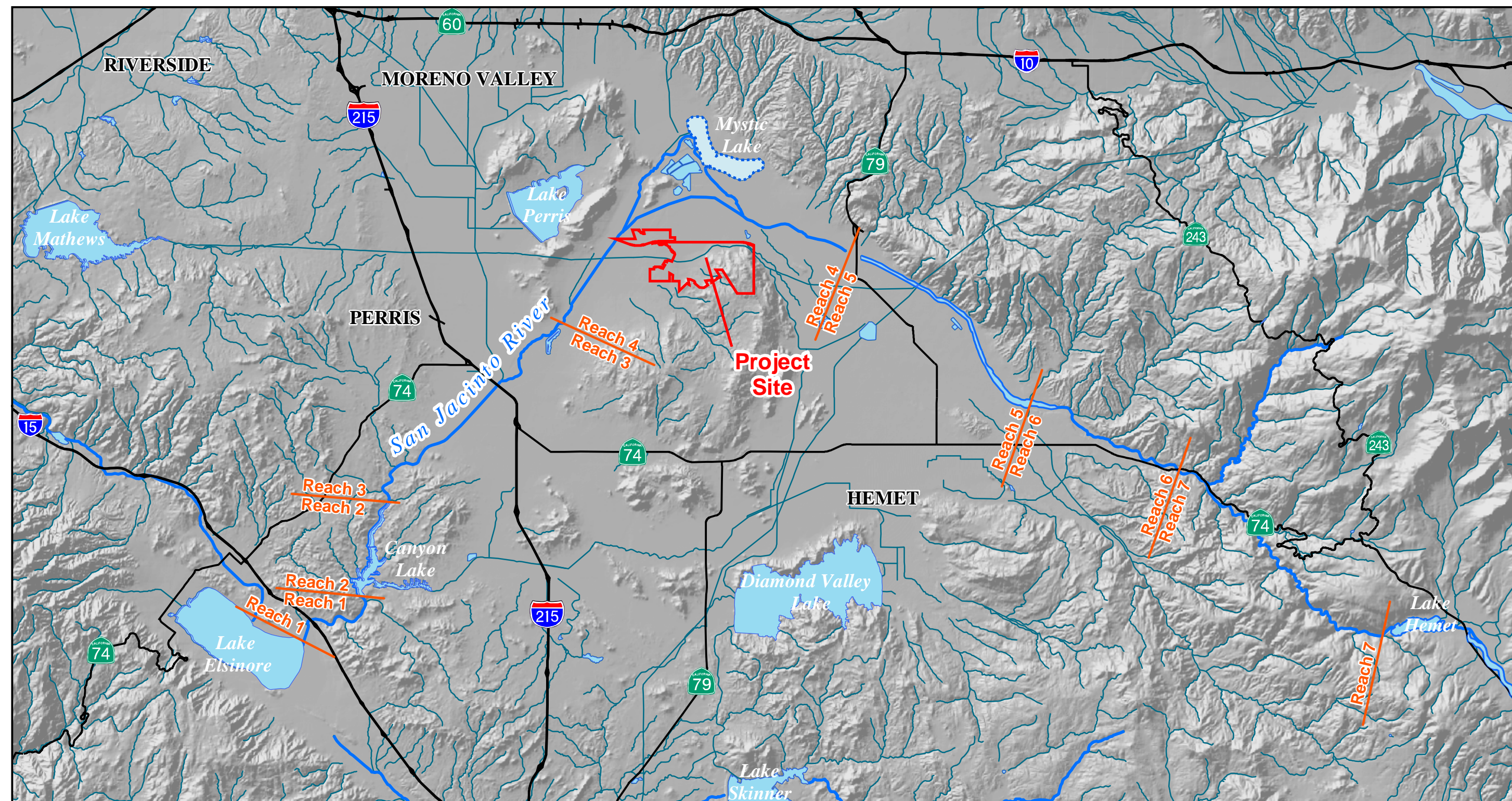
LEGEND

Project Boundary

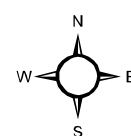
Figure 5.8-1

USGS Topography Map

The Villages of Lakeview EIR No. 471



Source: USGS Hydrology DLG's, DEM's.



0 2 4 6
Miles

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Project Boundary

Lakes

Seasonal Waterbodies

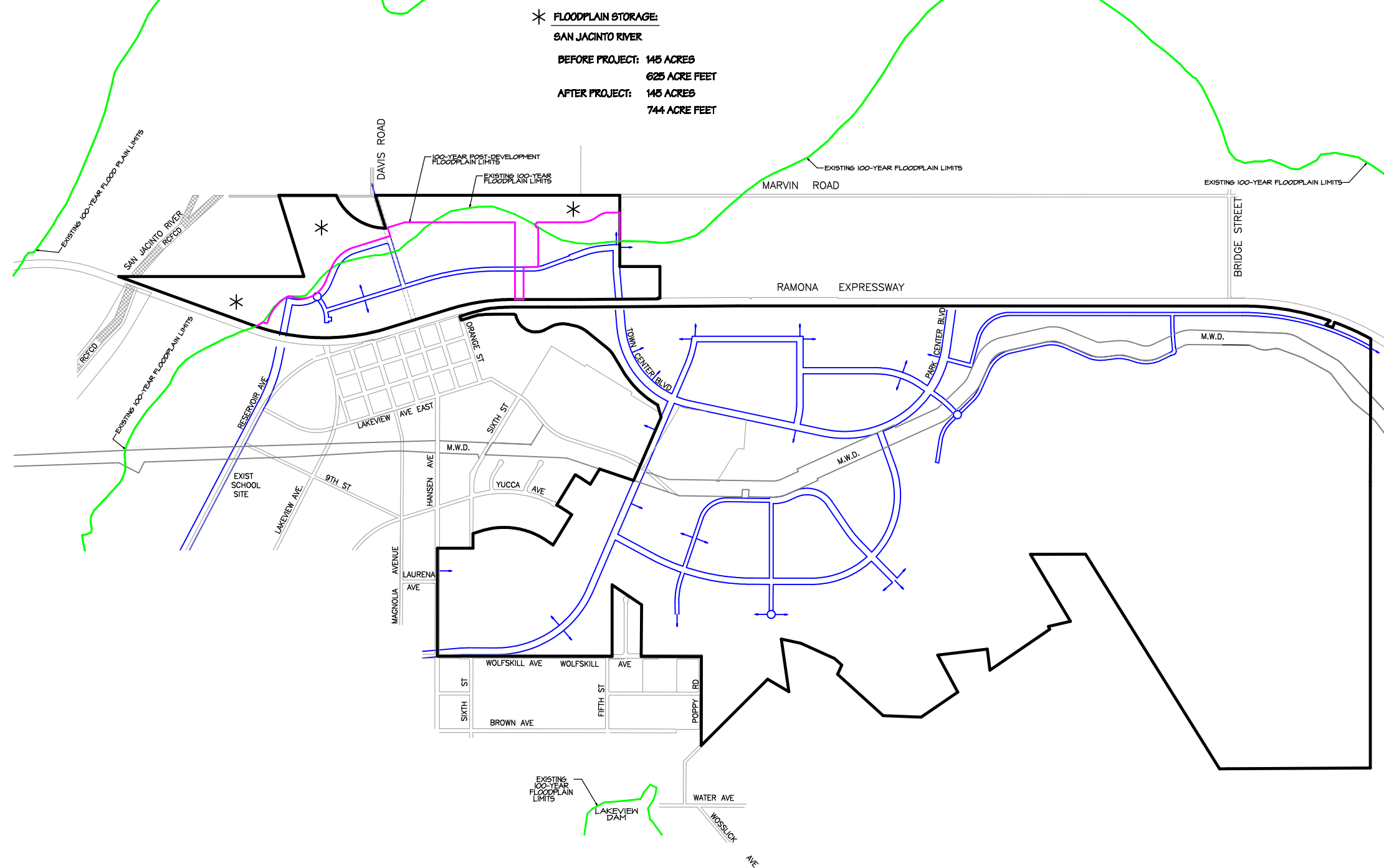
Major Streams

Minor Streams

Figure 5.8-2

Hydrology of the San Jacinto River

The Villages of Lakeview EIR No. 471



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- EXISTING 100-YEAR FLOODPLAIN LIMITS
- 100-YEAR POST-DEVELOPMENT FLOODPLAIN LIMITS
- PROPOSED CIRCULATION
- PROJECT BOUNDARY

Figure 5.8-3

100-Year Post-Development Floodplain

Currently, in the project site's undeveloped state, there is minimal constructed storm drain infrastructure designed to convey stormwater; consequently, the facilities that are in place are designed to convey low flow only. The general direction that stormwater flows onsite is from the south, along the Lakeview Mountains, toward the north, to the San Jacinto River. According to the Santa Ana Watershed Authority's Prop 50 proposed grant application, in the past, the San Jacinto River was channelized between Sanderson Avenue and Nuevo Road by local interests with levees, with the intent to route flows past that natural sump, Mystic Lake. Today, these storm drain facilities would do little to contain even low flows due to years of sedimentation. Therefore, all of the river flow drains directly to Mystic Lake where it is impounded during average and low flow years. When Mystic Lake does not overflow, downstream river reaches are often dry.

Current drainage/river projects within the river system include the San Jacinto River Stage 4 Project (San Jacinto area), the San Jacinto River Stage 3 Project (Perris Valley area), and the San Jacinto River Gap Project (San Jacinto Wildlife Area vicinity). These projects assess the alignments of the San Jacinto River to convey various level storm events while considering influences of several hydrologic and hydraulic factors.

The San Jacinto River Stage 4 Project is located upstream of THE VILLAGES OF LAKEVIEW project site from 1.5 miles west of Sanderson Avenue to 1.5 miles east of State Street. It includes the construction, operation, and maintenance of a new levee approximately 5 miles in length and south of the existing San Jacinto River channel, a desiltation basin, as well as the enhancement of small portions of the existing northern levee and excavation under the State Street Bridge to allow for a 100-year storm capacity. The proposed levee will increase the channel width to provide for the 100-year storm event. This will reduce the potential for breaches which in the past have resulted in damage to agricultural lands and resort facilities, flooded roads, displaced local residents, and inundated large areas adjacent to the river. The existing unimproved levees downstream of State Street and Sanderson Avenue could fail resulting in inundation of farmland and dairies with floodwater that could allow floodwater to escape and come into contact with dairy and other wastes and contaminate local surface waters. The proposed levee will alleviate flooding and disruption of traffic circulation for the major transportation corridors of Ramona Expressway, State Street, and Sanderson Avenue within the city of San Jacinto. The levee will also alleviate flooding problems for hundreds of acres of areas that are designated for development in the adopted general plans. The proposed levee will provide the 100-year flood protection for approximately 2,000 acres of existing agriculture, active dairy operations, and roadways as well as approximately 100 acres of existing development. The total construction period for the proposed project is anticipated to take 15 months once environmental documentation that is currently being prepared is certified.

Installation of the new southern levee will increase the channel width/area by approximately 400 acres. The conversion of the land within this area, primarily from agricultural land to open space, has the potential to increase riparian habitat along the San Jacinto River. The desiltation basin will be constructed to mitigate any increase in scour and sedimentation downstream resulting from implementation of the project. The basin can be taken out of operation if it is determined through future studies that an increase in sediment transport is beneficial to downstream receiving water bodies.

The San Jacinto River Stage 3 Project extends from the Ramona Expressway downstream to Railroad Canyon. The objectives of the San Jacinto River Stage 3 project are to address health and safety concerns associated with flooding of public roads that provide access for emergency services within the city of Perris and the San Jacinto Valley (e.g., I-215 Freeway, San Jacinto Ave., Ramona Expressway, Nuevo Road, Goetz Road), as well as flooding protection for the Burlington Northern Railroad and future Metrolink line, the Metropolitan Water District Aqueduct crossing, and public and private property in the City of Perris and unincorporated Riverside County, and improve regional water quality. The San Jacinto River Stage 3 Project includes a flow control structure and levee system at the existing Ramona Expressway crossing of the San Jacinto River which will cause a rise in the historic floodplain just upstream of the crossing. THE VILLAGES OF LAKEVIEW project has been designed to accommodate the Stage 3 Project flood elevation. The San Jacinto River Stage 3 Project also includes: a levee system downstream of Ramona Expressway to Nuevo Road, a detention basin on either side of the Perris Valley Storm Drain and other improvements to the Perris Valley Storm Drain, a flow control structure at the existing Interstate 215 crossing, and improvements to the existing earthen channel from Interstate 215 to Railroad Canyon. Biological studies and reviews through the Western Riverside County MSHCP process are currently underway.

Currently, the City of San Jacinto and the County of Riverside are sponsoring the San Jacinto River Stage 4 Study, with the City of San Jacinto as the lead agency. This study is a comprehensive drainage study of the San Jacinto River flood plain with the goal of matching the FEMA study flood levels. This project takes into account both drainage studies and has conceptually designed parks and residential planning areas in accordance with the expected flood levels.

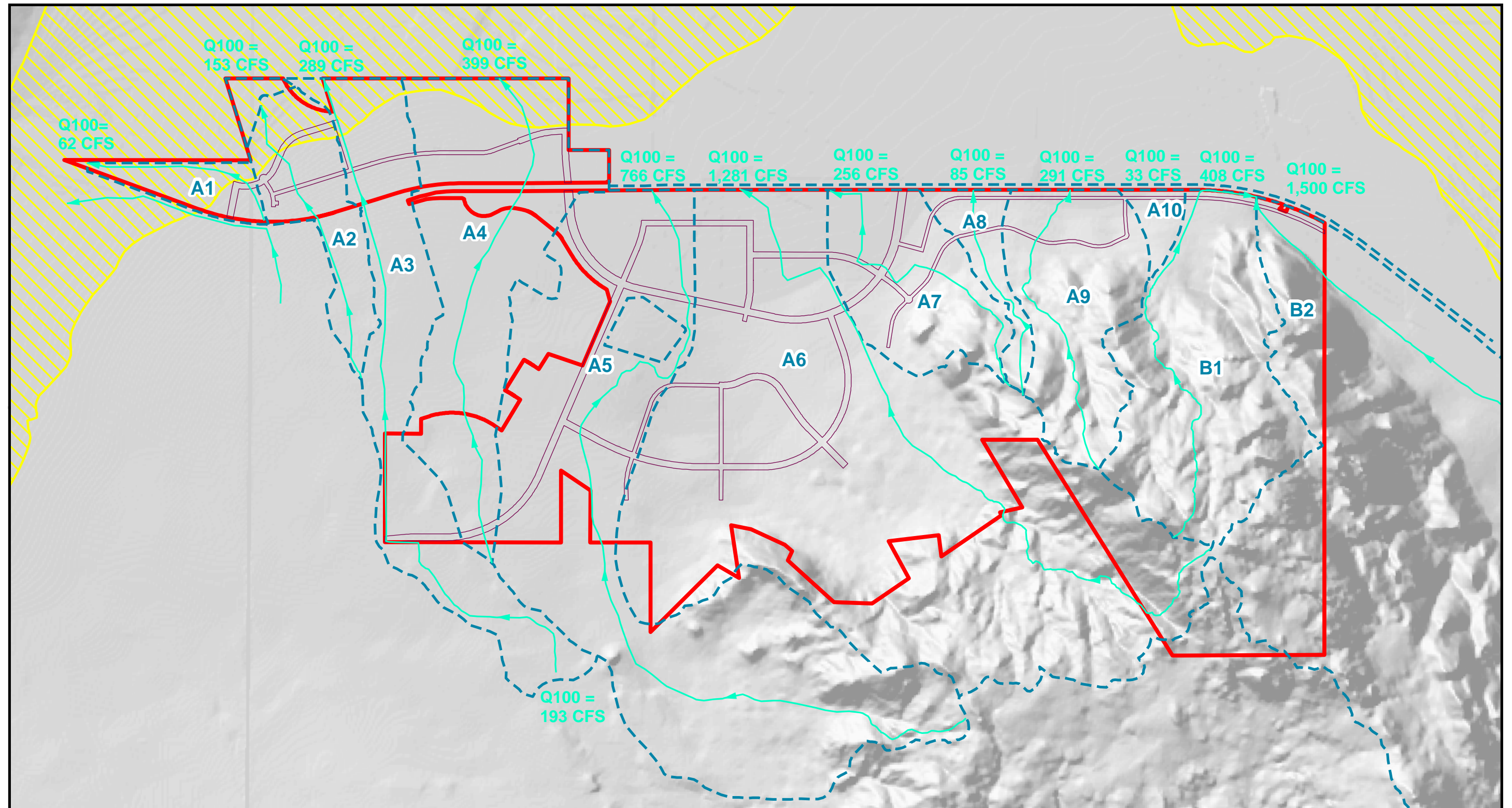
The portion of the San Jacinto River located between the Stage 3 and Stage 4 projects is referred to as “the Gap.” Ramona Expressway is located to the south of the Gap and Sanderson Avenue is along the eastern edge of the Gap. Approximately 2.5 miles downstream of Sanderson Avenue, a man-made levee low flow channel was constructed by agriculture operations (prior to 1949). This un-maintained channel is considered to be the San Jacinto River channel through the Gap Area. The limits of the Gap project are from Sanderson Avenue to the 2005 breach location, approximately 2.5 miles downstream of Sanderson Avenue, and from the 2005 breach location to Mystic Lake. The objective of the San Jacinto River Gap Project is to provide flow conveyance from the existing San Jacinto River channel to Mystic Lake while preserving biological habitat and linkages, controlling sediment transport, and minimizing maintenance requirements.

The Lakeview dam, constructed in 1994, is off site and is located south of the project, at its southwesterly end, and the dam receives and collects storm flows from an area to the south of the project and southeast of the dam, shown as watershed A5 on **Figure 5.8-4, Existing Hydrology**. The area north of the Lakeview dam, at the southwesterly corner of the project, is designated Zone X shaded by FEMA. This designation is used to show areas subject to flooding with average depths of less than one foot during the one percent chance flood. The Riverside County Flood Control & Water Conservation District (RCFC&WCD) has studied and built the dam to protect the area north and west of the dam from flooding. A small drainage system now collects water from the dam outlet, and releases it in a northwesterly direction where it makes its way to Ramona Expressway following the alignment of Hansen Avenue. Additionally, RCFC&WCD

developed the Lakeview/Nuevo Master Drainage Plan (MDP), in February of 1981, which was adopted by the Riverside County Board of Supervisors in June of 1981. The MDP includes a proposed drainage facility (Lateral D) that would convey storm flows from the dam outlet, and channels them westerly to the existing Nuevo channel that extends to the San Jacinto River. The project will be implementing the Nuevo/Lakeview MDP that will direct all outflows from the Lakeview dam, westerly to the existing Nuevo Channel. The MDP facilities include a series of reinforced concrete pipes (RCPs) from the dam outlet to Nuevo Channel. The Lakeview dam was constructed with a reserve capacity that can accommodate additional inflows. Once off-site improvements, a) the modification to Lakeview Dam for additional storage, b) the construction of the training dike to direct flows into Lakeview Dam and c) the construction of Lateral D to Nuevo Channel, are implemented, flooding within the project will be reduced significantly except for storms of unusual magnitude.

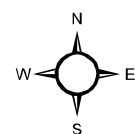
Wintertime storm flows in California rivers are predicted to be larger than at the present time due to increases in global climate change, discussed in more detail in Section 5.3, Air Quality. Because of this, potential impacts related to flood risk in river floodplains are increased. At the present time, regional precipitation responses to climate change remain difficult to determine. Flood magnitude in a watershed depends on several factors such as the intensity and duration of precipitation, location of the storm center, and area of precipitation among others. According to the National Oceanic Atmospheric Administration (NOAA), the average precipitation in the south coast drainage area since 1895 has remained relatively stable approximately 1.25 inches. Although future precipitation patterns are unknown, current planning practices are in place, which reduce impacts related to flood hazards. FEMA's National Flood Insurance Program authorizing statutes requires re-validation of floodplain areas and flood hazard zones every five years. (FEMA)

Storm flows across the project site sheet flow all the way to Ramona Expressway, where smaller level storm flows are collected in miscellaneous CMP culverts. There are 14 existing culverts ranging in size from 24-inch to a pair of 72 x 45-inch squash pipes at the easterly end of the project, that convey low flows under Ramona Expressway. However, during larger storm events, storm runoff sheet flows over Ramona Expressway and all across the project frontage. Under existing conditions, and during a 100-year storm event, approximately 5,250 cfs will reach Ramona Expressway and will overtop it in a northerly direction, headed to the San Jacinto River.



Source: Preliminary Hydraulic/Hydrology Study
and Storm Drain Facilities for TVOL, AAWA, 2007.

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0 2,000 4,000
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- Project Boundary
- A3— Subwatershed Boundaries
- Flow Paths
- Road ROWs
- 100yr Floodplain

Figure 5.8-4

Existing Hydrology

The Villages of Lakeview EIR No. 471

Water Quality

Water quality in this region is regulated under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). The SARWQCB has divided the San Jacinto River into seven reaches for regulatory purposes, refer to **Figure 5.8-2, Hydrology of the San Jacinto River**. The majority of onsite stormwater enters Reach 4 of the San Jacinto River and proceeds to, first, Canyon Lake, then Lake Elsinore, and then ultimately the Santa Ana River, which flows to the Pacific Ocean. Except during large storm events, Canyon Lake and Lake Elsinore are, for all practical purposes, closed basins that have water quality characteristics reflecting the water quality of the flows entering them. Canyon Lake and/or Lake Elsinore have been identified by the State Water Resources Control Board pursuant to the Clean Water Act section 303(d) as having water quality impairments due to nutrients, pathogens, low dissolved oxygen, sedimentation/siltation, and unknown toxicity.

Surface water quality may be impacted by both point source and non-point source (NPS) discharges of pollutants. Point source discharges are regulated through National Pollution Discharge Elimination System (NPDES) permitting. Non-point source pollution is now considered to be the leading cause of water quality impairments in the state, as well as the entire nation. Non-point source pollution is not as readily quantifiable as pollution that is derived from point sources, since it occurs through numerous diffuse sources. Rainwater, snowmelt, or irrigation water can pick up and transport pollutants as it moves across land or paved surfaces, and these pollutants may ultimately be discharged into streams, lakes, the ocean, and groundwater. Urban areas and agriculture are both considered to substantially contribute to non-point source pollution in surface waters; pollutants associated with agricultural areas include fertilizers, pesticides, fecal coliform, salts, and sediments. Pollutants associated with urban areas include pathogens, organic compounds, sediment, oil and grease, metals, trash and debris, and nutrients.

Status of Surrounding Water Bodies

The SARWQCB sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the Clean Water Act to include the beneficial uses of specific water bodies, the levels of water quality that must be met and maintained to protect those uses (water quality objectives), and the state's anti-degradation policy. Water quality standards for all ground and surface waters overseen by the SARWQCB are documented in the Basin Plan (1995). Beneficial uses consist of all the various ways that water can be used for the benefit of people and/or wildlife. Nineteen beneficial uses are recognized within the Santa Ana Region. Seven beneficial uses have been designated for surface water bodies and groundwater in the vicinity of the project site. **Table 5.8-A, Beneficial Uses for Receiving Waters in Proximity to the Project Site**, provides a summary of the impairment and beneficial uses of the relevant receiving waters.

Table 5.8-A, Beneficial Uses for Receiving Waters in Proximity to the Project Site

Receiving Waters	303(d) List Impairments	Designated Beneficial Uses
San Jacinto River, Reaches 1, 3, and 4	None	MUN*, AGR, GWR, REC1, REC2, WARM, WILD
Canyon Lake (Reach 2)	Nutrients and Pathogens	MUN^, AGR, GWR, REC1, REC2, WARM, WILD
Lake Elsinore	Nutrients, Organic Enrichment/Low Dissolved Oxygen, PCBs, and Unknown Toxicity	MUN, GWR, REC1, REC2, WARM, WILD

* Intermittent beneficial use for Reaches 3 and 4

^ Expected from MUN

Definitions	
MUN	Waters used for community, military, municipal or individual water supply systems. Uses may also include drinking water supply.
AGR	Waters are used for farming, horticulture or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
GWR	Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.
REC1	Water contact recreation waters, used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
REC2	Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, and camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.
WARM	Warm freshwater habitat waters support warm water ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.

*California Regional Water Quality Control Board, Santa Ana Regional Water Quality Control Plan Santa Ana River Basin, 1995. (Available at RWQCB.)

All listed water quality objectives governing water quality in inland surface waters were evaluated for potential impacts from development of the proposed project; however, only those numeric and narrative water quality objectives that are most likely to be relevant to the proposed project are listed in **Table 5.8-B, Numeric Water Quality Objectives** and **Table 5.8-C, Applicable Narrative Water Quality Objectives**, respectively. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory program of the SARWQCB is designed to minimize and control pollutant discharges to surface and ground waters within the region, largely through permitting, such that water quality standards are effectively attained.

Regardless whether or not a water body has numeric water quality objectives, narrative objectives apply to all inland surface waters and ground waters within the region under jurisdiction of the SARWQCB. Where more than one narrative objective is applicable, the SARWQCB requires more stringent application of the objective. **Table 5.8.C, Applicable Narrative Water Quality Objectives** lists all of the applicable narrative objectives for inland surface waters in proximity to the project.

Canyon Lake, Lake Elsinore, and the Santa Ana River, Reach 3, are the receiving water bodies for the project. These water bodies are the receiving water bodies for the project. Canyon Lake is impaired for nutrients and pathogens; Lake Elsinore is impaired for nutrients, organic enrichment/low dissolved oxygen, Polychlorinated biphenyls (PCBs), and unknown toxicity; and the Santa Ana River, Reach 3 is impaired for pathogens. Lake Elsinore and Canyon Lake are the terminal points for the San Jacinto watershed. The project's stormwater ultimately discharges to these water bodies, the project will be required to treat the stormwater that leaves the site for the pollutants listed above.

The project consists of the following proposed land uses: residential, schools, parks, mixed use town center, and public facilities. The land uses in the Town Center include retail and office. **Table 5.8-D, Pollutants of Concern**, shows all of the pollutants of concern that are associated with different land use types. Best management practices (BMP) will be required of the project by the County to comply with State standards to treat the stormwater runoff from each different land-use type and associated pollutants of concern. Pollutants of concern associated with the project land use types could potentially reduce the quality of receiving water bodies, which would violate the Clean Water Act; thus, treatment control BMPs, as well as site design and source control BMPs will be used to reduce the pollutant load into receiving water bodies. BMP effectiveness is shown in **Table 5.8-E, Treatment Control BMPs and Effectiveness**.

Table 5.8-B
Numeric Water Quality Objectives

Water Body	Water Quality Objectives (mg/L)						
	Total Dissolved Solids (TDS)	Hardness	Sodium (Na)	Chlorine (Cl)	Total Inorganic Nitrogen (TIN)	Sulfate (SO ₄)	Chemical Oxygen Demand (COD)
Reach 1 – Lake Elsinore to Canyon Lake HU#	450	260	50	65	3	60	15
Reach 2 – Canyon Lake HU#	700	325	100	90	8	290	---
Reach 3 – Canyon Lake to Nuevo Rd. HU#	820	400	---	250	6	---	15
Reach 4 – Nuevo Rd. to North-South Mid-Section Line HU#	500	220	75	125	5	65	---
Lake Elsinore, HU# 802.31	2000	---	---	---	1.5	---	---

California Regional Water Quality Control Board, *Santa Ana Regional Water Quality Control Plan Santa Ana River Basin*, 1995. (Available at RWQCB.)

Table 5.8-C
Applicable Narrative Water Quality Objectives

<i>Bacteria, Coliform</i>
REC-1 Fecal coliform: log mean less than 200 organisms/100 mL based on five or more samples/30 day period, and not more than 10% of the samples exceed 400 organisms/100 mL for any 30-day period. REC-2 Fecal coliform: average less than 2000 organisms/100 mL and not more than 10% of the samples exceed 4000 organisms/100 mL for any 30-day period.
<i>Oil and Grease</i>
Waste discharges shall not result in deposition of oil, grease, wax or other materials in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or adversely affect beneficial uses.
<i>Solids, Suspended and Settleable</i>
Inland surface waters shall not contain suspended or settleable solids in amounts which cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
All inland surface waters of the region shall be free of changes in turbidity which adversely affect beneficial uses.
Waste discharges shall not contain floating materials, including solids, liquids, foam, or scum, which cause a nuisance or adversely affect beneficial uses.
<i>Nitrate</i>
Nitrate-nitrogen concentrations shall not exceed 45 mg/L as (NO ₃) or 10mg/L (as N) in inland surface waters designated MUN as a result of controllable water quality factors.

The information in this table has been derived from the *Santa Ana Regional Water Quality Control Plan Santa Ana River Basin*, 1995. (Available at RWQCB.)

**Table 5.8-D
Pollutants of Concern**

Types of Development	Pathogens	Metals	Nutrients	Pesticides	Organic Compounds	Sediments	Trash and Debris	Oxygen Demanding	Oil and Grease
Detached Residential Development	X		X	X		X	X	X	X
Attached Residential Development	P		X	X		X	X	P ₍₁₎	P ₍₂₎
Commercial/Industrial Development	P ₍₃₎	P	P ₍₁₎	P ₍₁₎	P ₍₅₎	P ₍₁₎	X	P ₍₁₎	X
Automotive Repair Shops		P			X _(4,5)		X		X
Restaurants	X						X	X	X
Hillside Development	X		X	X		X	X	X	X
Parking Lots	P ₍₆₎	X	P ₍₁₎	P ₍₁₎	X ₍₄₎	P ₍₁₎	X	P ₍₁₎	X
Streets, Highways & Freeways	P ₍₆₎	X	P ₍₁₎	P ₍₁₎	X ₍₄₎	X	X	P ₍₁₎	X

X = anticipated. P = potential

(1) A potential pollutant if landscaping or open area exist on-site.

(2) A potential pollutant if the project includes uncovered parking areas.

(3) A potential pollutant if land use involves food or animal waste products.

(4) Including petroleum hydrocarbons.

(5) Including solvents.

(6) Analyses of pavement runoff routinely exhibit bacterial indicators.

**Riverside County Flood Control District, Stormwater Quality Best Management Practice Design Handbook, July 6, 2004.

Table 5.8-E
Treatment Control BMPs and Effectiveness

Pollutant of Concern	Veg. Swale /Veg. Filter Strips(1)	Detention Basins(2)	Infiltration Basins & Trenches/Porous Pavement(3)	Wet Ponds or Wetlands(4)	Sand Filter or Filtration(5)	Water Quality Inlets	Hydrodynamic Separator Systems(6)	Manufactured/Proprietary Devices(7)
Sediment/Turbidity	H/M	M	H/M	H/M	H/M	L	H/M (L turbidity)	U
Nutrients	L	M	H/M	H/M	L/M	L	L	U
Organic Compounds	U	U	U	U	H/M	L	L	U
Trash & Debris	L	M	U	U	H/M	M	H/M	U
Oxygen Demanding Substances	L	M	H/M	H/M	H/M	L	L	U
Bacteria & Viruses	U	U	H/M	U	H/M	L	L	U
Oils & Grease	H/M	M	U	U	H/M	M	H/M	U
Pesticides (non-soil bound)	U	U	U	U	U	L	L	U
Metals	H/M	M	H	H	H	L	H	U

Abbreviations:

L: Low removal efficiency

H/M: High or medium removal efficiency

U: Unknown removal efficiency

Notes:

- (1) Includes grass swales, grass strips, wetland vegetation swales, and bioretention.
- (2) Includes extended/dry detention basins with grass lining and extended/dry detention basins with impervious lining. Effectiveness based upon minimum 36-48-hour drawdown time.
- (3) Includes infiltration basins, infiltration trenches, and porous pavements.
- (4) Includes permanent pool wet ponds and constructed wetlands.
- (5) Includes sand filters and media filters.
- (6) Also known as hydrodynamic devices baffle boxes, swirl concentrators, or cyclone separators.
- (7) Includes proprietary storm water treatment devices as listed in the CASQA Storm Water Best Management Practices Handbooks, other storm water treatment BMPs, or newly developed/emerging storm water treatment technologies.

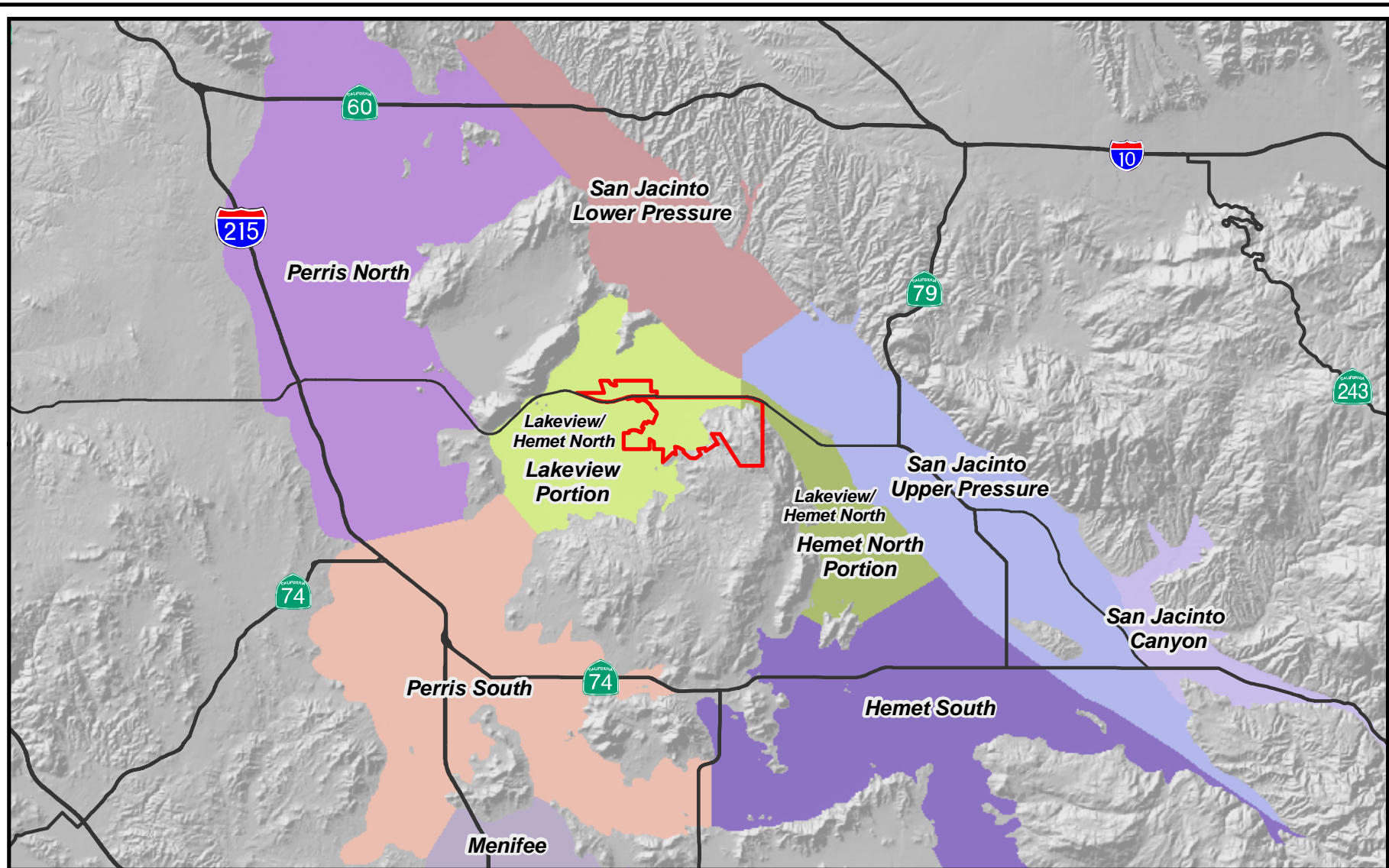
Groundwater Resources

THE VILLAGES OF LAKEVIEW project is located within the San Jacinto watershed. Groundwater resources in the San Jacinto watershed have been delineated by Eastern Municipal Water District (EMWD). EMWD extracts groundwater from multiple management zones which have been divided into eight separate groundwater sub-basins or groundwater management zones (GMZ's). These zones are covered by one of two groundwater management plans. The Hemet/San Jacinto Management Plan Area overlies all or portions of four management zones—the San Jacinto Canyon, San Jacinto Upper Pressure, Hemet South, and the Hemet North portion of the Lakeview/Hemet North. The West San Jacinto Groundwater Basin Management Plan Area overlies all or portions of six management zones—the Perris North, Perris South, San Jacinto Lower Pressure, Menifee, a portion of Hemet South, and the Lakeview portion of the Lakeview/Hemet North. The West San Jacinto Groundwater Basin Management Plan has been in place since 1995 and is located in Appendix B of the 2005 Eastern Municipal Water District (EMWD) Urban Water Management Plan (UWMP). Developing and implementing comprehensive water resources management programs to protect, optimize, and enhance the use of all available resources is a high priority at EMWD.

THE VILLAGES OF LAKEVIEW project is located within the Lakeview/Hemet North GMZ, as shown on **Figure 5.8-5, EMWD Groundwater Management Zones**. The Lakeview/Hemet North GMZ is broken into two portions, the Lakeview portion and the Hemet North portion. These GMZ's were determined based on major impermeable boundaries, constrictions in impermeable bedrock, groundwater divides, and internal flow systems. According to the Hemet/San Jacinto Management Plan, groundwater within the Hemet North portion of the Lakeview/Hemet North GMZ is provided primarily to private well owners. The Hemet North portion of this GMZ is currently being adjudicated. Therefore, a portion of THE VILLAGES OF LAKEVIEW project will have stipulated water rights within the Lakeview/Hemet North GMZ.

The majority of the project site is undeveloped agricultural land in the low lying, relatively flat areas in the west, central, and northern portions of the project site. In the south and southeastern portions of the project site, the land consists primarily of undisturbed mountainous terrain. In general, the project area as a whole has high permeability because of the low gradients and undisturbed or unpaved soils. Currently, there are a number of wells located on-site. Due to the fact that they are primarily private wells historically used for agricultural purposes, little information is available about which are in use or how much water has been or is currently extracted. The proposed project will not use groundwater, therefore groundwater extractions in this area will cease no later than project build-out.

The San Jacinto groundwater basin lies within alluvium-filled valleys carved into elevated bedrock plateau of the Perris Block. Collectively, the basins are nearly surrounded by impermeable bedrock mountains and hills. Internally, island-like masses of granite and metamorphic bedrock rise above the valley floor. The San Jacinto and Casa Loma fault zones are the major geologic features that bound and/or crosscut many of the groundwater basins, and typically are effective barriers to groundwater flow. The area between the San Jacinto and Casa Loma faults is a deep, alluvium-filled graben, a depressed block of land bordered by parallel faults, of tectonic origin, commonly referred to as the San Jacinto graben. The effective base of freshwater in the graben is known to be quite deep but has not been precisely determined.



Sources: USGS DEM;
EMWD GIS, 2007.

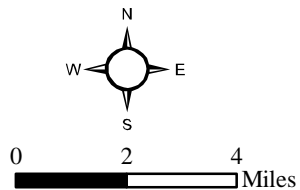


Figure 5.8-5

EMWD Groundwater Management Zones

The Villages of Lakeview EIR No. 471

The 256-square mile West San Jacinto Groundwater Basin is experiencing increasing water levels, which is a result of decreased production due to high total dissolved solids (TDS) and nitrate-nitrogen ($\text{NO}_3\text{-N}$). Concentrations of TDS and $\text{NO}_3\text{-N}$ have been migrating into the Lakeview/Hemet North GMZ, an area of good quality groundwater. Lowering groundwater levels and removal of saline groundwater is an integral element in the West San Jacinto Groundwater Basin Management Plan. There were no apparent significant changes in the water storage in the management zones between 2006 and 2007. Continued operation of the Meniffee and Perris Desalters and continued design of the Perris II Desalter plant and facilities in 2008 was recommended in the West San Jacinto Groundwater Basin Management Plan 2003, Annual Report on the Status of the Sub Basins. Increasing production of usable groundwater and production of brackish groundwater for desalination and blending continue to be elements of the management plan.

Currently, total dissolved solids (TDS) and $\text{NO}_3\text{-N}$ water quality objectives for the Lakeview/Hemet North management zone for TDS are 520 mg/L and $\text{NO}_3\text{-N}$ are 1.8 mg/L in both the West San Jacinto Basin Management Plan and Hemet/San Jacinto Water Management Area. As shown in **Table 5.8-F, TDS and $\text{NO}_3\text{-N}$ by Management Zone for 2004 through 2007**, well samples taken from identified Management Zones do not meet water quality objectives for TDS in any zones except for the Hemet South Management Zone where $\text{NO}_3\text{-N}$ levels were sampled and are within the water quality objective levels (TDS 730 mg/L and $\text{NO}_3\text{-N}$ 4.1mg/L). EMWD recognizes the potential water quality issues within its service area and samples are routinely taken to monitor water quality.

In 2007, the highest TDS registered in the West San Jacinto Basin Management Plan area was 14,600 mg/L in the middle portion of the Perris South Management Zone; and the lowest was 300 mg/L in the northern part of the Lakeview portion of the Lakeview/Hemet North Management Zone. In 2007, the highest $\text{NO}_3\text{-N}$ registered in the Management Plan area was 24.0 mg/L in the northwest portion of the Perris North Management Zone; and the lowest was “non-detect” (a non-detect indicates that the constituent is not present or is present in quantities below the testing detection limit for that compound) in the Lakeview portion of the Lakeview/Hemet North, Perris North, Perris South, and San Jacinto Lower Pressure Management Zones. Therefore, groundwater quality is relatively better in areas underlying the project site. Since no groundwater is proposed to be used by the proposed project, existing wells will cease any pumping that may be occurring now, and groundwater recharge potential in the area of the river and within the on-site drainage system is maintained, the project poses little change to the groundwater situation in the area. Since groundwater relates to water supply, further discussion of groundwater is provided in Section 5.15, Utilities, under the Water subsection.

Information provided in the 2007 EMWD’s West San Jacinto Groundwater Basin Management Plan indicates groundwater depths to be on the order of 88 to 266 feet below ground level. According to the Leighton and Associates’ *Preliminary Geotechnical Investigation* report, depth to groundwater within the project area is approximately 200 feet below ground surface.

Table 5.8-F
TDS and NO₃-N by Management Zone for 2004 through 2007

Management Zone	Year	No. of Samples	TDS (mg/L)		NO ₃ -N (mg/L)	
			High	Low	High	Low
Lakeview/Hemet North (West San Jacinto Groundwater Basin Management Plan)	2004	25	4,410	380	22.0	ND
	2005	24	4,360	360	21.0	ND
	2006	22	4,520	350	21.0	ND
	2007	19	4,410	300	11.0	ND
Perris North	2004	25	1,400	270	23.0	0.8
	2005	22	1,310	220	23.0	ND
	2006	22	1,620	240	20.0	ND
	2007	17	1,730	460	24.0	ND
Perris South	2004	40	10,300	590	20.0	ND
	2005	46	10,100	580	18.0	ND
	2006	38	15,700	310	26.0	ND
	2007	41	14,600	320	21.0	ND
S.J. Lower Pressure	2004	7	1,870	330	7.8	ND
	2005	6	1,870	260	7.7	ND
	2006	5	1,080	360	8.5	ND
	2007	8	1,180	340	8.0	ND
Menifee	2004	16	4,540	840	15.0	0.2
	2005	16	3,680	910	10.0	ND
	2006	12	3,880	921	14.0	ND
	2007	13	3,580	770	14.0	ND
Hemet South (Partial)	2004	2	800	630	16.0	12.0
	2005	0	-	-	-	-
	2006	3	710	470	17.0	7.3
	2007	0	-	-	-	-
Canyon	2007	22	1,500	180	13	<0.1
San Jacinto Upper Pressure	2007	64	3,820	170	25	<0.1
Lakeview/Hemet North (Hemet/San Jacinto Water Management Area)	2007	19	1,015	340	4.7	<0.1
Hemet South	2007	27	1,330	210	50	0.4

-ND stands for "None Detected," an indication that the constituent is not present or is present in quantities below the testing detection limit.

-Information in this table was taken from the 2007 Annual Report West San Jacinto Groundwater Basin Management Plan and the 2007 Hemet/San Jacinto Water Management Area (of which only the 2007 data was available).

Thresholds of Significance

The County of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the ~~City of Perris's~~ County of Riverside's "Environmental Checklist" for the subject project (see Appendix A (CD #3) of this document) indicates that impacts to hydrology/water quality may be considered potentially significant if the project would:

- A. Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site.
- B. Violate any water quality standards or waste discharge requirements.
- C. 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).
- D. 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.
- E. 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.
- F. Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- G. Otherwise substantially degrade water quality.
- H. Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g., water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors and odors).
- I. Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site.
- J. Change in absorption rates or the rate and amount of surface runoff.
- K. 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 (Dam Inundation Area).
- L. Change in the amount of surface water in any water body.

Related Regulations

Federal

Federal Clean Water Act

Pursuant to Section 404 of the Clean Water Act, the United States Army Corps of Engineers (ACOE) regulates discharges of dredged and/or fill material into waters of the United States. “Waters of the United States” are defined in ACOE regulations at 33 C.F.R. Part 328.3(a). Navigable waters of the United States are those waters of the United States that are navigable in the traditional sense. Waters of the United States is a broader term than navigable waters of the United States and includes adjacent wetlands and tributaries to navigable waters of the United States and other waters where the degradation or destruction of which could affect interstate or foreign commerce.

The Federal Clean Water Act (CWA) requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. The water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The SARWQCB placed Lake Elsinore and Canyon Lake on the 303(d) list of impaired waters in 1994. Lake Elsinore and Canyon Lake are the terminal points for the San Jacinto watershed. Therefore, the project will discharge storm water into receiving waters with known water quality impairments.

The Federal Clean Water Act and the State Porter-Cologne Water Quality Act, requires basin-wide planning. Additionally, the National Pollution Discharge Elimination System (NPDES), empowers the SARWQCB to set discharge standards, and encourages the development of new approaches to water quality management. The Santa Ana River Basin Plan 1995 (SARBP) identifies beneficial uses and water quality objectives for all waters of the state, both surface and subsurface (groundwater). A beneficial use is one of the various ways that water can be used for the benefit of people and/or wildlife. According to the SARBP, the beneficial uses for Canyon Lake and Lake Elsinore includes: municipal and domestic water supply, agricultural water supply, groundwater recharge, warm fresh water aquatic habitat, body, and non-body contact recreation, and wildlife habitat.

In 1972, the Federal Water Pollution Control Act (Clean Water Act) was amended to prohibit the discharge of pollutants to waters of the United States unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The Clean Water Act focused on tracking point sources, primarily from wastewater treatment facilities and industrial waste dischargers, and required implementation of control measures to minimize pollutant discharges. The Clean Water Act was amended again in 1987, adding Section 402(p), to provide a framework for regulating municipal and industrial storm water discharges. In November 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish requirements for specific categories of industries, including construction projects that encompass greater than or equal to 5 acres of land. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to 1 acre. The regulations require that storm water and non-storm water runoff associated with construction activity, which

discharges either directly to surface waters or indirectly through municipal separate storm sewer systems (MS4), must be regulated by an NPDES permit.

State

The State Water Resources Control Board administers the NPDES permit program regulating storm water from construction activities for projects greater than one acre in size. This is known as the General Permit for Storm Water Discharges Associated with Construction Activities, Order No. 99-08-DWQ, NPDES No. CAS000002. The main compliance requirement of the NPDES permits is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to identify potential on-site pollutants and identify and implement appropriate storm water pollution prevention measures to reduce or eliminate discharge of pollutants to surface water from storm water and non-storm water discharges. Storm water best management practices (BMPs) to be implemented during construction and grading, as well as post-construction BMPs, will be outlined in the SWPPP prepared for the proposed project. Examples of BMPs include: detention basins for capture and containment of sediments, use of silt fencing, sandbags, or straw bales to control runoff and identification of emergency procedures in case of hazardous materials spills. The project proponent will be required to obtain a construction NPDES permit prior to site disturbance.

Local

General Plan Policies

The following are applicable policies from the County of Riverside General Plan related to hydrology and water quality:

- | | |
|---------------|---|
| LU Policy 3.3 | Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers. (AI 3) |
| LU Policy 5.3 | Based on site specific study, all development shall be set back from the floodway boundary a distance adequate to address the following issues: a. public safety; b. erosion; c. riparian or wetland buffer; d. wildlife movement corridor or linkage; and e. slopes. |
| LU Policy 5.4 | Consider designating floodway setbacks for greenways, trails, and recreation opportunities on a case-by-case basis. (AI 25, 59, 60) |
| LU Policy 4.8 | Allow development within the floodway fringe, if the proposed structures can be adequately flood-proofed and will not contribute to property damage or risks to public safety. (AI 25, 60) |
| LU Policy 4.9 | Within the floodway fringe of a floodplain as mapped by FEMA or as determined by site specific hydrologic studies for areas not mapped by FEMA, require development to be capable of withstanding flooding and to minimize use of fill. However, some development may be compatible within flood plains and floodways, as may some other land uses. In such |

cases, flood proofing would not be required. Compatible uses shall not, however, obstruct flows or adversely affect upstream or downstream properties with increased velocities, erosion backwater effects, or concentrations of flows. (AI 60)

LU Policy 4.18 Require that the design and upgrade of street storm drains be based on the depth of inundation, relative risk to public health and safety, the potential for hindrance of emergency access and regress from excessive flood depth, and the threat of contamination within the top of curbs and the 100-year flood flows within the street right of way.

The relationship of the project to the above general plan policies is presented in Appendix N (CD #4) of this DEIR.

On September 17, 2004, the Water Quality Management Plan for Urban Runoff from New Development and Significant Redevelopment (WQMP) was adopted by the SARWQCB and became effective January 1, 2005. This includes the preparation of a site specific Water Quality Management Plan (WQMP) that will identify BMPs to ensure that water quality of receiving waters is not degraded following development. New projects submitted to Riverside County are now required to submit a project-specific WQMP prior to the first discretionary project approval or permit. Project applicants may submit a preliminary project-specific WQMP for discretionary project approval (land use permit); however, a final version would be submitted for review and approval prior to the issuance of any grading or building permits.

As indicated in the Riverside County Water Quality Management Plan (WQMP), it is imperative that development projects minimize changes to hydrology to ensure that post-development runoff rates and velocities from a site do not adversely impact downstream erosion, sedimentation or stream habitat. Urban Runoff and associated impacts may be reduced by minimizing impervious surfaces and incorporating other site-design concepts that replicate or reduce impacts to the pre-development condition. The goal of these site design techniques is to achieve post development runoff flow rates, volumes, velocities, and durations that prevent significant increase in downstream erosion compared to the pre-development condition and prevent significant adverse impacts to stream habitat during the 2-year and 10-year, 24-hour rainfall event.

In order to minimize downstream erosion and subsequent sediment transport to Canyon Lake, the project must address the issue of Hydrologic Conditions of Concern under the WQMP unless one of the following three conditions are met:

- Runoff from the project is discharged directly to a publicly-owned, operated and maintained municipal separate storm sewer systems (MS4); the discharge is in full compliance with Co-Permittee (municipalities as listed in Table 1 of the *Riverside County Water Quality Management Plan for Urban Runoff*) requirements for connections and discharges to the MS4 (including both quality and quantity requirements); the discharge would not significantly impact stream habitat in proximate Receiving Waters; and the discharge is authorized by the Co-Permittee.

- The project disturbs less than 1 acre. The disturbed area calculation should include all disturbances associated with larger common plans of development.
- The project's runoff flow rate, volume, velocity, and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour and 10-year, 24-hour rainfall events. This condition can be achieved by minimizing impervious area on a site and incorporating other site-design concepts that mimic pre-development conditions. This condition must be substantiated by hydrologic modeling methods acceptable to the Co- Permittee.

Area Drainage Plans (ADP) are adopted throughout the western parts (RCFCWCD jurisdiction) of the County to fund needed stormdrain/flood protection infrastructure. First adopted by Riverside County in February 1981 and revised in 1993, the Lakeview/Nuevo Area Drainage Plan (ADP), includes a portion of the project area; this plan addresses the watershed area within and to the southwest of the project. This ADP includes some proposed drainage facilities to protect property in the western extent of the project area from serious flooding. According to the RCFCWCD, *Rules and Regulations for Administration of Area Drainage Plans*, the area drainage plan is a mechanism that provides guidance as to the needed facilities and the monies that will be required, and what development will be required to finance. Currently, the fees that can be expected within the Lakeview/Nuevo Area Drainage Plan are \$2,093 per acre.

The Lakeview/Nuevo Master Drainage Plan (MDP), adopted in 1981 and later revised in 1985, identifies specific drainage facilities within the Lakeview/Nuevo ADP which, when implemented, are expected to provide some flood protection for a portion of the project area. Once the project's Drainage Plan, including off-site MDP facilities, is implemented, the facilities will be MS4 facilities.

California Civil Code Section 1103–1103.4 applies to the transfers of real property between private parties, as defined therein, and requires notification upon transfer if the property is affected by one or more natural hazards. The following potential hazards must be disclosed, if known: FEMA flood hazard areas, dam failure inundation areas, very high fire hazard severity zone, wildland area with forest fire risks, earthquake fault zone, and seismic hazard zones including landslide and liquefaction on a standardized "Natural Hazard Disclosure Statement" (Section 1103.2). The proposed project identifies all of these hazards within the Planning Area with the exception of the forest fire risks.

Project Design Considerations

Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts through the design of the project.

Overall aspects of THE VILLAGES OF LAKEVIEW project include approximately 1,104 acres of conservation and open space areas. These areas will remain as is or will be vegetated with native or drought tolerant trees, shrubs, grass etc. per the landscape design. The project proposes to have a community with approximately 50,000 trees. In addition to this, the project will have approximately 150 acres of park located throughout the project.

Proposed Hydrology and Drainage Plan

THE VILLAGES OF LAKEVIEW Specific Plan proposes to use streets, underground storm drains, open channels, debris basins, and detention basins to collect the on-site and off-site storm water, and convey it through the project and into the San Jacinto River floodplain area. (**Figure 5.8-6, Master Plan of Drainage (On-Site)**) Closed conduits, man-made earthen channels, a detention basin located in Central Park, debris basins, and roadways will convey developed 100-year storm runoff through the project, in accordance with RCFCWCD standards and requirements. Proposed backbone drainage facilities will be required to accommodate developed 100-year storm runoff through the project, in order to protect habitable dwelling units from flooding. This project proposes to match existing flows as closely as possible along Marvin Road, by regulating overflow with the use of detention basins, spillover channels, and an open channel that takes runoff westerly to the most northwesterly tip of the project at the San Jacinto River. Between Town Center Boulevard and the east end crossing, the project proposes to let Q100 flows cross the Ramona Expressway without exceeding historical peak flows, and in some cases reducing such flow rates from their historical peak flow rates. It shall be noted that, although post-project flow rates north of Ramona Expressway east of Town Center Blvd. will be reduced, there will be concentration of flows discharged through culverts as a result of the widening of Ramona Expressway. Should the project be required to widen the Ramona Expressway east of Town Center Blvd., a mitigation structure that spreads these flows will be constructed in accordance with RCFCWCD standards in an effort to duplicate existing drainage patterns. (See MM Util 3a located in Section 5.15.)

The detention basin is located in areas designated as park, in the Land Use Diagram. The debris basins are located outside of the Lakeview Mountains Conservation area. The Central Park detention basin is approximately 6.7 acres of the 36.2-acre park and is proposed to be no more than 7 feet deep at its deepest point. Passive park uses will be allowed within the basin.

The stormdrain channel which crosses under Ramon Expressway west of Town Center Boulevard is a large facility which is planned to accommodate both stormwater flows and trails. Construction of this large facility could disrupt traffic on Ramona Expressway if not staged and constructed in such a way as to avoid traffic impacts.

In addition, the Specific Plan proposes diversion structures (detailed as Exhibit B.3.11F in SP 342), closed conduits, and an open channel along Ramona Expressway to capture WQMP flow and convey it to the main open channel, which eventually delivers it to the Water Quality Basin located at the northwest corner of the project site.

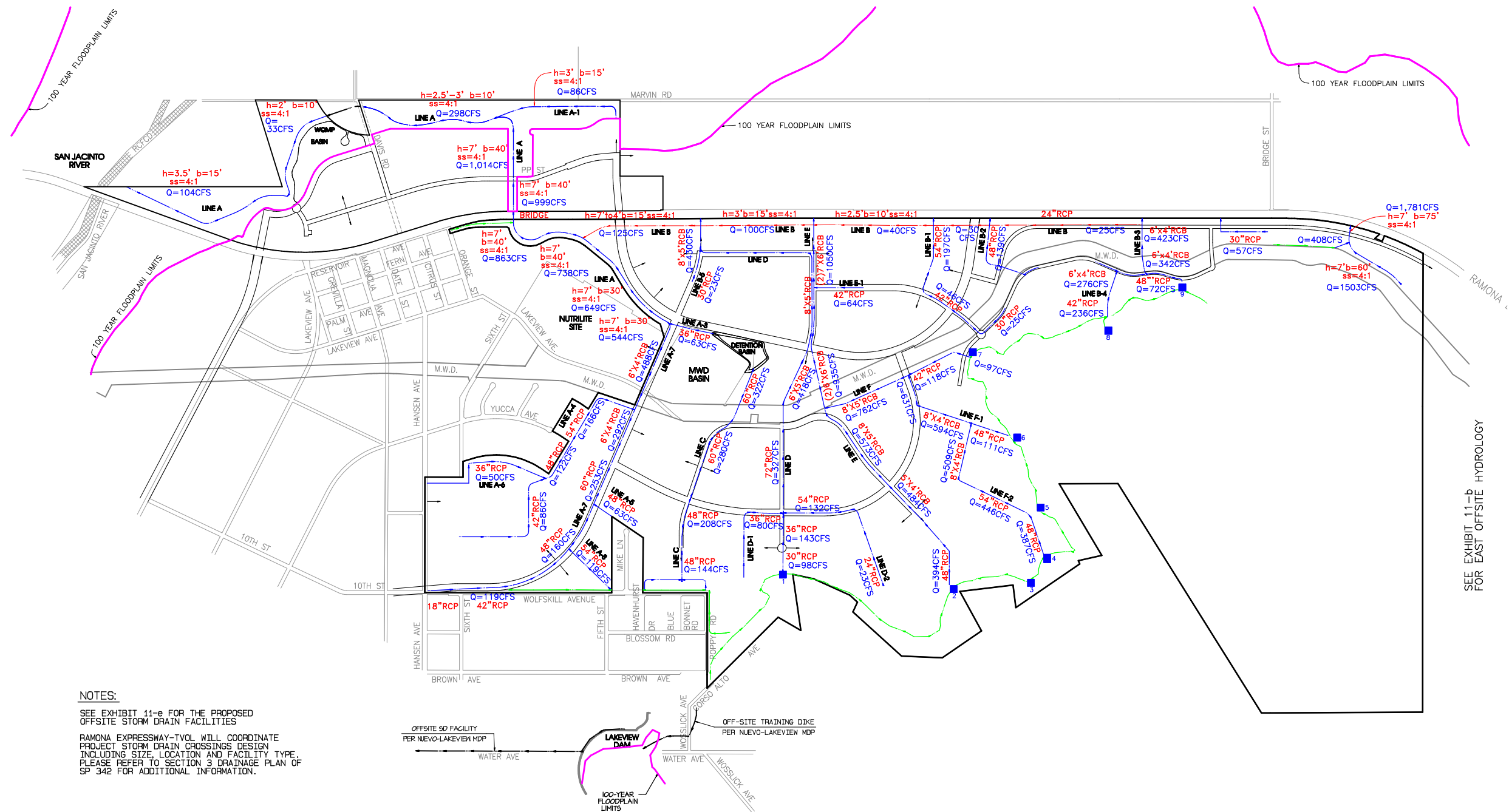
This project proposes to keep all buildings outside of the 100-year San Jacinto River floodplain. This will require the re-delineation of the San Jacinto River floodplain, via a LOMR, along the northwest portion of the project affecting proposed development within Planning Areas PA10, PA12 and PA14. THE VILLAGES OF LAKEVIEW is proposing conservation, recreational and park uses within the area inside the flood plain limits. The open space areas will serve the function of storm drain and parks facilities. Grading in the open space/park areas, is expected to increase the storage capacity in the floodplain from an existing 625 acre-ft to 744 acre-ft. This is an increase of about 19 percent, equivalent to a volume of 119 acre-ft.

Figure 5.8-6, Master Plan of Drainage (On-Site), shows a conceptual on-site drainage system that is consistent with the conceptual street alignments and grading plan within the various planning areas of THE VILLAGES OF LAKEVIEW Specific Plan. Storm drain facility alignments and sizes may change during final project development phases, and during the Ramona Expressway expansion project, which is led by the County of Riverside. Additional facilities may be needed to address the drainage needs within each Planning Area. These additional facilities may consist of a combination of street flows, storm drainpipes, and man-made earthen channels.

Off site, the project will be implementing the Nuevo/Lakeview MDP that will direct all outflows from the Lakeview dam, westerly to the existing Nuevo Channel, increasing the storage of the Lakeview Dam and also constructing the training dike to direct storm flows into Lakeview Dam. The MDP facilities include a series of reinforced concrete pipes (RCPs) from the dam outlet to Nuevo Channel. The Lakeview dam was constructed with a reserve capacity that can accommodate additional inflows. Once off-site improvements, a) the modification to Lakeview Dam for additional storage, b) the construction of the training dike to direct flows into Lakeview Dam and c) the construction of Lateral D to Nuevo Channel, and the on-site Drainage Plan are implemented, flooding within the project will be reduced significantly except for storms of unusual magnitude. **Figure 5.8-7, Master Plan of Drainage (Off-Site)**, shows the off-site drainage facilities the project will be constructing.

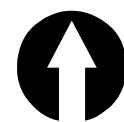
At build-out, THE VILLAGES OF LAKEVIEW drainage system will be connected to the Ramona Expressway drainage system. THE VILLAGES OF LAKEVIEW drainage system has been designed to accommodate future improvements proposed for the Ramona Expressway. A typical Ramona Expressway expansion storm drain crossing would be a culvert crossing that connects to the backbone storm drain facilities from THE VILLAGES OF LAKEVIEW.

In its existing state, the Ramona Expressway is subject to flooding; however, under the County's General Plan and other concurrent circulation improvement efforts, the Ramona Expressway is proposed to be widened and flood proofed. The existing Riverside County General Plan Circulation Element designates the Ramona Expressway as an expressway with a right-of-way width from 184' to 220'. The General Plan further designates the Ramona Expressway as the Hemet to Corona/Lake Elsinore Community and Environmental Transportation (CETAP) Corridor. Subsequent to adoption of the General Plan, the Hemet to Corona/Lake Elsinore CETAP corridor has been designated as the Mid County Parkway. Improvement of the Ramona Expressway will be accomplished by others through one of many possible mechanisms. Currently, the Riverside County Transportation Commission (RCTC) is processing environmental documentation for construction of the Mid County Parkway. THE VILLAGES OF LAKEVIEW and RCTC are collaborating to insure the design of each project's drainage system is consistent such that the connection of the two systems can ultimately be accomplished.





* FLOW RATES AND STORM DRAIN SIZES ARE BASED ON LAKEVIEW-NUOVO MASTER DRAINAGE PLAN. ADDITIONAL HYDROLOGY AND HYDRAULIC STUDIES ARE REQUIRED TO FINALIZE THE FLOW RATES AND STORM DRAIN SIZES.



LEGEND

- OFFSITE ALIGNMENT
- R/W
- EX. NUEVO CHANNEL
- TVOL BOUNDARY
- ~ PROPOSED DRAINAGE COURSE

Figure 5.8-7

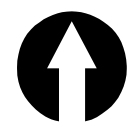
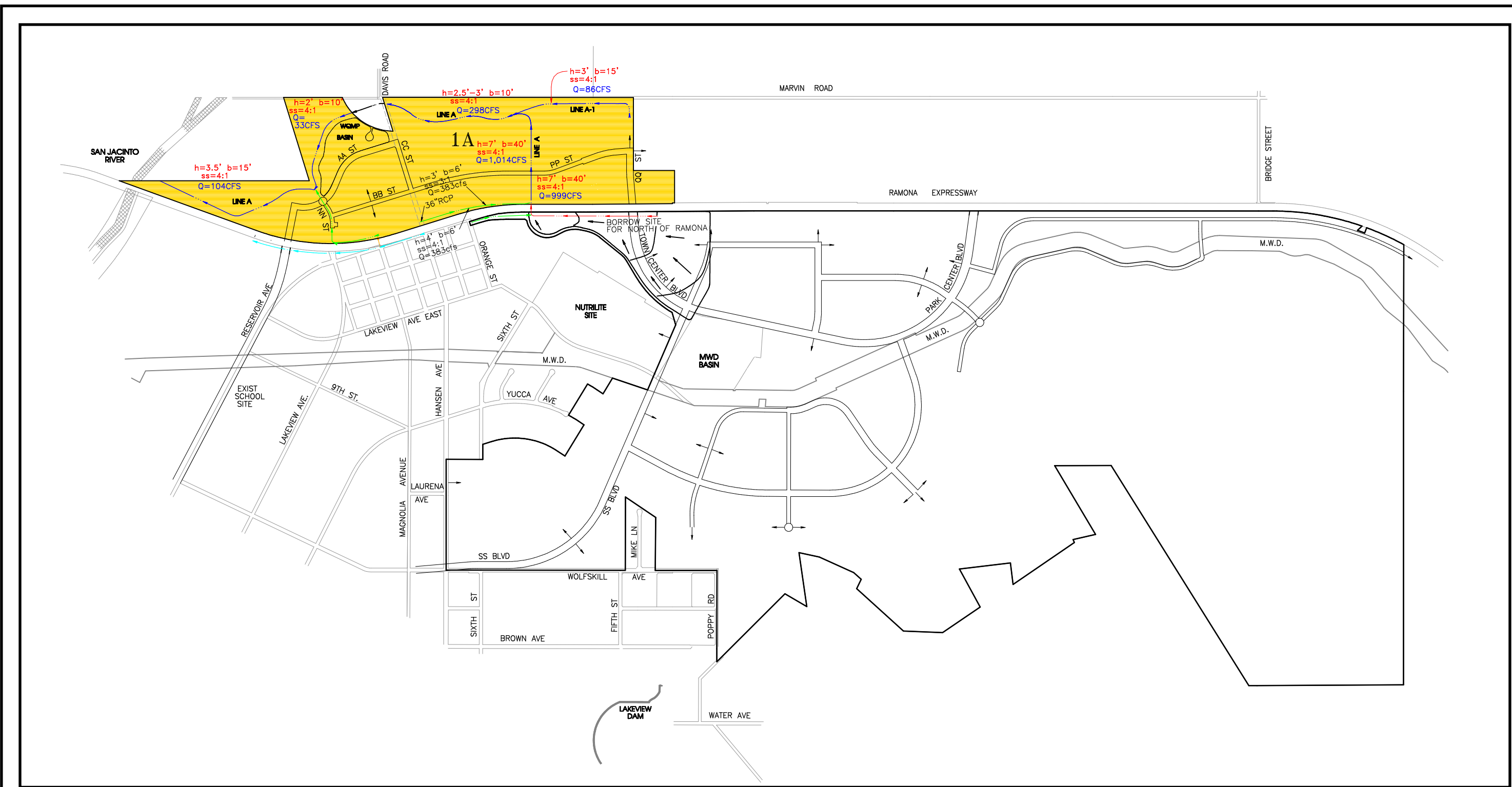
Master Plan of Drainage (Off-Site)

In the event THE VILLAGES OF LAKEVIEW develops adjacent to and upstream of Ramona Expressway prior to improvements to the Ramona Expressway, THE VILLAGES OF LAKEVIEW will construct interim facilities as approved by RCFC&WCD and the Riverside County Transportation Department. Interim facilities have been designed to accommodate floodwaters and treat flows that could impact the Phase 1 area located north of Ramona Expressway, and off-site areas, during the interim condition that may exist prior to the completion of all necessary upstream drainage facilities. In addition, Ramona Expressway may not be upgraded to expressway or freeway status in concurrence with all of THE VILLAGES OF LAKEVIEW phasing and may need to be protected from flooding in an interim situation. Therefore interim facilities have been designed to accommodate floodwaters and treat flows during this interim condition. Two approaches are being used, as stated above, the first approach consists of catch drains/ditches along the north side of Ramona Expressway which will direct sheet flows toward the permanent channel constructed under Ramona Expressway. The other approach is to construct temporary onsite sump areas along the southern side of Ramona Expressway (see **Figures 5.8- 8 through 5.8-12, Conceptual Storm Drain Phasing, Phase 1A through 3B**).

THE VILLAGES OF LAKEVIEW Specific Plan Drainage Plan Development Standards, below, will also be required of the project:

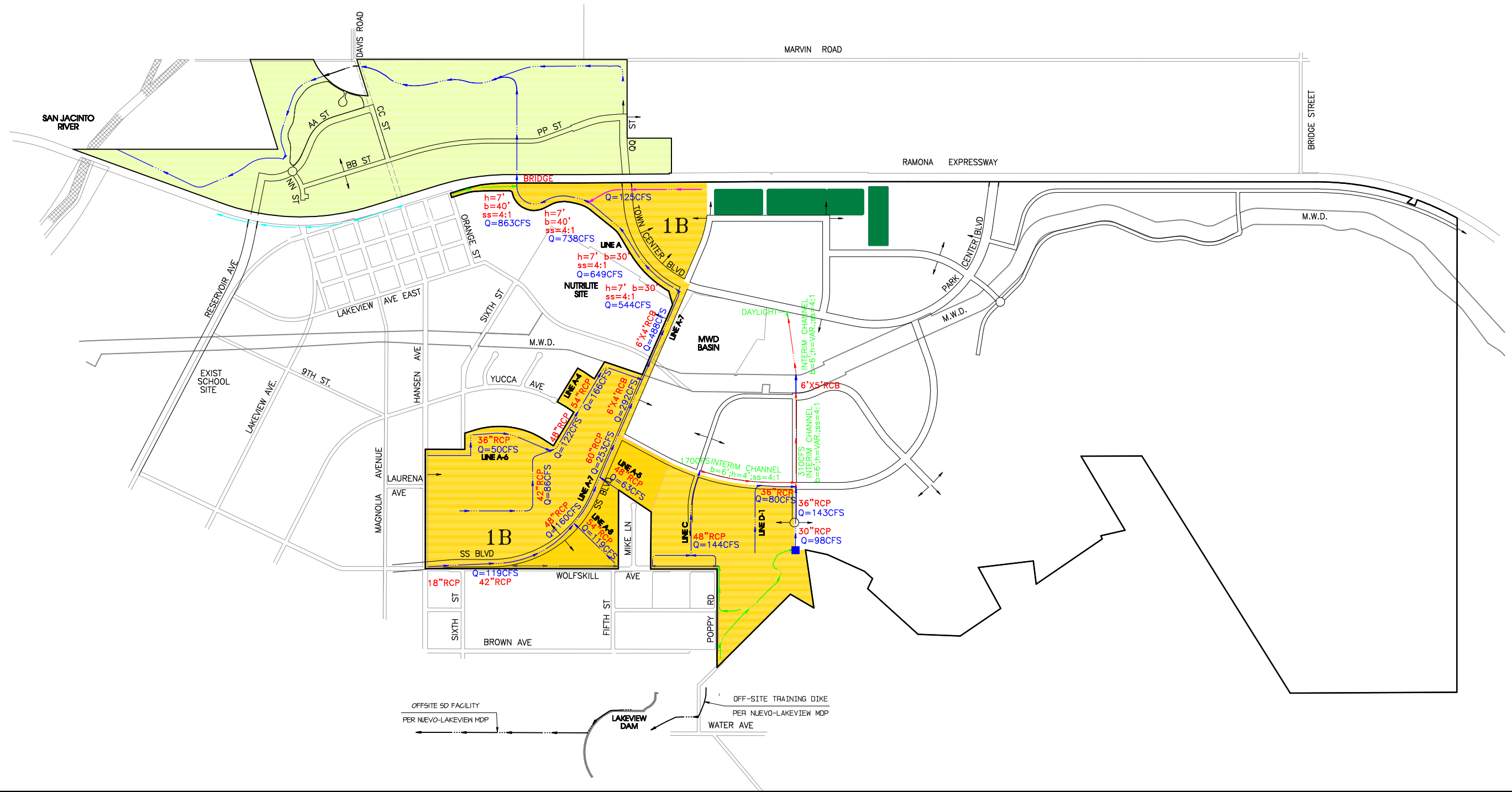
1. Drainage and flood control facilities and improvements shall be provided in accordance with Riverside County Flood Control and Water Conservation District (RCFC&WCD) requirements.
2. Q10 and Q100 flow levels shall be kept within limits set by County Ordinance 460, Article XI. Should water levels exceed such limits, adequate drainage facilities shall be provided.
3. Storm drain facilities shall ensure the acceptance and disposal of 100-year storm runoff without damage to streets or adjacent properties.
4. All areas within the Specific Plan will be required to prepare a Storm Water Pollutant Prevention Plan (SWPPP) in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) standards as part of the final design of an application.
5. The proposed Preliminary Water Quality Management Plan (PWQMP) and debris basins, as shown in **Figures 5.8-13, Preliminary WQMP by Drainage Zone, 5.8-14, Preliminary WQMP On-site, Off-site, Existing and Developed, and 5.8-15, Preliminary Pretreatment Measures**, will address management of the project onsite-runoff quality by functioning as treatment control BMP to meet the requirements of MS4 permit at the project site (Order No. R8-2002-0011, NPDES No. CAS 618033; Santa Ana Regional Water Quality Control Board).
6. All drainage and storm drain facilities may be maintained by one of the following: the Riverside County Flood Control and Water Conservation District, Riverside County Transportation Department, or other public agency, a community service financing mechanism such as a County Service Area (CSA), a Community Services District (CSD), or a Homeowners' Association (HOA).

7. To mitigate for potential traffic impacts associated with the construction of the storm drain channel located west of Town Center Boulevard, construction documents must specify boring and tunneling techniques that will be used, if feasible.
- ~~8. Should crossing or open trenching through the Ramona Expressway be required as a part of the construction of the storm drain channel located west of Town Center Boulevard, temporary traffic control measures including but no limited to, flagmen, temporary median barriers, or realigned roadway segments shall be used to maintain two-way traffic at all times. A traffic control plan shall be submitted for approval to RCFCWCD and County Transportation Department with the construction documents for the channel.~~
8. A traffic control plan shall be submitted for approval to RCFCWCD and the County Transportation Department if the construction of the storm drain channel through Ramona Expressway could potentially affect traffic.



- LEGEND**
- 750CFS
 - Q100 (ULTIMATE)
 - PROPOSED ONSITE STORM DRAIN FACILITIES
 - PROPOSED ONSITE COLLECTOR
 - EXISTING DITCH
 - PROPOSED TEMPORARY ONSITE COLLECTOR
 - PROPOSED OFFSITE STORM DRAIN FACILITIES
 - PROPOSED R/W
 - TVOL PROJECT BOUNDARY
 - TVOL PROJECT PHASE 1A BOUNDARY

Figure 5.8-8
Conceptual Storm Drain Phasing, Phase 1A



ALBERT A.
WEBB
ASSOCIATES



LEGEND

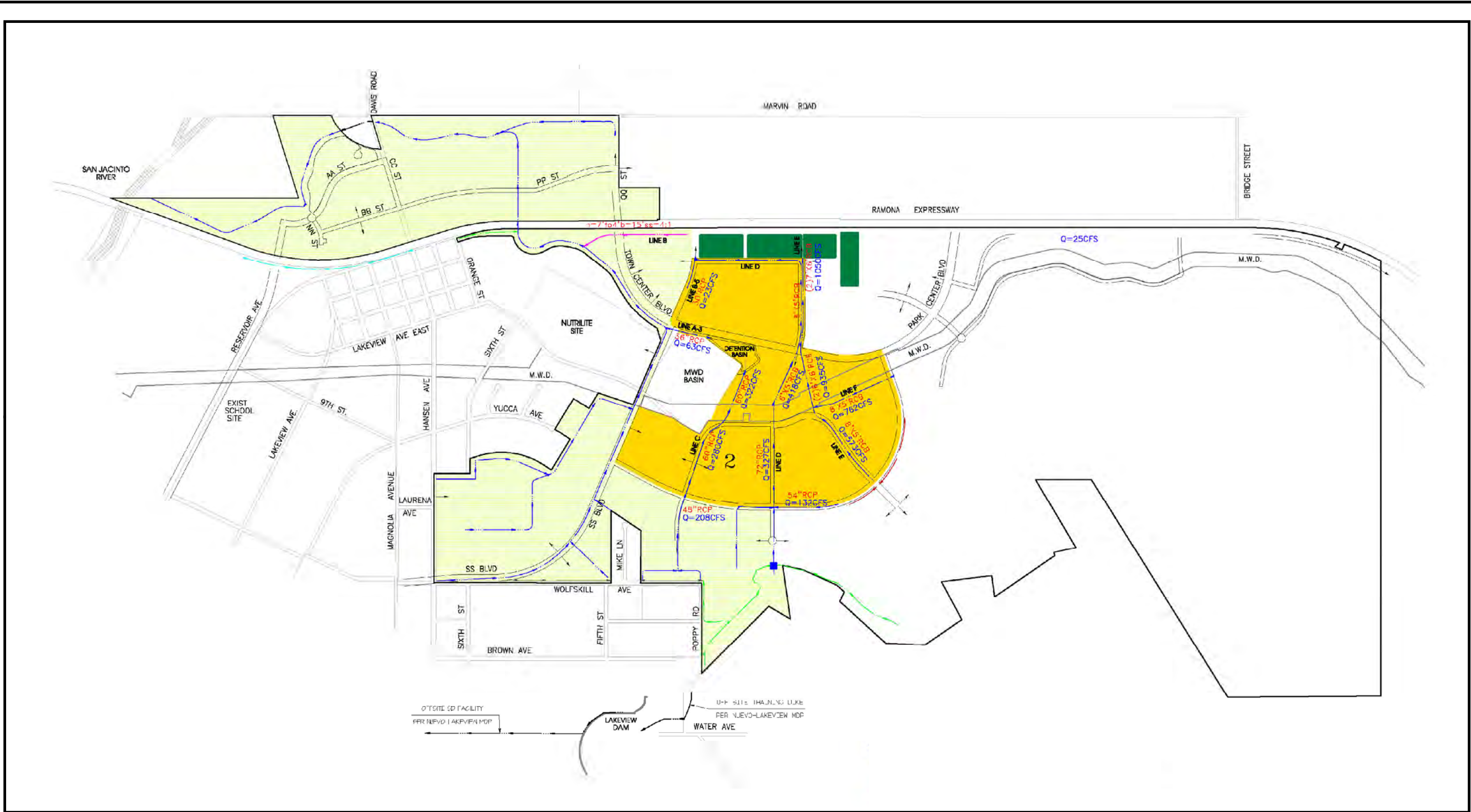
- 750CFS (PHASE)
- 750CFS (ULTIMATE)
- PROPOSED ONSITE STORM DRAIN FACILITIES
- PROPOSED ONSITE COLLECTOR
- EXISTING DITCH
- PROPOSED TEMPORARY ONSITE COLLECTOR
- PROPOSED OFFSITE STORM DRAIN FACILITIES

- PROPOSED EDGE CONDITION CUT OFF DITCH
- PROPOSED STORM DRAIN FACILITIES FOR WQMP FLOW ONLY
- PROPOSED R/W
- TVOL PROJECT BOUNDARY
- TVOL PROJECT PHASE 1B BOUNDARY
- DEBRIS BASIN
- PROPOSED TEMPORARY ONSITE SUMP

Figure 5.8-9

Conceptual Storm Drain Phasing, Phase 1B

The Villages of Lakeview EIR No. 471



Source: SP No. 342

Not to Scale



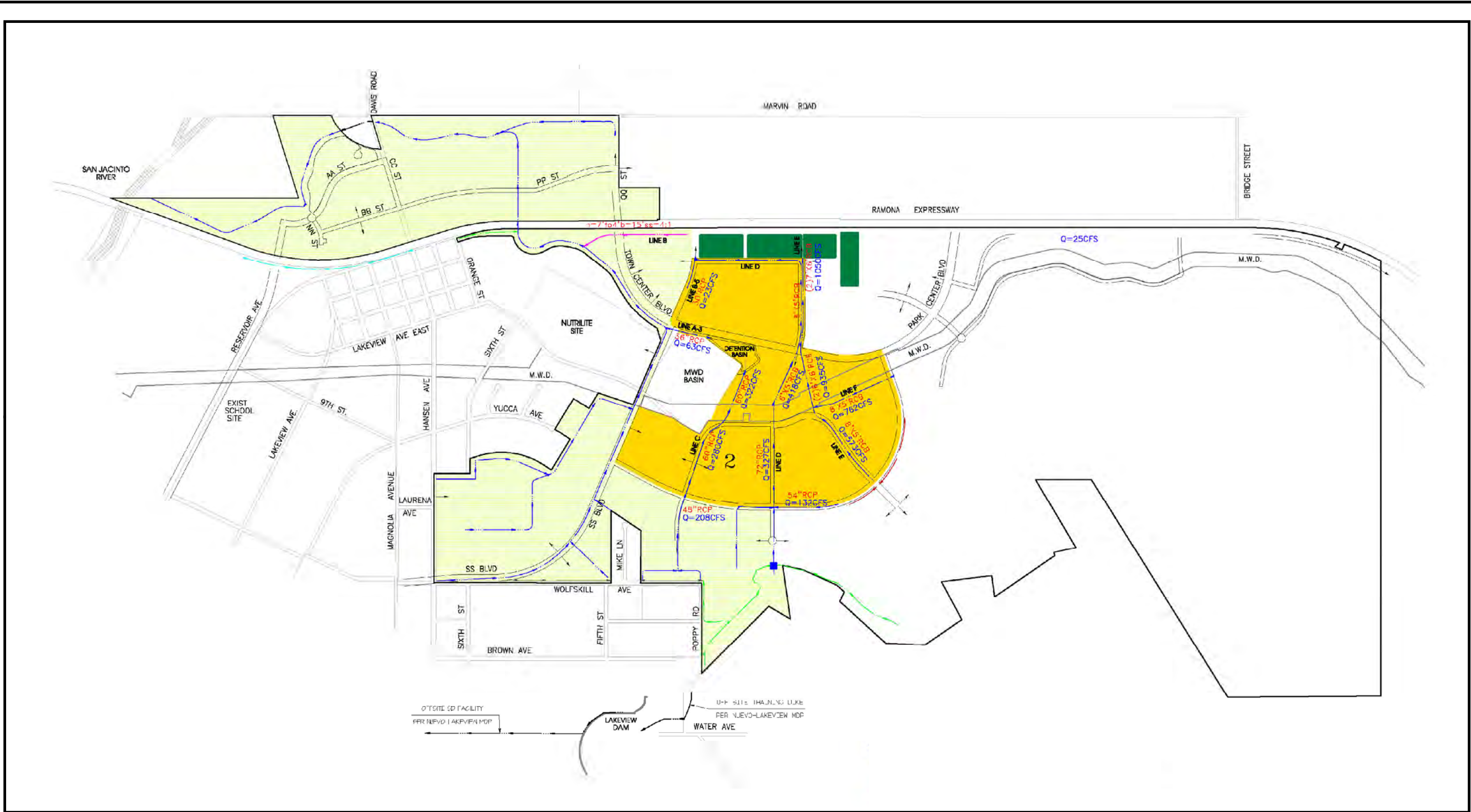
LEGEND

- 750CFS
- Q100 (ULTIMATE)
- PROPOSED ONSITE STORM DRAIN FACILITIES
- PROPOSED ONSITE COLLECTOR
- EXISTING DITCH
- PROPOSED TEMPORARY ONSITE COLLECTOR
- PROPOSED OFFSITE STORM DRAIN FACILITIES
- PROPOSED EDGE CONDITION CUT OFF DITCH
- PROPOSED STORM DRAIN FACILITIES FOR WQMP FLOW ONLY
- PROPOSED R/W
- TYPICAL PROJECT BOUNDARY
- HYDROLOGY BOUNDARY FOR LINE F INLET
- TYPICAL PROJECT PHASE 3A BOUNDARY
- DEBRIS BASIN

Figure 5.8-10

Conceptual Storm Drain Phasing, Phase 2

The Villages of Lakeview EIR No. 471



Source: SP No. 342

Not to Scale

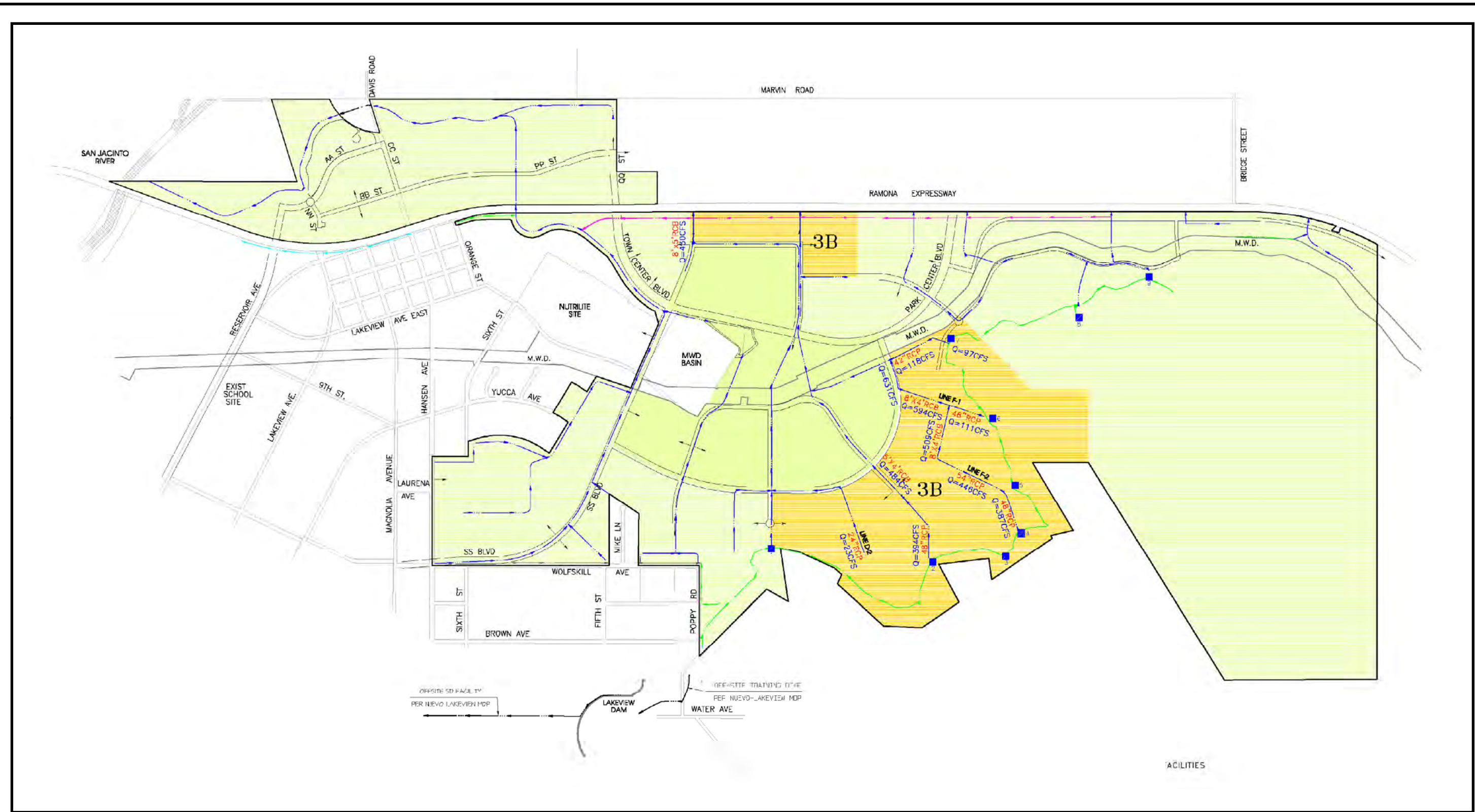


LEGEND

- 750CFS
- Q100 (ULTIMATE)
- PROPOSED ONSITE STORM DRAIN FACILITIES
- PROPOSED ONSITE COLLECTOR
- EXISTING DITCH
- PROPOSED TEMPORARY ONSITE COLLECTOR
- PROPOSED OFFSITE STORM DRAIN FACILITIES
- PROPOSED EDGE CONDITION CUT OFF DITCH
- PROPOSED STORM DRAIN FACILITIES FOR WQMP FLOW ONLY
- PROPOSED R/W
- TYPICAL PROJECT BOUNDARY
- HYDROLOGY BOUNDARY FOR LINE F INLET
- TYPICAL PROJECT PHASE 3A BOUNDARY
- DEBRIS BASIN

Figure 5.8-11

Conceptual Storm Drain Phasing, Phase 3A



Source: SP No. 342

Not to Scale

ALBERT A.
WEBB
ASSOCIATES

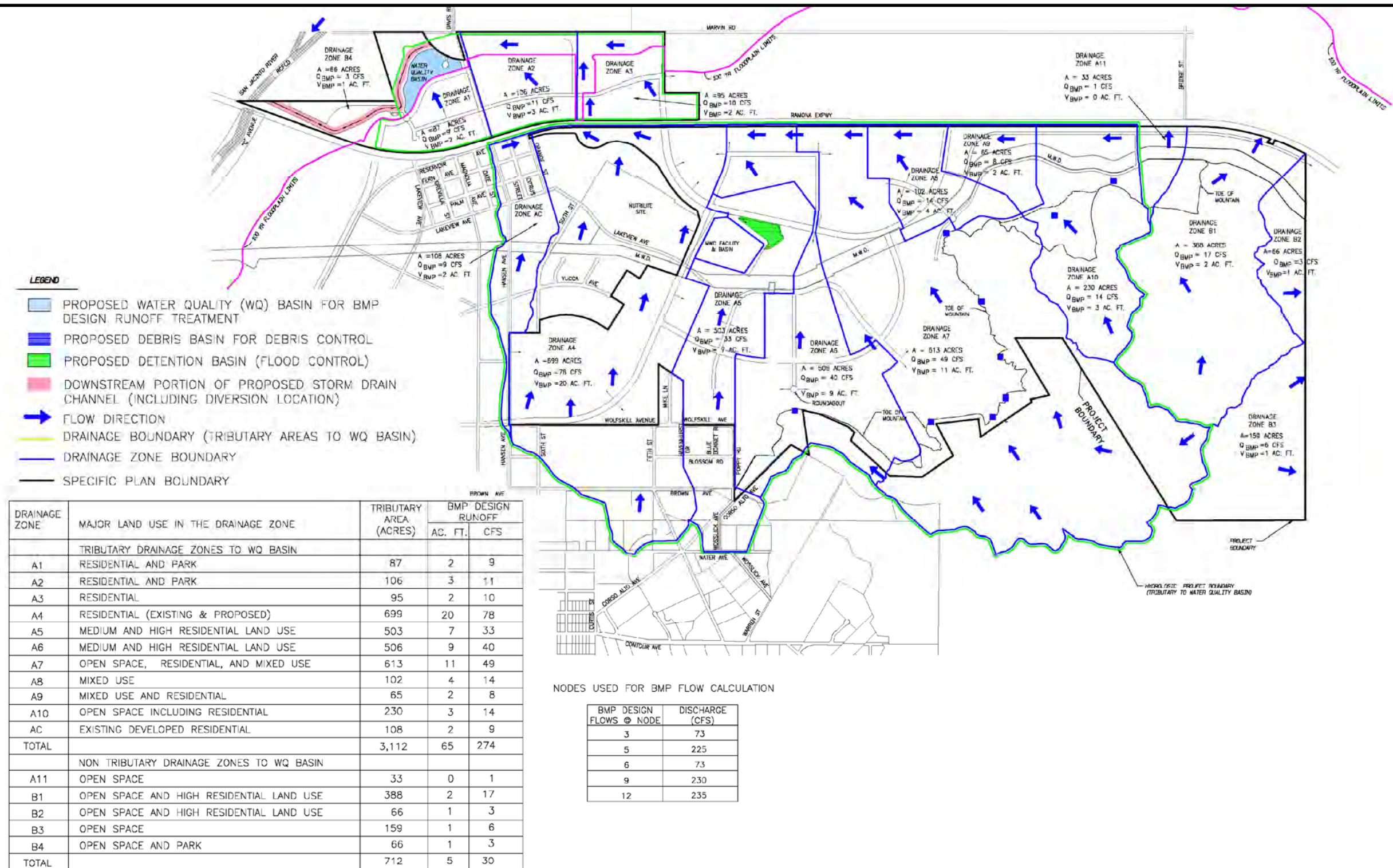
LEGEND

- 750CFS
- Q100 (ULTIMATE)
- PROPOSED ONSITE STORM DRAIN FACILITIES
- PROPOSED ONSITE COLLECTOR
- EXISTING DITCH
- PROPOSED TEMPORARY ONSITE COLLECTOR
- PROPOSED OFFSITE STORM DRAIN FACILITIES
- PROPOSED EDGE CONDITION CUT OFF DITCH
- PROPOSED STORM DRAIN FACILITIES FOR WQMP FLOW ONLY
- PROPOSED R/W
- TVOL PROJECT BOUNDARY
- HYDROLOGY BOUNDARY FOR LINE F INLET
- TVOL PROJECT PHASE 3A BOUNDARY
- DEBRIS BASIN

Figure 5.8-12

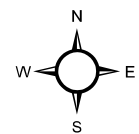
Conceptual Storm Drain Phasing, Phase 3B

The Villages of Lakeview EIR No. 471



Source: SP 342

ALBERT A.
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Not to Scale

Figure 5.8-13

Preliminary WQMP by Drainage Zone

The Villages of Lakeview EIR No. 471

LEGEND

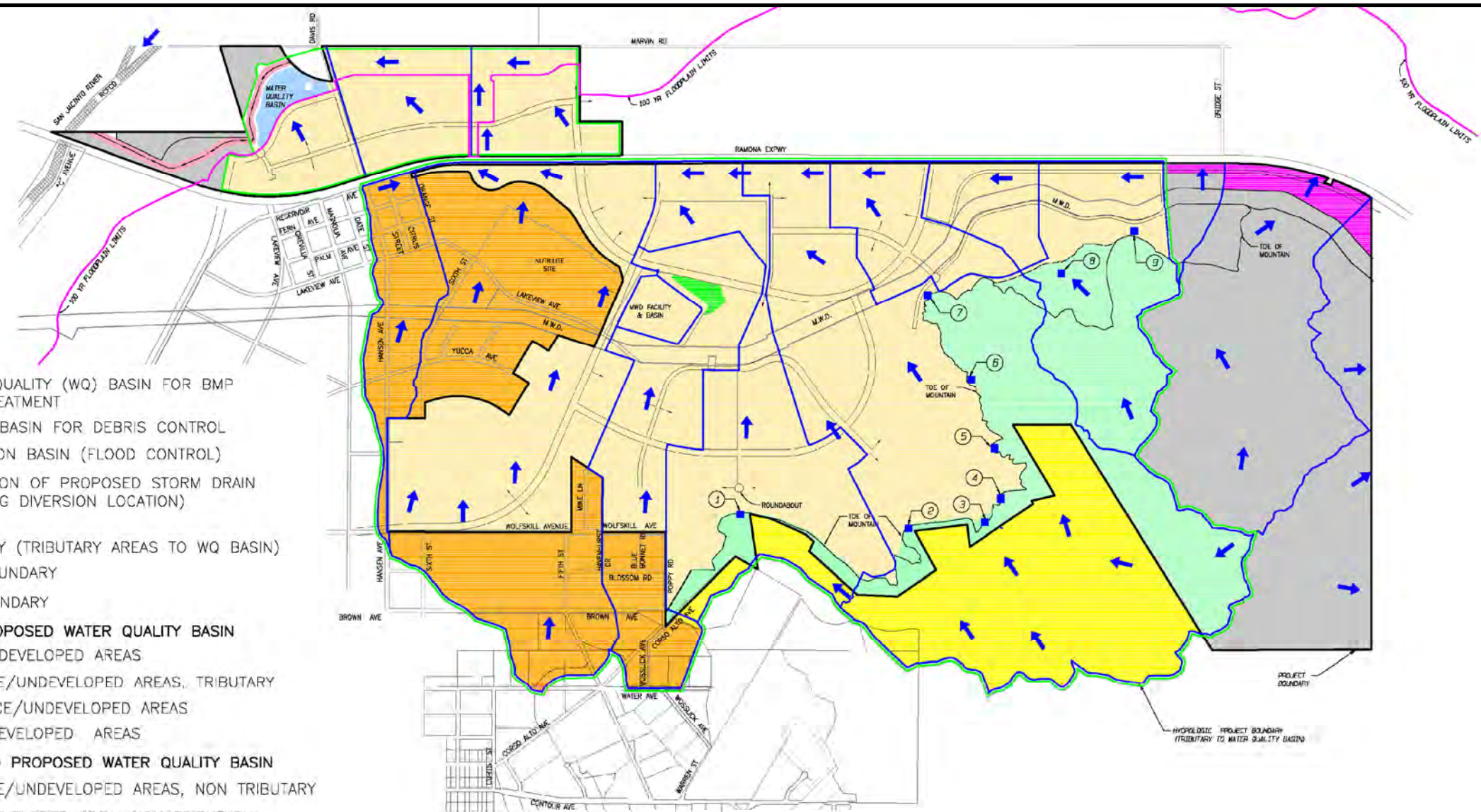
- PROPOSED WATER QUALITY (WQ) BASIN FOR BMP DESIGN RUNOFF TREATMENT
- PROPOSED DEBRIS BASIN FOR DEBRIS CONTROL
- PROPOSED DETENTION BASIN (FLOOD CONTROL)
- DOWNSTREAM PORTION OF PROPOSED STORM DRAIN CHANNEL (INCLUDING DIVERSION LOCATION)
- FLOW DIRECTION
- DRAINAGE BOUNDARY (TRIBUTARY AREAS TO WQ BASIN)
- DRAINAGE ZONE BOUNDARY
- SPECIFIC PLAN BOUNDARY

AREAS TRIBUTARY TO PROPOSED WATER QUALITY BASIN

- ONSITE PROPOSED DEVELOPED AREAS
- ONSITE OPEN SPACE/UNDEVELOPED AREAS, TRIBUTARY
- OFFSITE OPEN SPACE/UNDEVELOPED AREAS
- OFFSITE EXISTING DEVELOPED AREAS

AREAS NOT TRIBUTARY TO PROPOSED WATER QUALITY BASIN

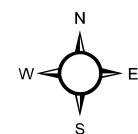
- ONSITE OPEN SPACE/UNDEVELOPED AREAS, NON TRIBUTARY
- SELF SUFFICIENT DEVELOPED AREA, NON TRIBUTARY



PROPOSED DEBRIS BASIN	REQUIRED DEBRIS BASIN VOLUME DETERMINED USING TATUM'S METHOD	BMP DRAINAGE AREA (ACRES)	VOLUME AC. FT.	DESCRIPTION OF THE PROPOSED STRUCTURAL BMP FOR THE SITE
1	DEBRIS BASIN	63	1	FOR TRAPPING DEBRIS
2	DEBRIS BASIN	96	2	FOR TRAPPING DEBRIS
3	DEBRIS BASIN	105	2	FOR TRAPPING DEBRIS
4	DEBRIS BASIN	242	7	FOR TRAPPING DEBRIS
5	DEBRIS BASIN	21	1	FOR TRAPPING DEBRIS
6	DEBRIS BASIN	55	1	FOR TRAPPING DEBRIS
7	DEBRIS BASIN	54	1	FOR TRAPPING DEBRIS
8	DEBRIS BASIN	108	3	FOR TRAPPING DEBRIS
9	DEBRIS BASIN	57	2	FOR TRAPPING DEBRIS

Source: SP 342

ALBERT A.
WEBB
ASSOCIATES

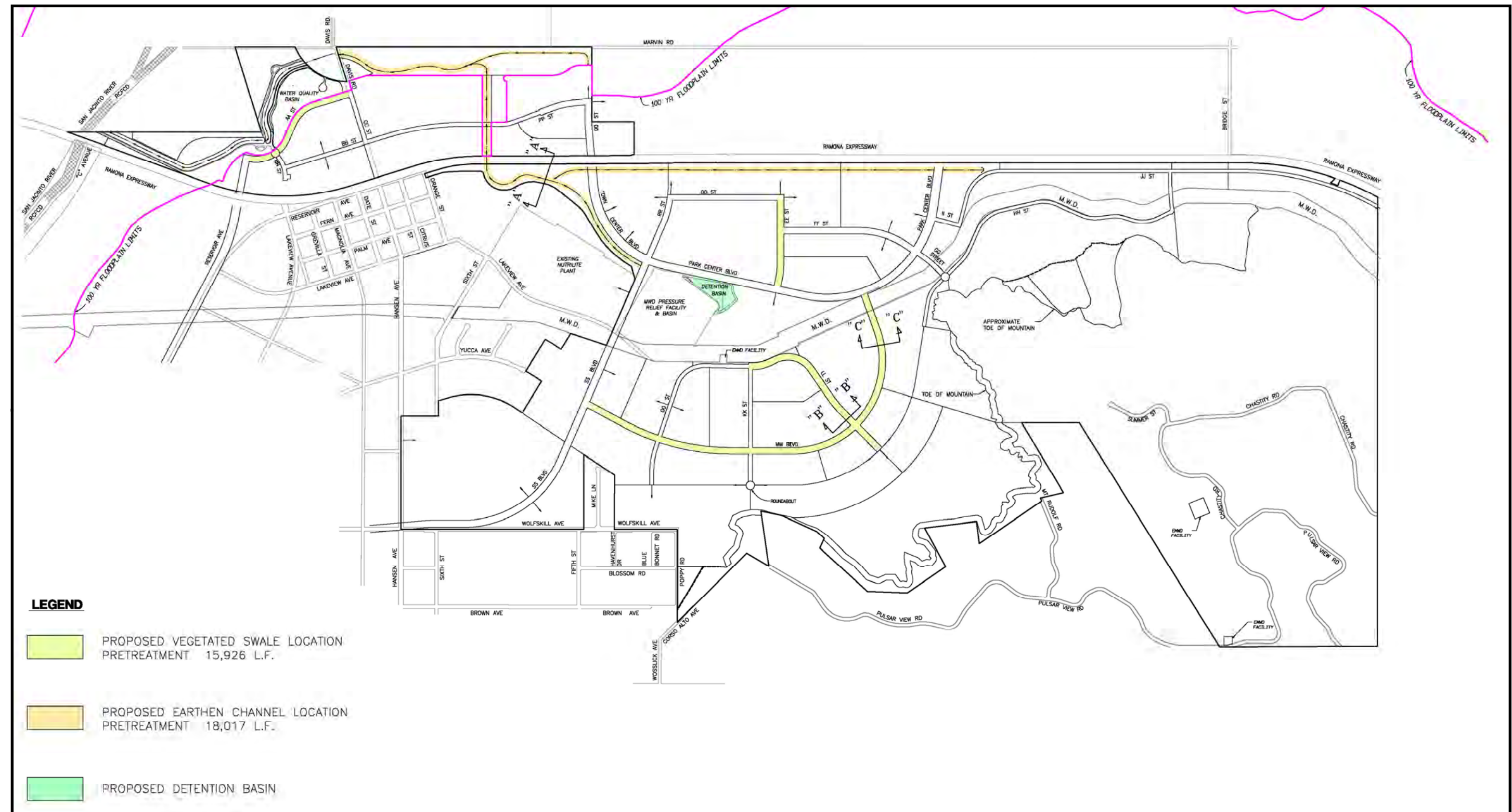


Not to Scale

Figure 5.8-14

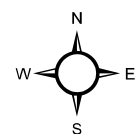
Preliminary WQMP On-site, Off-site, Existing and Developed

The Villages of Lakeview EIR No. 471



Source: SP 342

ALBERT A.
WEBB
ASSOCIATES



Not to Scale

Figure 5.8-15

Preliminary WQMP Pretreatment Measures

The Villages of Lakeview EIR No. 471

Water Quality Management Plan

THE VILLAGES OF LAKEVIEW Specific Plan site is located in the San Jacinto River watershed, and is generally located between Bridge Street and Reservoir Avenue, along the Ramona Expressway, and north of the Lakeview Mountains. The Specific Plan covers an area of approximately 2,786 acres, a large portion of which is a hilly conservation area to the southeast of the project. The project proposes to develop approximately 1,729 acres with a total of 11,350 dwelling units. The existing Ramona Expressway and any related future roadway work and treatment control Best Management Practices (BMP) are not a part of this project.

Undeveloped Condition Flows

THE VILLAGES OF LAKEVIEW has a number of debris basins that will intercept debris from their respective mountainous tributary areas. **(Figure 5.8-14, Preliminary WQMP On-Site, Off-Site, Existing, and Developed)** Runoff from the debris basins will flow towards the Water Quality basin (northwest portion of the project site) along with the development-generated BMP runoff.

Developed Condition Flows

The project proposes all development-generated runoff generated west of the wildlife corridor to be conveyed along proposed curb and/or gutters or roadside swales to storm collection inlet points for further conveyance via proposed storm drain systems to earthen channel. On-site-generated runoff will then be conveyed by these storm drain systems to the Water Quality Basin (WQB) in the northwest portion of the project. At the entrance to the basin, there is a proposed weir structure that ensures diversion of all BMP flows from the main storm drain system to the proposed WQB. The basin treats the entire on-site-generated QBMP-design runoff before it is discharged into downstream receiving water bodies. The proposed WQMP basin will address the management of the project on-site water quality to protect receiving waters. The proposed WQMP basin will address the management of project on-site runoff quality by functioning as a treatment control BMP to meet the requirements of MS4 permit at the project site (Order No. R8-2002-0011, NPDES No. CAS 618033; Santa Ana Regional Water Quality Control Board). Even though the Water Quality Basin provides complete treatment, this project proposes pre-treatment BMP measures as shown on **Figure 5.8-15**, as an added assurance by building redundancy into the WQMP. Therefore, the proposed Water Quality Basin and debris basins will fully address the management of the project water quality to protect receiving waters.

The proposed Regional Water Quality Basin will provide treatment for runoff from the entire project site except the very easterly end of the project site. A sand filter bottom and filtered outlet riser are components of the basin. This combination of a sand filter and a water quality basin is in accordance with the Riverside County Flood Control and Water Conservation District Stormwater Quality BMP Design Handbook (draft). The inclusion of the sand filter outlet is a significant improvement to the standard design of extended detention basins, which typically do not include a media filtration component. Appendix F Section 4 of the PWQMP includes Preliminary Water Quality Basin Design Plans on Sheets 1 through 6. The Water Quality Basin is designed to accommodate both the onsite and off-site runoff. The off-site runoff will be treated in the same manner as onsite runoff with the exception that it will go through a debris basin prior to entering the onsite storm drain system.

“Sand Filters capture and treat the design runoff in a two-part system, first a settling basin, then a filter bed. The settling basin collects large sediment and prevents these particles from clogging the filter bed. The sand bed then strains the water, removing soluble and particulate pollutants. The treated water is conveyed through pipes back into a stream or channel. Sand Filters are especially useful where water quality concerns might preclude the use of infiltration BMPs” (Riverside County Stormwater Quality BMP Design Handbook, July 21, 2006).

“A Sand Filter Extended detention basin (SFB) is a stormwater filter that consists of a runoff storage zone underlain by a sand bed with an underdrain system. During a storm, accumulated runoff ponds in the surcharge zone and gradually infiltrates into the underlying sand bed, filling the void spaces of the sand. The underdrain gradually dewateres the sand bed and discharges the runoff to a nearby channel, swale, or storm sewer” (Riverside County Stormwater Quality BMP Design Handbook, Draft).

Runoff diverted to the Regional Water Quality Basin will initially enter the Forebay where debris, trash, sediment and turbidity will settle out. The Forebay has an outlet pipe that conveys runoff to the main basin area. Runoff that enters the main basin area will filter through a permeable sand layer underlain by perforated pipes or a gravel packed outlet structure. The perforated pipes form a French Drain system that assists with dry weather flow management in accordance with the Handbook (draft). During the dry seasons, as part of the water quality system maintenance, the sand surface will need to be scarified to ensure a hard crust does not form. This hard crust would limit the permeability of the sand filter. The Regional Water Quality Basin also includes an emergency overflow structure that directs runoff into the vegetated earthen channel.

There will also be various types of site design BMPs (to be designed in the future). By their nature, the site design BMPs will provide some additional pre-treatment to onsite runoff prior to it being collected and conveyed by the onsite drainage system. The pre-treatment will allow sediment/turbidity to settle out along with other contaminants such as oil grease and metals. While these forms of pre-treatment are beneficial, the Regional Water Quality Basin is the ultimate treatment control BMP for the site and will, by itself, provide the necessary treatment for all the Pollutants of Concern (POC) generated by the site.

Page 27 of the PWQMP confirms that the Regional Water Quality Basin “will address all POC (nutrients, pathogens, organic compounds, sedimentation and unknown toxicity) by treating the project’s BMP design runoff (both flow and volume based calculation).” Geosyntec Consultants prepared a Water Quality Technical Report (Appendix H of the DEIR). This study quantitatively substantiates the effectiveness of the BMPs in the PWQMP.

Runoff generated in the developed and undeveloped areas located east of the wildlife corridor will be collected in a similar fashion to the western areas of the project, but will be treated to meet water quality standards within Planning Area 77.

Environmental Impacts Before Mitigation

Threshold A: *Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site.*

Grading of the project site will be conducted during construction to create commercial building and residential pads, roads, basins, etc. Implementation of the proposed project will result in the alteration of the site's surface and contours as well as introducing additional asphalt, concrete, and other impervious surfaces that do not currently exist on site. This will result in an alteration of the existing drainage patterns onsite.

The project site was historically used as a poultry ranch, a thoroughbred ranch, and row crops, all of which included homes, feed lots, and grazing areas. Storm water discharges from the site as sheetflow, in a northerly direction, toward the San Jacinto River upstream from Canyon Lake and Lake Elsinore. **Figure 5.8-4, Existing Hydrology**, shows the subwatershed boundaries and flow paths of stormwater within the project site and from the tributary areas. The hydrology report prepared for the project divides the project site into eleven existing (undeveloped) drainage areas, and nine developed drainage areas. A drainage area is that area measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point.

The project site is not currently equipped with an underground storm drain system. Surface runoff currently enters the San Jacinto River at various locations throughout the site. During significant storm events, surface water discharges as sheetflow across Ramona Expressway into the San Jacinto River (north of the project site). Drainage within the site generally flows northwest towards the San Jacinto River. There are numerous man-made agricultural ditches throughout the site that, in the past, served crop lands. These man-made drainages will be altered through project implementation. There are five USGS blue line streams located within the project site, three of which are almost entirely within the Lakeview Mountains that represent both existing and historic drainages. Additionally, the Jurisdictional Delineation Report prepared by Glenn Lukos Associates for the project, indicated that there are 11 drainages onsite that ultimately connect to waters of the U.S., and are therefore, considered to be waters of the U.S. themselves; this includes a very small portion of the San Jacinto River, and 10 other drainage features that are ultimately hydrologically connected to the San Jacinto River. Additionally, the project site contains other areas that convey either open sheetflows or confined sheetflows. In the case of the latter, sheetflows that originate from a portion of the Lakeview Mountains are confined between artificially constructed berms that protect adjacent agricultural fields from flooding. The San Jacinto River is located at the extreme northwestern portion of the project site but will not be impacted.

In the proposed project condition, onsite generated runoff will be conveyed to the proposed finished surfaces along proposed curb and/or gutters to storm collection inlet points for further conveyance via the proposed storm drain system. The project drainage is towards the northwest (refer to **Figure 5.8-6, Master Plan of Drainage (On-Site)**). The proposed storm drain plan generally follows the historical drainage pattern and elevation of the site. Historic flows in the

project site sheetflow across Ramona Expressway where they enter the San Jacinto River. In its undeveloped state, the 100-year, 3-hour peak flow rate averages approximately 5,600 cfs leaving the project's boundary. Under developed conditions, a total of eight crossings under Ramona Expressway are proposed (including the Wildlife Corridor). Waters will cross in the shape of concentrated flows under Ramona Expressway. At full build-out of the project, it is anticipated that the 100-year, 3-hour peak flow rate across Ramona Expressway will be the same or lower than that of the undeveloped state, at 4,800 cfs.

After implementation of the proposed Drainage Plan and meeting RCFCDWCD requirements of perpetuating drainage patterns, the proposed project will not result in peak flows exiting the site that would result in erosion and siltation offsite. Implementation of the proposed project would have negligible impacts, since the Q_{100} would be the same or less than the existing conditions. Therefore, impacts to the existing drainage pattern of the site or area which would result in substantial erosion or siltation on- or off-site are considered **less than significant**.

Threshold B: *Violate any water quality standards or waste discharge requirements.*

The SARWQCB sets water quality standards for all ground and surface waters within its jurisdiction. Water quality standards are defined under the Clean Water Act to include both the beneficial uses of specific water bodies and the levels of water quality that must be met and maintained to protect those uses (water quality objectives). Water quality standards for all ground and surface waters overseen by the SARWQCB are documented in the Santa Ana River Basin Water Quality Control Plan (1995). Beneficial uses consist of all the various ways that water can be used for the benefit of people and/or wildlife. Nineteen beneficial uses are recognized within the Santa Ana Region. Eight beneficial uses have been designated for water bodies in vicinity of the project site (see **Table 5.8-A, Beneficial Uses for Receiving Waters in Proximity to the Project Site**).

The numeric and narrative water quality objectives that are most likely to be relevant to the proposed project are listed in **Table 5.8-B, Numeric Water Quality Objectives**, and **Table 5.8-C, Applicable Narrative Water Quality Objectives**, respectively. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. Basically, a beneficial use is one of the various ways that water can be used for the benefit of people and/or wildlife. Examples include drinking, swimming, industrial, and agricultural water supply, and the support of fresh and saline aquatic habitats. The regulatory program of the SARWQCB is designed to minimize and control discharges to surface and groundwater within the region, largely through permitting, such that water quality standards are effectively attained.

Pollutants of concern (POC) that are anticipated from the project implementation include sediment/turbidity, nutrients, organic compounds, oxygen demanding substances, and bacteria and viruses. In order to reduce the impacts to the water quality of San Jacinto River a project specific Regional WQMP has been prepared. Best Management Practices (BMPs) have been designed to address the POC's and will reduce the impacts on water quality to less than significant levels.

Potential negative impacts from site development include an increase impervious surfaces which will increase the amount of surface runoff generated from the project site. Paved areas and streets will collect dust, soil and other impurities that will then be assimilated into surface runoff during rainfall events. Pollutants such as trash and debris, oil and grease, metals, sediment, pathogens, organic compounds, nutrients, pesticides and oxygen demanding substances can be expected to be present in surface water runoff once project development occurs. Without appropriate mitigation measures incorporated into the project, significant adverse impacts to beneficial uses and water quality objectives may be expected to occur.

In order to reduce the discharge of POC's into receiving waters during construction of the proposed development, the project proponent will be required to prepare a site-specific Storm Water Pollution Prevention Plan (SWPPP) in accordance with the State Water Resources Control Board's (SWRCB) General Permit for Construction Activities. The General Permit requires a development and implementation of a site-specific SWPPP to identify an effective combination of erosion control and sediment control best management practices (BMPs) to minimize or eliminate the discharge of pollutants into receiving waters. In addition, BMPs for managing sources of non-storm water discharges and waste are required to be identified in the SWPPP. Examples of construction BMPs include silt fencing, gravel bag berms, fiber rolls, and street sweeping. In addition, the SWPPP is required to identify post-construction BMPs, which are permanent features maintained in perpetuity by the owner, developer or the building occupant. Examples of permanent, post-construction BMPs include detention basin, catch basin stenciling, tenant education and a vegetated swales.

The project includes water quality basins, debris basins, vegetated swales, and grassy swale pre-filters that will address water quality in the project's operational phases. Landscaped portions of commercial/industrial sites will be spatially distributed in such a way that directly connected impervious areas will be minimized (e.g., landscaped portions along the periphery of building, parking lots, etc.). Runoff generated from the immediate vicinity (impervious portion) will infiltrate in landscaped portions. As storm runoff flow continues, runoff will be directed to the proposed storm drain system via gutters and curbs. Depending on site-specific designs, there can be open channels or grass swales that can serve as a part of a treatment train. The ultimate treatment BMP (i.e., the regional water quality basin located at the northwestern corner of the project) is equipped with filtration systems to treat the project's pollutants of concern. The regional water quality basin is designed to treat a BMP runoff volume at 275 cfs within the minimum 65.2 acre-feet basin. While the Regional Basin will treat all development runoff for pollutants listed in **Table 5.8-E**, the additional use of localized BMPs designed into the individual development plans will further reduce the pollutant load prior to runoff reaching the basin.

The proposed regional water quality basin is sized and designed such that it has capacity to treat pollutants of concern in the tributary BMP runoff with medium to high efficiency of removal (see **Table 5.8-E**). In addition to the regional water quality basin, there are nine Debris Basins as shown on the preliminary Regional Water Quality Management Plan. These basins will trap trash debris from mountainous areas that are both onsite and offsite of the project, and will also control sediment. The project also includes vegetated medians (approximately 4 miles), vegetated open channel storm drains, and vegetated swales at various locations throughout the

project. The pollutants of concern, shown on **Table 5.8-D**, are addressed by the proposed treatment control BMP (i.e., the Water Quality basin). With the addition of the upstream treatment-train the pollutants of concern are treated in an even more effective manner.

According to THE VILLAGES OF LAKEVIEW Water Quality Technical Report by Geosyntec, through design implementation including the Regional Basin, debris basins, grass swales, and other aspects of the project, impacts from sediments, total dissolved solids, nutrients, trace metals, pesticides, pathogens, hydrocarbons, trash and debris, methylene blue activates substances, bioaccumulation, construction impacts, regulatory requirements are considered less than significant on receiving waterbodies. Nitrate-nitrogen concentrations are predicted to decrease in the post-developed condition due to the removal of agricultural lands. The predicted concentrations of these constituents in storm water runoff after treatment in the project's proposed drainage facilities, as well as in typical irrigation water, are well below the groundwater quality objectives for the Lakeview-Hemet North Groundwater Management Zone (including minimization of total dissolved solids and nitrate-nitrogen introduction into the ground water) and are considered less than significant through issuance of MS4 Permits, General Construction Permits, De Minimus Discharges Permit, and WQMP-compliant BMPs. On this basis, the potential for adversely affecting groundwater quality is considered **less than significant**.

In order to reduce the discharge of expected POC's into receiving waters following development, individual project proponents will be required to be in compliance with the latest version of the County's requirements for new development and redevelopment as found in the Riverside County Drainage Area Management Plans. With the implementation of the Regional WQMP, as well as subsequent tract-specific WQMPs that will be prepared at the time of Tract Map submittal impacts to water quality are anticipated to be **less than significant**.

***Threshold C:** 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.*

The San Jacinto River Watershed covers an area of approximately 728 square miles, measured above a point just downstream from Railroad Canyon Dam. All of the streams and rivers in the watershed are ephemeral; they flow only when precipitation occurs and much of this flow infiltrates to groundwater. When storms are unusually intense and prolonged, the ground saturates quickly and most of the precipitation runs off to streams. The San Jacinto River arises in and drains the western slopes of the San Jacinto Mountains. Waterways tributary to the river include the North and South Forks, Strawberry, Indian, Poppet, and Bautista Creeks. The river recharges the San Jacinto Groundwater Basin in the area southeast of the city of San Jacinto. It then flows northwest past the Lakeview Mountains (where the project site is located) before turning southwest to flow across the Perris Valley floor. The San Jacinto River ultimately flows into Lake Elsinore via Railroad Canyon and Canyon Lake. Lake Elsinore, when full, overflows into Temescal Wash, which joins the Santa Ana River near Prado Dam.

Eastern Municipal Water District (EMWD) provides potable and recycled water to the project area. EMWD utilizes four principal sources of water supply: imported State Water Project and Colorado River water from the Metropolitan Water District of Southern California (MWD), local groundwater production, and recycled water. Potable water will be supplied to the project mainly from imported supplies obtained from MWD. Non-potable water is expected to be supplied to the project from recycled water from EMWD's Regional Water Reclamation Facilities and untreated imported water from MWD. (See Water-related discussion in Section 5.15 for discussions of the project's potable and non-potable demand.) In 2005, EMWD relied on MWD to provide approximately 80 percent of its potable water supply and thirty percent of its non-potable water supply.

According to the water supply assessment (WSA), groundwater is EMWD's only source of locally produced potable water. Protecting and developing local resources to reduce dependency on imported water is an important objective in EMWD's Strategic Plan. Groundwater information is included in this assessment to assist the lead agency in determining the adequacy of EMWD's total supply. Use of local groundwater is not proposed to serve this project and on-site wells are expected to remain unused. Rather, new development, including this project, is proposed to be supplied with imported water obtained through MWD. Therefore, the project will have a **less than significant** impact on groundwater resources through direct withdraws of groundwater, as the local wells will no longer be of use.

Implementation of the project will result in an increase in impervious surfaces within the project site. Impervious surfaces, including paved areas such as parking lots and roadways, and building and residential rooftops, decrease the area in which stormwater runoff can infiltrate and recharge local groundwater resources. As indicated in the Preliminary Regional Water Quality Management Plan, the proposed project has been designed to maximize the infiltration of the on-site-generated runoff by incorporating design concepts that promote infiltration of stormwater runoff. Within the impervious portion of the project there will be landscaped buffers along the periphery of the buildings and parking lots for the various developments included in the project. Runoff generated from the immediate vicinity (impervious portion) will infiltrate in this landscaped portions. The majority of the landscaping will be utilized to promote infiltration. The site design BMPs will be implemented in such a way that the parking areas, sidewalks, and to the maximum extent practicable rooftops will drain in to these landscaped portions or enhanced grass-swales. As stormwater runoff flow continues, runoff will be directed to the proposed gutters to stormwater collection points. The project will have vegetated open channel or grass swales that further promote infiltration of generated runoff. The latter can function as a pre-treatment or treatment-train of runoff water before it reaches the Regional Basin. The Regional Basin is designed with a filtration system to treat the project's Pollutants of Concern with medium to high efficiency; this basin will also promote maximum infiltration of the total project site.

In an effort to match historical peak flows leaving the project sites northerly boundary, and keep post-project peak runoff from increasing due to development, a large detention basins located in the central park area (on the northeast side of the Metropolitan Water District Pressure Relief Facility Basin) and nine debris basins along the foot hill area are being proposed by THE VILLAGE OF LAKEVIEW Specific Plan Master Plan of Drainage (**Figure 5.8-6, Master Plan of**

Drainage (On-Site)). These basins, in addition to the un-developed conservation area in the Lakeview Mountains and the proposed parks, trails, and other vegetated areas, will contribute to an overall reduction in the volume of water exiting the site.

In addition to the site-specific measures, EMWD is initiating groundwater recharge projects in an effort to stabilize and improve overall groundwater levels within the West San Jacinto Groundwater basin. Overall groundwater levels have declined significantly since the 1940s necessitating that EMWD and local municipal and private groundwater producers work together to develop and implement a groundwater management plan for the area. Pages 16 and 17 of the WSA for the project detail the history of the Hemet/San Jacinto Basin Water Management Plan. The following paragraphs summarize this information.

In 1995, the Soboba Band of Luiseno Indians entered into negotiations with EMWD and the Lake Hemet Municipal Water District to settle groundwater claims. A settlement regarding more than just the original issues raised by the tribe was signed in May of 2006. The settlement resolved the Soboba water right claim and included provision about using imported water for recharge and development of a groundwater management plan.

Between 2001 and 2005 numerous Memorandums of Understandings were executed between EMWD and other local water purveyors which resulted in an Interim Water Supply Plan which provided for recharge during 2004 and 2005. The purpose of the plan was to address the deteriorating situation in the Hemet/ San Jacinto area by providing about 6,000 AF of recharge during the 2004 calendar year and about 8,000 AF of recharge during 2005.

In addition to the recharge of SWP, there is some incidental recharge of recycled water from a storage pond EMWD has in the area and the MWD San Jacinto Reservoir. EMWD also has the right to divert surface water from the San Jacinto River to recharge the Canyon sub-basin. Because the San Jacinto River is an ephemeral river, the river does not flow every year and thus EMWD's ability to engage in this recharge approach varies according to hydrologic cycles.

As a result of proposed project BMPs, landscape design, and EMWD's efforts to stabilize and improve the groundwater levels within the West San Jacinto Groundwater basin the addition of impervious surfaces, which will result from the project, will have a **less than significant** impact on groundwater recharge.

Threshold D: *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.*

In its undeveloped condition, few drainage features are present on the project site. An onsite drainage system is required to accommodate storm water flows generated on site and those generated off-site that flow onto the project site, such as those from tributary areas of the Lakeview Mountains. Development of the proposed project will result in an increase of impervious surfaces within the project area, which could generate increased stormwater flows from the site. For this reason drainage facilities will be constructed as part of the project. As illustrated in **Figure 5.8-6, Master Plan of Drainage (On-Site)**, the plan utilizes streets,

underground storm drains, open channels, debris basins, and detention basins to collect the on-site and off-site storm water, and convey it through the project and into the San Jacinto River floodplain area. Facilities will be required to accommodate developed 100-year storm runoff through the project. The backbone drainage plan facilities are designed to protect habitable dwelling units from flooding.

The proposed on-site drainage system is contingent upon a conceptual street alignment and grading plan within the various planning areas of the project. Precise facility alignments and sizes may change during final development. Additional facilities may be needed to address the drainage within each planning area which may consist of a combination of street flows, underground storm drains, as well as man-made earthen-swales.

The project proposes not to exceed historical flows leaving its northern boundary. In order to keep post-project peak runoff from increasing due to development two large detention basins (one of which is considered to be a water quality basin) will capture on-site flows and release them at slower rates more consistent with pre-project peak runoff. The central detention basin is located centrally in the project site, along the proposed Town Center Boulevard, adjacent to the MWD aqueduct, the primary purpose of this basin is peak flow rate reduction; the Regional Basin is located north of Ramona Expressway within the 100-year flood plain limits and is designed to capture and treat the majority of the project site stormwater flows as discussed in Threshold B. The central detention basin will take in five percent of the project runoff (approximately 260 cfs) and will limit flows to the Regional Basin located at the northwest portion of the project site. The basin will not provide water quality function. In addition to the central detention basin and the Regional Basin, there is also a MWD basin located immediately adjacent to and west of the Town-Centre basin. This basin is a closed system emergency basin designed to strictly contain water from the MWD pipeline that transects the project. Although this basin is located within the project site it is not a part of the proposed storm drain system.

Currently, a portion of the off-site water which crosses the site is tributary to the Lakeview Dam. The approved MDP for the area, when fully implemented, will direct these off-site flows to the west, avoiding flooding on the affected portion of the project site. The project will be conditioned to build the required portions of the MDP facilities.

Furthermore, as indicated in the Preliminary Regional Water Quality Management Plan for THE VILLAGES OF LAKEVIEW, the proposed project has been designed to maximize the infiltration of the on-site-generated runoff by incorporating design concepts that promote infiltration of stormwater runoff. Within the impervious portion of the project there will be landscaped buffers along the periphery of the buildings and parking lots for the various developments included in the project. Runoff generated from the immediate vicinity (impervious portion) will infiltrate in this landscaped portions. The majority of the landscaping will be utilized to promote infiltration. The site design BMPs will be implemented in such a way that the parking areas, sidewalks, and to the maximum extent practicable rooftops will drain in to these landscaped portions or enhanced grass-swales. As stormwater runoff flow continues, runoff will be directed to the proposed gutters to stormwater collection points. The project will have vegetated open channel or grass swales that further promote infiltration of generated runoff. The latter can function as a pre-treatment or treatment-train of runoff water before it reaches the Regional Basin. The

Regional Basin is designed with a filtration system to treat the project's Pollutants of Concern with medium to high efficiency; this basin will also promote maximum infiltration of the total project site. The Regional Water Quality Basin allows particulates and associated pollutants to settle in less than 72 hours, and will incorporate a low-flow channel in the bottom of the basin for the treatment and infiltration of dry weather flows and small storm events.

In its undeveloped condition, few drainage features are present on the project site. For this reason construction of drainage facilities are required and will occur in conjunction with the construction of the project. The proposed storm drain facilities will be designed to and are required to accommodate stormwater runoff generated by a 100-year storm in the developed condition. Therefore, the proposed project when fully built out will not contribute runoff water which would exceed the capacity of the planned stormwater drainage system. Impacts are considered significant but through implementation of the Specific Plan as described in the Design Considerations, above, and compliance with existing regulations, the impact is **less than significant**.

The project will be constructed over time, and not all permanent basins, storm drains, or channels may be in place as development is phased. Construction within the Resort Village located north of Ramona Expressway may be built prior to the completion of all necessary permanent upstream drainage facilities. In addition, Ramona Expressway may not be upgraded to expressway or freeway status in concurrence with all of THE VILLAGES OF LAKEVIEW phasing and may need to be protected from flooding in an interim situation. Therefore interim facilities have been designed to accommodate floodwaters and treat flows during this interim condition. Two approaches are being used; the first approach consists of catch drains/ditches along the north side of Ramona Expressway which will direct sheet flows toward the permanent channel constructed under Ramona Expressway. The other approach is to construct temporary onsite sump areas along the southern side of Ramona Expressway (**Figures 5.8-8 through 5.8-12**).

Currently, Ramona Expressway can be subject to flooding and is impassable for vehicles. The purpose of the sumps is to protect Ramona Expressway and the area north of Ramona Expressway from existing flood conditions and increased flows from development in Phase 1b through 3a 2 by collecting flow from developed areas. The sump area(s) can be relocated as needed. The sumps will also mitigate for hydrological factors including peak flow, volume, and duration to the north of the Ramona Expressway dairy areas and protection for Ramona Expressway as a secondary access road. The proposed interim storm drain facilities, including the sump area, will be designed to and are required by Riverside County Flood Control and Water Conservation District standards to accommodate stormwater runoff generated by a 100-year storm in the developed condition. In addition, the temporary sumps are designed to hold storm-flows from less than 100-year event such that Transportation Department standards related to the depth and rate of water released across Ramona Expressway in a storm is kept at or below requirements for safe travel.

Therefore, the Phase 1 development north of Ramona Expressway will not contribute runoff water which would exceed the capacity of the planned stormwater drainage system nor be impacted by partially complete storm drain facilities on the remainder of the project site. Current flooding conditions on Ramona Expressway will be improved with the implementation of the

interim facilities. The Ramona Expressway will also be protected by the interim facilities to the standards of the Flood Control District and Transportation Department. Impacts are considered significant but through implementation of these aspects of the project design and County standards described above, the impact is reduced to **less than significant**.

For other areas of the site where interim conditions may exist with respect to incomplete phases of storm drain facilities, **MM Hydro 1** will reduce impacts to less than significant levels by requiring all future Tentative Parcel Maps to provide adequate on- or off-tract improvements to address flooding and water quality.

All on-site water from the project, as well as off-site water conveyed through the site, will be treated prior to discharge from the site. The project includes BMPs that maximize infiltration of stormwater before it leaves the site as well as BMPs designed to treat stormwater runoff generated by the project prior to its discharge offsite. Thus, with the implementation of the above Design Considerations and regulatory requirements, the project will not provide substantial additional sources of polluted runoff and potential impacts will be **less than significant**.

***Threshold E:** 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.*

As shown on **Figure 5.8-4**, portions of the developed area of the site located north of Ramona Expressway appear within the existing 100-year flood plain of the San Jacinto River. The project proposes to reconfigure the floodplain, increase storage capacity, and assure all habitable structures are located outside of the 100-year flood hazard area. **Figure 5.8-6, Master Plan of Drainage (On-Site)**, shows the new flood plain line of the river as it would exist if the project is built. Therefore, based on project design, **no impacts to habitable structures within the 100-year flood plain will result**.

However, portions of the project site are located within the Dam Inundation Zone for the East Dam of Diamond Valley Reservoir (refer to **Figure 5.8-16, Dam Inundation Area, Diamond Valley Reservoir, East Dam**). See discussion below on the Dam Inundation Area under Threshold K. It shall be noted that, although there are no dam inundation maps available for Lakeview Dam, the site will be subject to inundation should the dam fail during a flooding event.

***Threshold F:** Place within a 100-year flood hazard area structures which would impede or redirect flood flows.*

A portion of the northwest corner of the project site is located within the 100-year floodplain of the San Jacinto River (see **Figure 5.8-4, Existing Hydrology**). The project proposes to keep all habitable structures outside of the 100-year San Jacinto River flood plain as modified by the project. Sensitive species habitat conservation, drainage/water quality treatment facilities, recreation, and passive park uses are proposed within floodplain. As shown on the Land Use Diagram for the project, the Conservation areas will be kept in their existing state for habitat preservation, and Open Space areas will serve the function of storm drain and park facilities.

Proposed storm drain facilities are located within the San Jacinto River floodplain. Within the northern portion of the project area, in the 100-year flood plain, an open channel (Line A) and a

water quality basin are proposed (Regional Basin). Line A is the terminus channel which captures surface runoff from the majority of the project site and conservation area in the Lakeview Mountains, through a series of debris basins, gutters, and other storm drain channels, and directs it to the San Jacinto River.

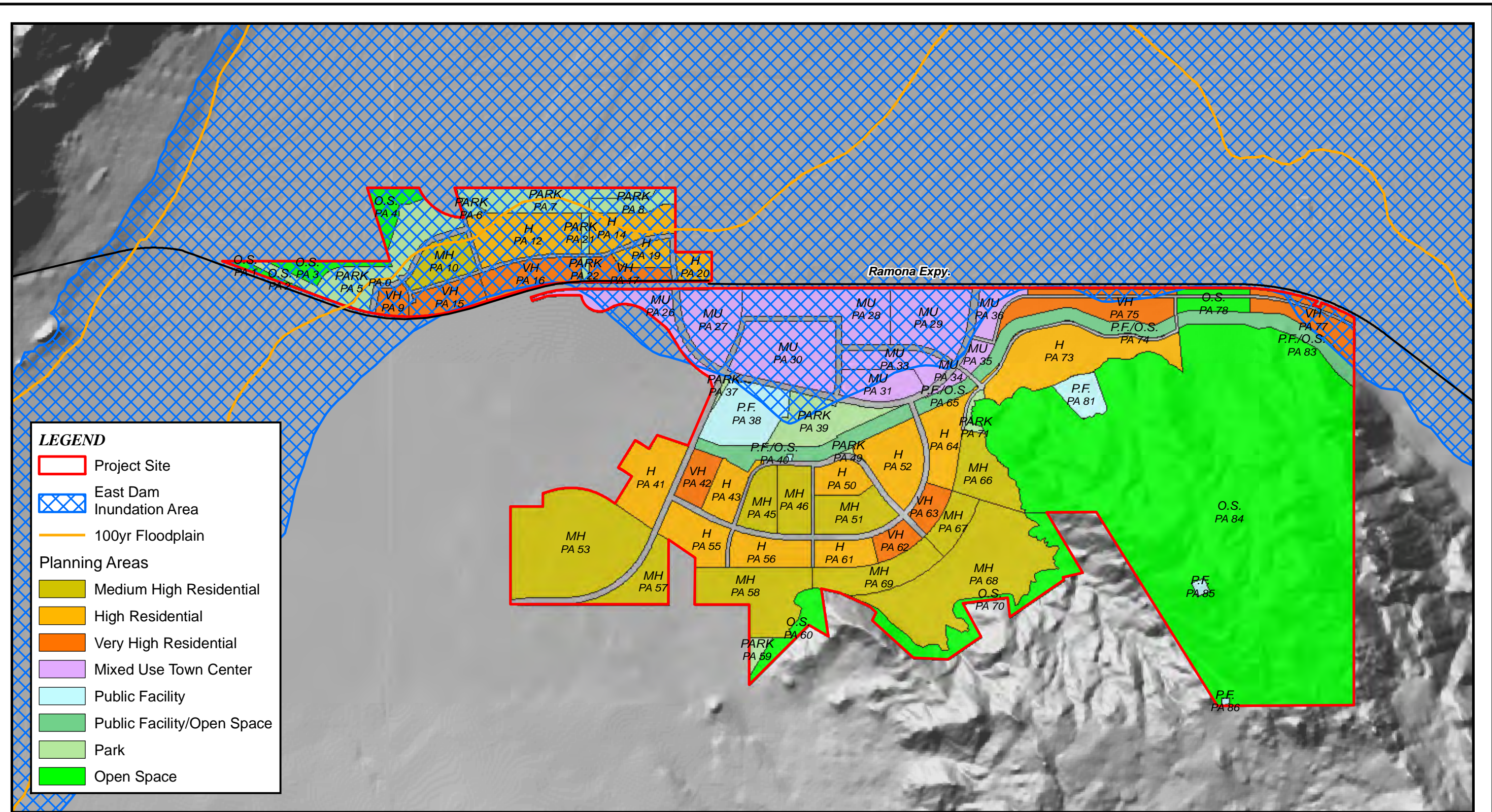
The storm drain facilities located within the floodplain of the river will not significantly impede or redirect flood flows. Historically, storm water in this area flows over a relatively flat area in a west and northwest direction toward the San Jacinto River at low velocities as it is located on the outer edge of the floodplain. Storm water would be directed around the above ground structures of the Line A channel and the water quality basin however these structures would not prevent or significantly alter the historical drainage pattern towards and within the San Jacinto River. Therefore, impacts are considered **less than significant** with Design Consideration.

Threshold G: Otherwise substantially degrade water quality.

The proposed project will have both a beneficial and potential negative effect on water quality. The action of agricultural abandonment, as a result of the proposed project, will benefit water quality by reducing nitrate and total dissolved solids (TDS), and nutrient loads (which are a result of fertilization of the crops) in receiving waters, thus improving the long term quality of the underlying groundwater basin and surrounding surface waters.

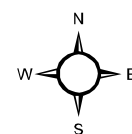
In order to reduce the discharge of expected pollutants, such as sediment, into receiving waters during construction of the proposed development, the project proponent will be required to prepare a site-specific Storm Water Pollution Prevention Plan (SWPPP) in accordance with the State Water Resources Control Board's (SWRCB) General Permit for Construction Activities. The General Permit requires a development and implementation of a site-specific SWPPP to identify an effective combination of erosion control and sediment control best management practices (BMPs) to minimize or eliminate the discharge of pollutants into receiving waters. In addition, BMPs for managing sources of non-storm water discharges and waste are required to be identified in the SWPPP. Examples of construction BMPs include silt fencing, gravel bag berms, fiber rolls, and street sweeping. In addition, the SWPPP is required to identify post-construction BMPs, which are permanent features maintained in perpetuity by the owner, developer or the building occupant. Examples of a permanent, post-construction BMP include a detention basin, catch basin stenciling, tenant education and a vegetated swale.

The WQMP Basin provides the function of a regionally-based treatment control BMP for treating storm water runoff from the entire THE VILLAGES OF LAKEVIEW project. This ensures all the BMP runoff (volume and flow) will be treated before it is discharged to the downstream receiving storm drain system or water bodies. In other words, the proposed WQMP basin is intended to address management of project on-site runoff both in quantity and quality to protect receiving waters. Although this WQMP Basin is the ultimate BMP for project runoff treatment, there are a number of Site Design BMPs that may be implemented. The latter include any proposed vegetated channels, landscaping, natural, or open spaces, trees, etc. Runoff from the debris basins will flow towards the WQMP Basin along with the onsite-generated BMP runoff. From the WQMP Basin, the path of treated runoff is as follows: San Jacinto River, Canyon Lake, Lake Elsinore, Temescal Creek, Santa Ana River Reach 3, Prado Dam, Santa Ana River Reaches



Sources: Office of Emergency Services,
State of California; SP No. 432

ALBERT A.
WEBB
ASSOCIATES



0 1,000 2,000 3,000
Feet

Figure 5.8-16

Dam Inundation Area with Planning Areas,
Diamond Valley Reservoir, East Dam

The Villages of Lakeview EIR No. 471

1 and 2, and finally the Pacific Ocean. THE VILLAGES OF LAKEVIEW Water Quality Technical Report by Geosyntec Consultants further discusses BMP effectiveness.

In order to reduce the discharge of expected pollutants related to post construction development of this type, such as oil, grease and trash, into receiving waters following development, individual project proponents located within THE VILLAGES OF LAKEVIEW Specific Plan will be required to be in compliance with the latest version of the County's requirements for new development and redevelopment. By project design including the Regional Basin and complying with all NPDES permit requirements, impacts to water quality are considered **less than significant**.

A potential climate change impact is on water quality, including the risk of poorer water quality arising from increased water temperatures and more frequent floods and droughts, which could exacerbate water supply issues. Water supply and climate change is discussed in Section 5.3 of the DEIR.

Threshold H: *Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g., water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors and odors).*

The project includes the use of many types of BMPs including Regional Water Quality Basins, roadside vegetated swales, debris basins, and sand filtration. The project will incorporate vegetated swales at various locations throughout the site; primarily as roadside conveyances. Vegetated swales are engineered, vegetation-lined channels that provide water quality treatment in addition to conveying stormwater runoff. Swales provide pollutant removal through settling and filtration in the vegetation (often grasses) lining the channels and also provide the opportunity for volume reduction through infiltration and evapotranspiration (soil soaking and drying). A regional extended detention basin with a polishing sand filter provides treatment for all developed areas of the project. A polishing sand filter will be incorporated into the outlet of the water quality basin to provide additional treatment of the pollutants of concern.

BMPs are designed to minimize the time waters remain on the surface due to vector control issues. "Vector" means any animal capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury, including, but not limited to, mosquitoes, flies, mites, ticks, other arthropods, and rodents and other vertebrates. (California Health and Safety Code §2002) Usually, vectors are simply a nuisance, such as the discomfort caused by a mosquito bite, but sometimes vectors that breed in standing water can carry serious diseases. One specifically, is the West Nile virus (WNV). The WNV is a potentially serious illness. Experts believe WNV is established as a seasonal epidemic in North America that flares up in the summer and continues into the fall. Mosquitoes breed in wet, swampy areas, where they lay their eggs. The eggs hatch in the water, and the young mosquitoes spend their pupal stages in the water. Mosquitoes lay eggs in both fresh and polluted water, and seek still waters such as those found in small puddles, ditches, and ponds. Even a small amount of standing water—say, in the bottom of a flower pot—will provide sufficient habitat for mosquito eggs. These eggs usually hatch about 5 days after they are laid. The County of Riverside has established the Vector

Control Program. The Program is responsible for providing services to eliminate and/or reduce the risk of illness caused by any organism transporting a pathogen. The Northwest Mosquito and Vector Control District provides services to the northwest area of Riverside county.

Dry extended detention basins are typically designed with outlets that detain runoff volume from the water quality design storm for 36–72 hours to allow particulates and associated pollutants (phosphorus, trace metals, some pesticides, and other pollutants) to settle out without creating mosquito habitat. The regional water quality basin will be designed to drain in less than 72 hours and will incorporate a low-flow channel in the bottom of the basin for the treatment and infiltration of dry weather flows and small storm events. This timeframe to achieve elimination of mosquito habitat is adequate to ensure breeding does not occur. Water standing less than a week in duration will not result in vector outbreaks.²

Design guidelines and maintenance for vegetated swales involves visual inspection for erosion, damage to vegetation, and standing water and debris/litter/sediment removal. Regularly inspect swales for pools of standing water. Swales can become a nuisance due to mosquito breeding in standing water if obstructions develop (e.g., debris accumulation, invasive vegetation) and/or if proper drainage slopes are not implemented and maintained. The project will be required to install landscaping which is in compliance with Ordinance 859 Water-Efficient Landscaping Requirements, which will utilize less water and create fewer opportunities for low-flow standing water. The WQMP for the project requires that the “WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP.” The WQMP also requires the necessary maintenance practices such as regular inspection of the system, educational programs and training, debris removal, and landscape maintenance.

With proper project design and WQMP-required maintenance, environmental effects due to BMPs used in the project site are considered **less than significant**.

Threshold I: *Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site.*

The project site was historically used for various agricultural uses, including chicken, thoroughbred horse ranches with homes, grazing areas, and row-crop fields. Implementation of the proposed project will result in the alteration of the site's use and will introduce additional asphalt, concrete, and other impervious surfaces that do not currently exist on site.

All on-site streets will be graded with a minimum 0.5% slope, the County minimum street grade. The surface runoff will be collected within the master storm drain facilities which will be constructed as part of, and in conjunction with, the project. The proposed Master Drainage Plan (**Figure 5.8-6, Master Plan of Drainage (On-Site)**) utilizes streets, underground storm drains, open channels, debris basins, and detention basins to collect the on-site and tributary off-site storm water, and convey it through the project and into the San Jacinto River floodplain area.

² Dr. William Walton, PhD, Professor of Entomology, University of California Riverside. Phone communication February 20, 2008.

These facilities will be required to accommodate developed 100-year storm runoff through the project.

The San Jacinto River runs in an east to west direction as it passes north of the project area. The project related storm drain facilities will tie into the San Jacinto River where the River crosses under Ramona Expressway at the northwestern most extent of the project site. At this point along the river alignment, the 100-year, 3-hour peak flow rate averages approximately 4,200 cfs in the sites undeveloped state; at full build-out of the project, it is anticipated that the 100-year, 3-hour peak flow rate will be lower than that of the undeveloped state, at 4,000 cfs.

The project proposes to keep all habitable land uses outside of the 100-year San Jacinto River flood plain created by the project. Conservation, recreation, and passive park uses within this area, inside the floodplain are being proposed. The conservation areas will be kept in their existing state and open space areas will serve the function of storm drain and park facilities. Grading in the San Jacinto River 100-year flood plain for proposed parks and on-site drainage facilities will increase the storage capacity of the flood plain within the project site, from an existing 625 acre-feet to 750 acre-feet. This represents an increase in area along the river where

After implementation of the proposed storm drain plan the proposed project will not result in peak flows exiting the site that would result in flooding on or offsite. Implementation of the proposed project would have negligible impacts, since the Q_{100} would be lower than the existing condition by 200 cfs. Therefore, impacts to the existing drainage pattern of the site or area which would result in substantial flooding on- or off-site are considered **less than significant with implementation of MM Hydro 1** which addresses interim situations that may exist prior to completion of the entire storm drain system.

Threshold J: *Change in absorption rates or the rate and amount of surface runoff.*

Implementation of the project will result in an increase in impervious surfaces within the project site. Impervious surfaces, including paved areas such as parking lots and roadways, and building and residential rooftops, decrease the area in which stormwater runoff can infiltrate potentially resulting in decreased absorption and increased runoff. As indicated in the Preliminary Regional Water Quality Management Plan, the proposed project has been designed to maximize the infiltration of the on-site-generated runoff by incorporating design concepts that promote infiltration of stormwater runoff. Within the impervious portion of the project there will be landscaped buffers along the periphery of the buildings and parking lots for the various developments included in the project. Runoff generated from the immediate vicinity (impervious portion) will infiltrate in this landscaped portions. The majority of the landscaping will be utilized to promote infiltration. The site design BMPs will be implemented in such a way that the parking areas, sidewalks, and to the maximum extent practicable rooftops will drain in to these landscaped portions or enhanced grass-swales. As stormwater runoff flow continues, runoff will be directed to the proposed gutters to stormwater collection points. The project will have vegetated open channel or grass swales that further promote infiltration of generated runoff. The latter can function as a pre-treatment or treatment-train of runoff water before it reaches the Regional Basin. The Regional Basin is designed with a filtration system to treat the project's

Pollutants of Concern with medium to high efficiency; this basin will also promote maximum infiltration of the total project site.

THE VILLAGES OF LAKEVIEW project includes approximately 1,100 acres of conservation and open space areas. These areas will remain as is or will be vegetated with native or drought tolerant trees, shrubs, grass etc. per the landscape design. The project proposes to have a community with approximately 50,000 trees. In addition to this, the project will have approximately 150 acres of park located throughout the project. The open space, parks, trees, and landscaping in conjunction with the formal water quality systems will maintain absorption on-site.

The project proposes to keep all habitable land uses outside of the 100-year San Jacinto River flood plain, as modified by the project. Conservation, recreation, and passive park uses within this area, inside the floodplain are being proposed. The conservation areas will be kept in their existing state and open space areas will serve the function of storm drain and park facilities. Grading in the San Jacinto River 100-year flood plain for proposed parks and on-site drainage facilities will increase the storage capacity of the flood plain within the project site, from an existing 625 acre-feet to 750 acre-feet. This represents an increase in area along the river where absorption can occur as per the existing conditions in that area.

In the proposed project condition, onsite generated runoff will be conveyed to the proposed finished surfaces along proposed curb and/or gutters to storm collection inlet points for further conveyance via the proposed storm drain system and earthen channel. The project drainage is towards the northwest (refer to **Figure 5.8-6, Master Plan of Drainage (On-Site)**). The proposed storm drain plan generally follows the historical drainage pattern and elevation of the site. Historic flows in the project site sheetflow across Ramona Expressway where they enter the San Jacinto River. In its undeveloped state, the 100-year, 3-hour peak flow rate averages approximately 5,600 cfs leaving the project's boundary. Under developed conditions, a total of eight crossings under Ramona Expressway are proposed (including the Wildlife Corridor). Waters will cross in the shape of concentrated flows under Ramona Expressway. At full build-out of the project, it is anticipated that the 100-year, 3-hour peak flow rate across Ramona Expressway will be the same or lower than that of the undeveloped state, at 4,800 cfs.

Therefore, through implementation of the Regional WQMP for THE VILLAGES OF LAKEVIEW, other Design Considerations such as open space preservation, parks and tree planting, an increase of the floodplain storage capacity, and adherence to NPDES requirements the project will achieve infiltration rates to the maximum extent practicable, maintain historic storm flows, and take into consideration localized runoff as the project builds out thus minimization of runoff will be achieved. Therefore, impacts to absorption rates or the rate and amount of surface runoff are considered **less than significant**.

Threshold K: *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 (Dam Inundation Area).*

The dam inundation maps for Lake Perris and all Diamond Valley Reservoir dams were reviewed and can be reviewed herein in Section 5.6, Geology and Soils, Figures 5.6-5 through

5.6-9. The inundation area for the Diamond Valley Reservoir, East Dam is the only one which impacts the project site (**Figure 5.8-16, Dam Inundation Area, Diamond Valley Reservoir, East Dam**). The Diamond Valley Reservoir, East Dam consists of earth/rock fill construction at approximately 185 feet high, 2 miles long, 800 feet wide at the base, and 40 feet wide at the crest. Construction of the dam was completed in 1999 leaving the reservoir with a capacity of almost one billion cubic meters. Currently, the dams of Diamond Valley Lake are being electronically monitored through real time electronic monitoring/alerting system. As depicted in **Figure 5.8-16**, a portion of the project site is located within the dam inundation zone for the East Dam of Diamond Valley Reservoir. The inundation area affects the Resort Village located north of Ramona Expressway, portions of the mixed use Town Center Village, and the easternmost Planning Areas within the project. The planning areas that are within the inundation zone include uses such as mixed use, residential, commercial, schools, parks, public facilities, as well as their associated utilities.

The residents and visitors to THE VILLAGES OF LAKEVIEW who will live and/or work within this dam inundation area could be exposed to a significant risk involving flooding if the Diamond Valley Reservoir East Dam failed. Although new development within the project will be designed to avoid standard 100-year flood areas, development within a dam inundation area could not be built to avoid flooding that would result from dam failure as the inundation area shown would have the potential to place some areas closest to the San Jacinto River under 30 feet of water. The “instantaneous failure of the dam,” as assumed for purposes of mapping on **Figure 5.8-16**, is unlikely. Therefore, repairs could be made to a leaking or damaged dam to avoid significant damage to life and/or property. Dam operation and maintenance within the state of California is regulated by the Department of Water Resources, Division of Safety of Dams. All dams under these definitions are subject to State supervision unless they are owned and operated by the United States.

As described in Section 5.6, Geology & Soils of the DEIR, the project site contains only a small portion of the Lake Perris Inundation Zone (see Section 5.6: Figure 5.6-5, Dam Inundation Area, Lake Perris) which is located in the western portion of the project site. Lake Perris is located approximately 2 miles west of the project site. The lake is contained by one dam and has a storage capacity of approximately 131,000 acre-feet. The inundation area associated with this dam does not impact areas proposed for habitable structures.

Although the Lakeview Dam has no dam inundation maps available, the Lakeview Dam has a potential for Dam Inundation. According to the California Department of Conservation, Division of Safety of Dams, the Lakeview Dam has a storage capacity of approximately 530 acre-feet behind a 37-foot high, 3,100-foot long earthen dam. This dam is not designed for water storage, rather it was designed to control stormwater flows therefore, would only hold maximum capacity standing water in a major storm (530 acre-feet = 100-year storm). The probability that an earthquake capable of rending the dam happening at the same time it was holding a 100-year storm would be so small as to be less than significant.

The Department of Water Resources, under the police power of the state, shall supervise the construction, enlargement, alteration, repair, maintenance, operation, and removal of dams and reservoirs for the protection of life and property as provided in this part. All dams and reservoirs

in the state are under the jurisdiction of the Department of Water Resources (DWR). In determining whether or not a dam or reservoir or proposed dam or reservoir constitutes or would constitute a danger to life or property, the Department of Water Resources takes into consideration the possibility that the dam or reservoir might be endangered by seepage, earth movement, or other conditions which exist or which might occur in any area in the vicinity of the dam or reservoir. Whenever the Department of Water Resources deems that any such condition endangers a dam or reservoir, it orders the owner to take such action as the Department of Water Resources determines to be necessary to remove the resultant danger to life and property. Operational dams are inspected on a regular schedule based on their individual damage potential and are inspected between every one and five years. This inspection process by DWR resulted in a lowering of the water levels at Lake Perris, in recent years, so that improvements to the dam could be constructed.

As quoted in the BSA Properties Specific Plan No. 322 EIR, a report prepared for Metropolitan Water District entitled, Interim Probabilistic Evaluation of Potential Dam Failure: Proposed Domenigoni East and West Dams, Eastside Reservoir Project, it is indicated that “extensive risk analysis [has shown] the risk of dam failure to be an annual probability of 1 in 100 million under seismic loading conditions exceeding a maximum credible earthquake condition anticipated in the region.” As published in the Supplemental EIR for the Domenigoni Reservoir project (aka Diamond Valley Reservoir), MWD had determined that since the probability of dam inundation is so slight, potential adverse environmental impacts associated with the inundation potential are less than significant. Additionally, for new construction and proposals for substantial improvements to residential and nonresidential development in 100- and 500-year floodplains and dam inundation areas, the County shall apply a minimum level of acceptable risk; and disapprove projects that cannot mitigate the hazard to the satisfaction of the Building Official or other responsible agency. The County of Riverside concurs with these findings with respect to THE VILLAGES OF LAKEVIEW and potential impacts related to exposing 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 are considered **less than significant** due to the extremely low risk.

Threshold L: *Change in the amount of surface water in any water body.*

Currently, the San Jacinto River is considered an ephemeral stream, containing surface flows only during the wet months of the year, and years with significant annual precipitation. The proposed project will result in the addition of impervious surfaces throughout the project footprint, excluding the areas within the conservation area. The addition of impervious surfaces will reduce the overall infiltration rate, thus increasing the amount of surface runoff within the project site. Additional waters produced through landscaping will be directed to detention basins and swales where they will be allowed to infiltrate. The proposed storm drain plan generally follows the historical drainage pattern and elevation of the site. Historic flows in the project footprint sheetflow across Ramona Expressway where they enter the San Jacinto River. In its undeveloped state, the 100-year, 3-hour peak flow rate averages approximately 4,200 cfs leaving the project’s boundary. Under developed conditions, a total of seven crossings under Ramona Expressway are proposed. Waters will cross in the shape of concentrated flows under Ramona Expressway. At full build-out of the project, it is anticipated that the 100-year, 3-hour peak flow rate across Ramona Expressway will be the same or lower than that of the undeveloped state, at

4,200 cfs. Through project design, flows into the San Jacinto River will be designed to mimic historic flows. Therefore, impacts due to 100-year storm events and increases in surface water bodies are considered **less than significant**.

With respect to low flows related to 2-year or 10-year storms, for example, increases and/or decreases in surface waters can have effects in ways not associated solely with flooding. Overall 100-year storm flows are contained as necessary to meet Riverside County Flood Control and Water Conservation District standards; however, additional indirect impacts could occur to the San Jacinto River due to project site drainage changes in the smaller storms events (e.g., 2-year or 10-year). These changes could result in impacts to the San Jacinto River local area watershed. A Hydromodification Technical Report (see Appendix I (CD #4)) was performed by Geosyntec Consultants July 2008 to analyze potential biological impacts due to hydrologic changes and hydrological impacts to areas located to the north of THE VILLAGES OF LAKEVIEW Specific Plan area. Hydromodification is defined by the U.S. Environmental Protection Agency as “alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources.” Hydromodification activities can change a waterbody's physical structure as well as its natural function which in turn can cause problems such as: changes to surface runoff volumes and dry weather flows, changes to the frequency and number of runoff events, changes to the long-term cumulative duration of flows, as well as increased peak flows. A change to the hydrologic regime is considered a hydrologic condition of concern (HCOC) if the change could have a significant impact on downstream natural channels and habitat integrity. The Hydromodification Technical Report specifically addresses the likelihood that the proposed project could create Hydrologic Conditions of Concern (HCOC) by focusing on the following elements:

- 1) Water Balance Modifications: Changes in the volume, nature, and frequency of runoff to the offsite wetland and vernal pool area to the north of the Project to assess the impact to plant and wildlife habitat.
- 2) Alteration to Storm Event Discharge Characteristics: Quantification of the pre- and post-development runoff flow rates, volumes, and durations to determine if storm event discharge characteristics will be significantly altered by the project.
- 3) Cumulative Impacts to the San Jacinto River Watershed: A qualitative evaluation of the cumulative impacts to the San Jacinto River due to changes in runoff hydrology and hydraulics from the site.

The Hydromodification Technical Report evaluates how and where on-site drainage to the San Jacinto River, the San Jacinto Wildlife Area, and vernal pools were considered before and after project implementation. The report mapped existing drainages and proposed drainages and calculated annual volumes including flow rate for pre- and post-development that drain to the San Jacinto River, the San Jacinto Wildlife Area, and the vernal pool area. This discussion will only cover impacts to the watershed areas. Discussion of wildlife impacts are located in Section 5.4 of this DEIR.

Water Balance Modifications

The proposed THE VILLAGES OF LAKEVIEW Specific Plan will change watershed imperviousness as well as the drainage characteristics with the is potential that the volume and frequency of

runoff from the project site would be modified significantly enough to impact the seasonal water balance of adjacent areas. The seasonal water balance refers to the proportioning of rainfall and irrigation water into surface runoff, infiltrated water, and evapotranspired water. The proposed project would be completed along with a project to complete a component of the approved Lakeview/Nuevo Area Master Plan (RCFCD, 1978 and 1981), where the discharges from the Lakeview Dam would be diverted to the Nuevo Channel. This diversion project would divert surface runoff from an approximately 8-square mile watershed that currently drains to the north of the project site. The combined effect of the diversion and the site development on the seasonal water balance to this area is a potential hydrologic issue of concern for the proposed project.

THE VILLAGES OF LAKEVIEW includes a Central Park, a portion of which will be used as a detention basin as part of the overall drainage system. The Hydromodification Technical Report analyzed conditions with this basin in operation. To better match existing hydrologic conditions, the study also analyzed project implementation without the central basin. It was found, that average volumes and flow rate to the area located east of Davis Road would be lower than pre-existing conditions with both the basin included and excluded; however, discharges would be impacted less with exclusion of the Central Park basin. Average volumes and flow rate discharges to the San Jacinto River will be greatly increased (over 500 times greater monthly average volume) both with and without a detention basin; however volumes were found to be higher with the basin while flow rates generally remain the same. Although it was found that post-development discharges would not equal pre-development discharge conditions, volumes and flow rates that did not include the central basin were roughly equal. Final analysis showed with implementation of the project without the basin, discharges would be closer to existing conditions (see **Figures 5.8-17, Developed Catchments, Post-Lakeview Dam Connection to Nuevo Channel, 5.8-18, Comparison of Average Annual Surface Discharge Volumes, 5.8-19, Average Monthly Volumes Discharged Directly to San Jacinto River, and 5.8-20, Average Monthly Volumes Discharged Off-site Wetland**) and **impacts to surrounding areas due to seasonable water balance are considered less than significant.**

Alteration to Storm Event Discharge Characteristics

Changes in the hydraulic loading characteristics of surface runoff to natural or unlined channels may affect the existing stability of local conveyances or the general hydrologic condition of the area receiving runoff. While all onsite open conveyances will be engineered and stabilized with vegetation, rock, or other engineered materials, some existing offsite local channels may be left in their natural condition. High flow rates would be controlled with upstream detention basins and flow control structures; however, if there are increases in the duration of low flow rates as compared to existing conditions there may be an increase in the total amount of energy applied to existing channels.

The project will introduce discharges that drain directly into the San Jacinto River. The return period of storm event peak flow rates to the offsite channel are expected to increase significantly from the existing condition due to the fact that the offsite channel currently receives very little surface runoff. As indicated in the **Figure 5.8-19**, the Central Park Basin does not significantly affect the peak flow return periods to the San Jacinto River.

As described in the Hydromodification Report prepared by Geosyntec, an existing channel (MS4 channel) located onsite at the northwest corner of the project site drains directly to the San Jacinto River at a very slight slope ($<0.5\%$) over approximately 300 feet from the project's point of connection. During larger events, given the shallow slope to the river, it is possible that the river will back up into this existing onsite channel thereby reducing any potential impacts associated with discharges from the on-site MS4 Channel.

Existing storm water discharges surface runoff via culverts or roadway overtopping at several locations across Ramona Expressway to private dairies and fields and across Marvin Road to the San Jacinto Wildlife Area. The surface conveyances at these locations are not well defined indicating that high flows cross infrequently or these areas are regularly disturbed by land use activities (e.g., agricultural activities). The proposed project's surface conveyances include well-defined engineered channels and storm drains. New culverts will be installed near the locations where surface runoff is currently being discharged from the property. (See **Figure 5.8-17, Developed Catchments, Post-Lakeview Dam Connection to Nuevo Channel.**)

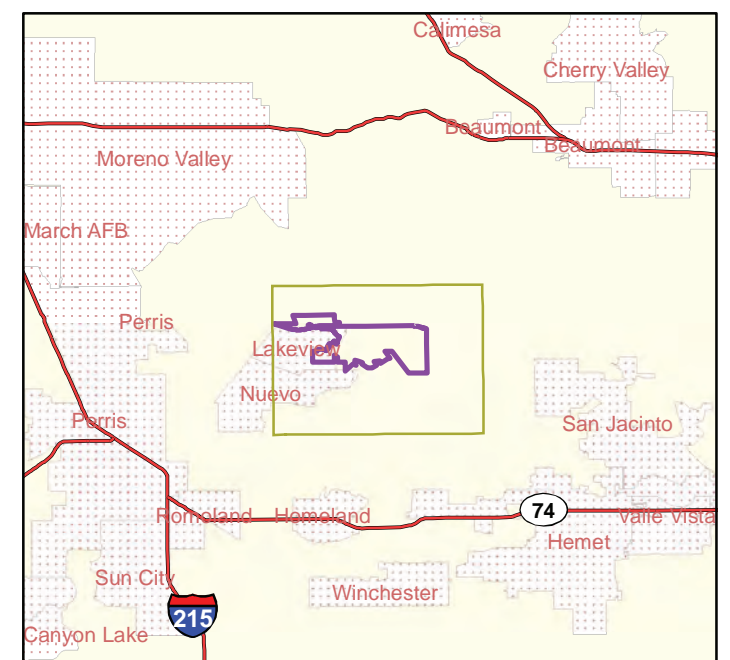
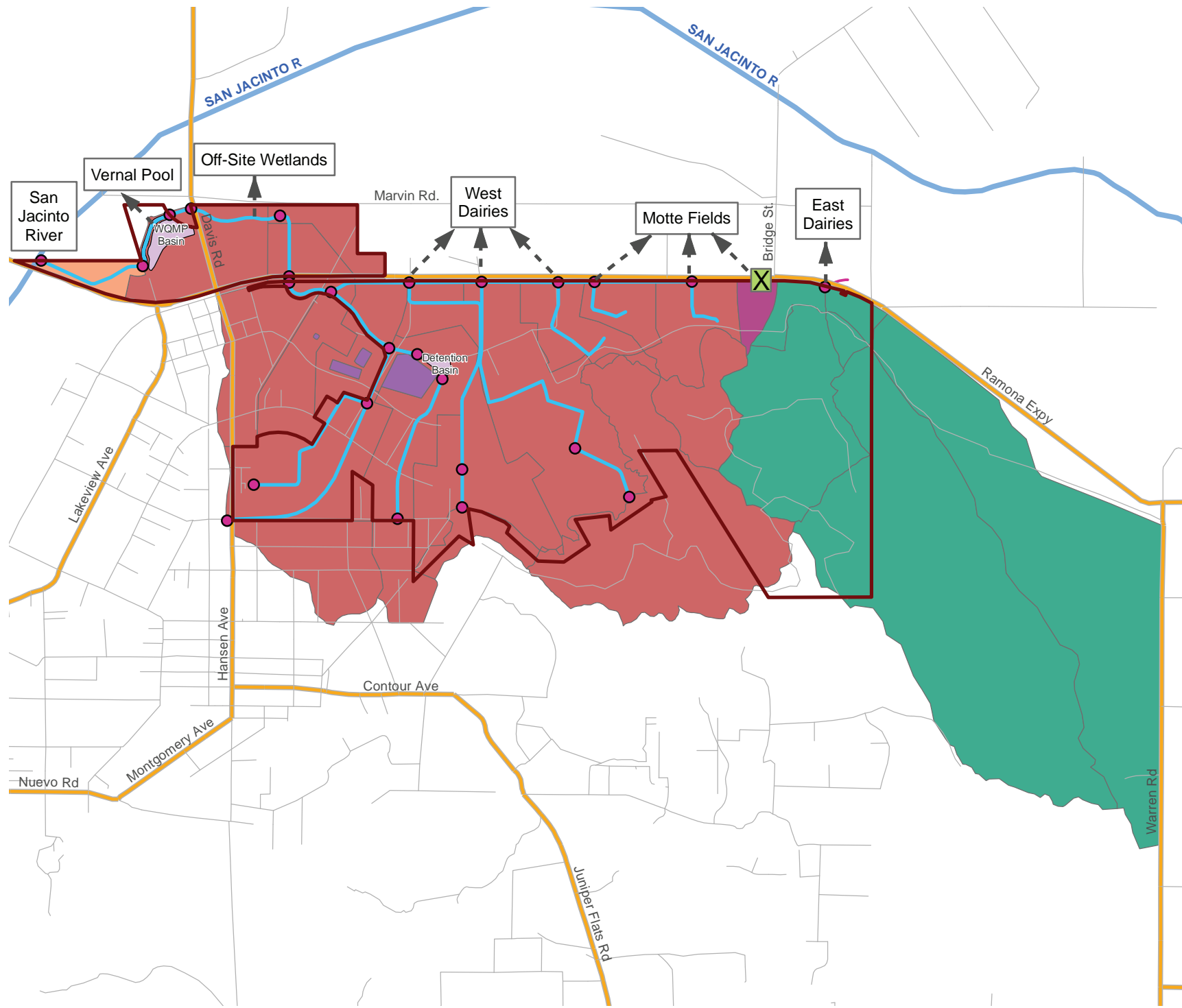
Cumulative Impacts to the San Jacinto River Watershed

The San Jacinto River is located at the northwest corner of the project site. The San Jacinto River has a nearly 500-square mile watershed of which THE VILLAGES OF LAKEVIEW Specific Plan area will impact less than 5 square miles, or less than 1% of the upstream watershed. This relatively small proportion of the watershed would not be expected to cause any significant impacts on San Jacinto River; however, as the watershed area becomes more developed, the proposed project may contribute to cumulative impacts on the hydrology and hydraulics of the river. By estimating the impervious area of the watershed at projected build-out conditions per the General Plan and comparing this to the proposed project impervious area, the contribution of the project to cumulative impacts may be assessed. While the proposed project does not include any in-stream modifications to the San Jacinto River, significant increases in peak runoff from the proposed Project could contribute to channel instability and exacerbate the effects of future river channelization projects.

Due to the current lack of directly connected conveyances from the project area to the San Jacinto River, the proposed THE VILLAGES OF LAKEVIEW Specific Plan will significantly increase the average annual and monthly volumes discharged directly to the river. However, this increase is not expected to cause significant impacts since the majority of discharges will be treated, low-flows from the WQMP Basin located in the northern portion of the property. The velocities that exit the project site are below calculated levels that could cause significant scour or erosion of the downstream offsite channel. As all surface runoff from the project area eventually infiltrates or flows to the river, the total change in water balance to the river is much less than the directly connected component alone. The total average annual volume discharged from the proposed project area is predicted to increase by 34 percent.

Although the natural drainage features that drain to surrounding areas will be impacted, the Hydromodification Technical Report has shown that the project's drainage system could be modified, by using the Central Park detention basin to a greater or lesser degree, to ensure that the net flows across the property will be maintained, such that any resources located downstream of the project site will receive, or not receive, necessary annual flows in a fashion in keeping

with the existing conditions, overall and seasonally. In addition, the implementation of a Water Quality Management Plan (WQMP) and Best Management Practices (BMPs) will ensure that this project will not have any adverse water quality impacts on site or to any downstream resources. Indirect impacts resulting from hydromodification will be reduced to **less than significant** levels.



Legend

Project Boundary	WQMP Basin
Developed Storm Drain Nodes	Closed Basin
Developed Storm Drains	Wildlife Xing / Motte Fields
Storage Basins	East Dairies
Drains To	High Flow Bypass
San Jacinto River	Wildlife Crossing

Figure 5.8-17

**Development Catchments,
Post-Lakeview Dam Connection to Nuevo Channel**

Villages of Lakeview EIR No. 471

Average Annual Volumes (95% Confidence Intervals)

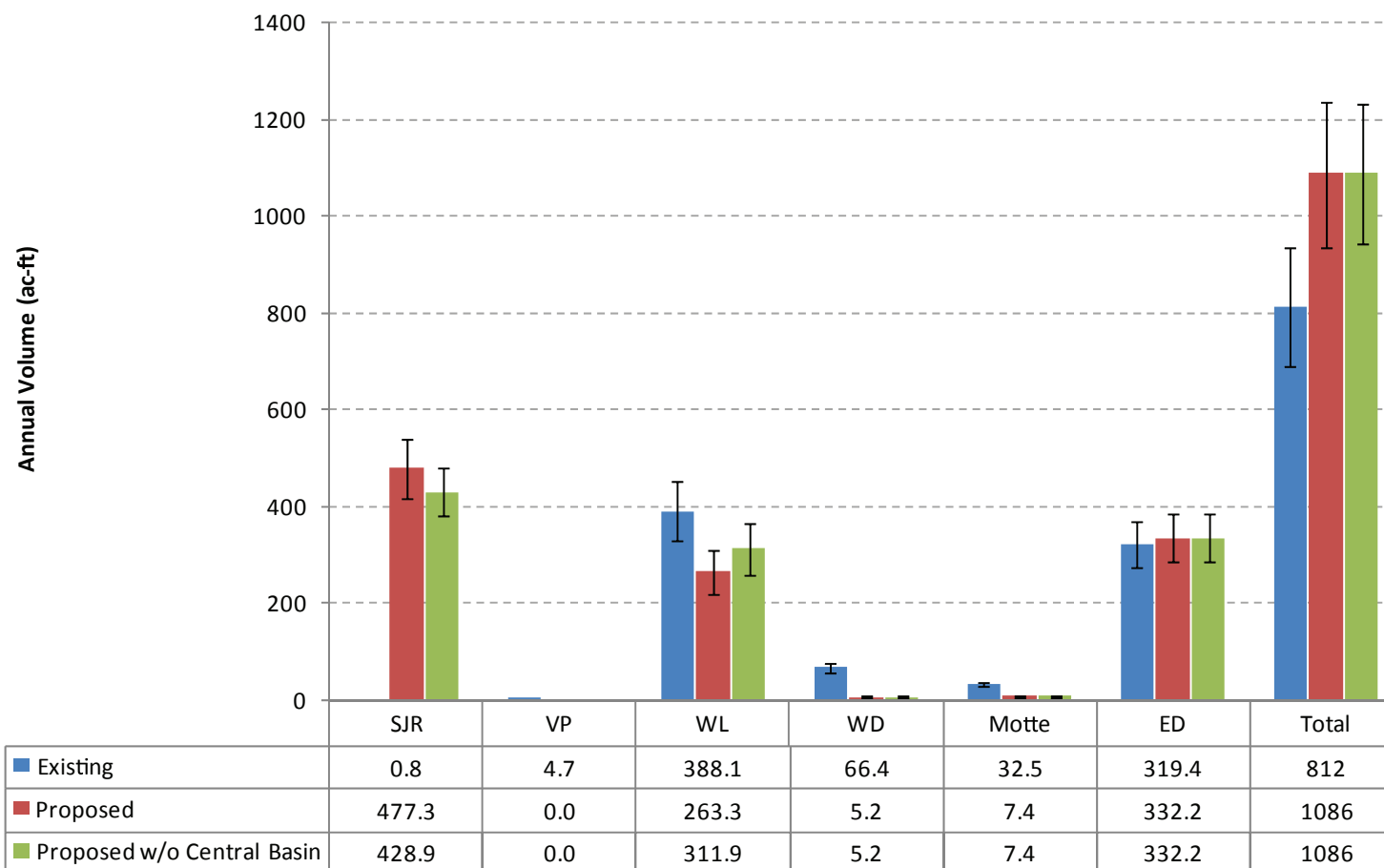


Figure 5.8-18



Abbreviations:

SJR = Direct to San Jacinto River
 VP = Vernal Pool
 WL = Offsite Wetland

WD = West Dairies
 Motte = Motte Fields
 ED = East Dairies

**Comparison of Average Annual
 Surface Discharge Volumes**

Villages of Lakeview EIR No. 471

Average Monthly Volumes (95% Confidence Intervals)

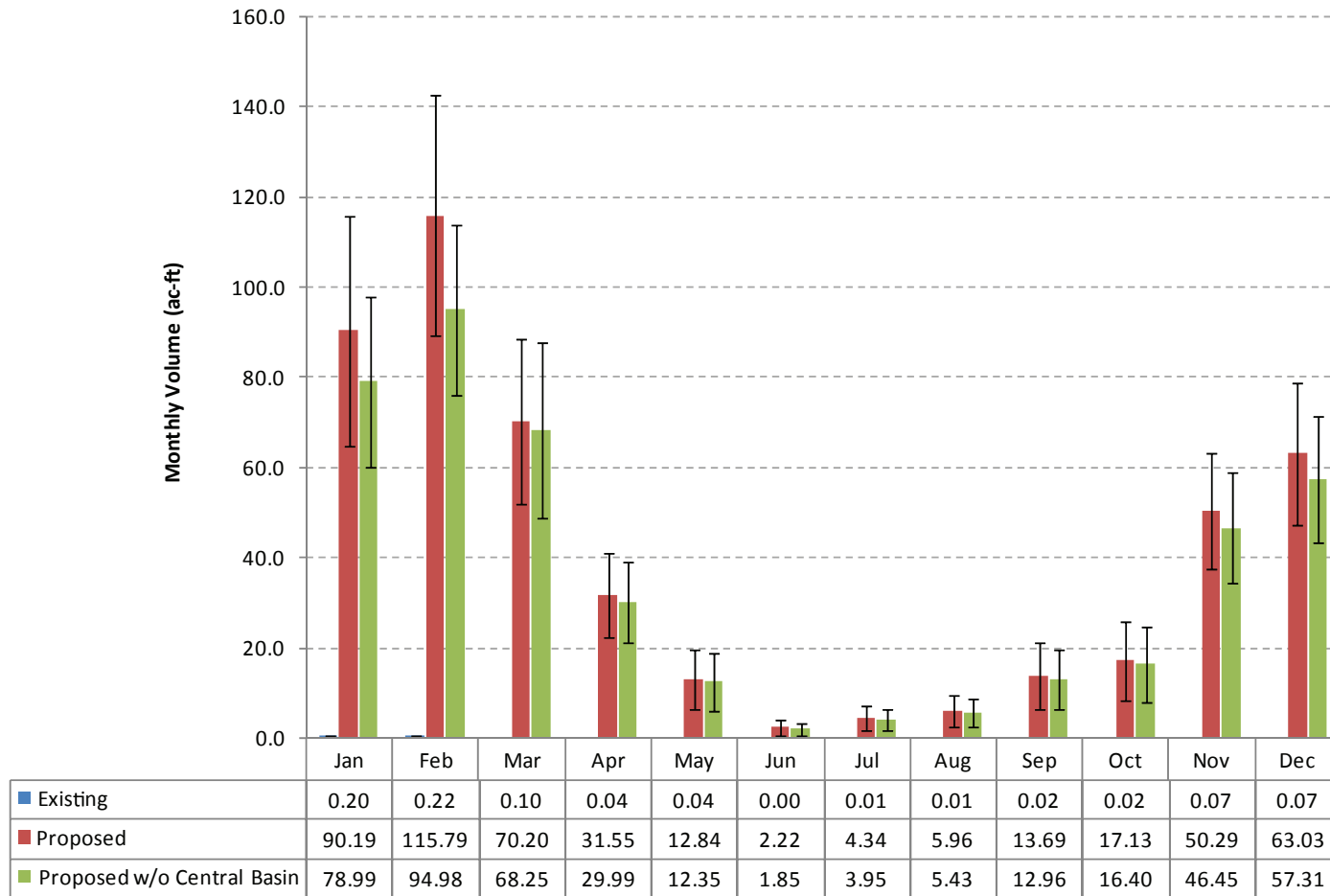


Figure 5.8-19

**Average Monthly Volumes Discharged
Directly to San Jacinto River**

Villages of Lakeview EIR No. 471

Average Monthly Volumes (95% Confidence Intervals)

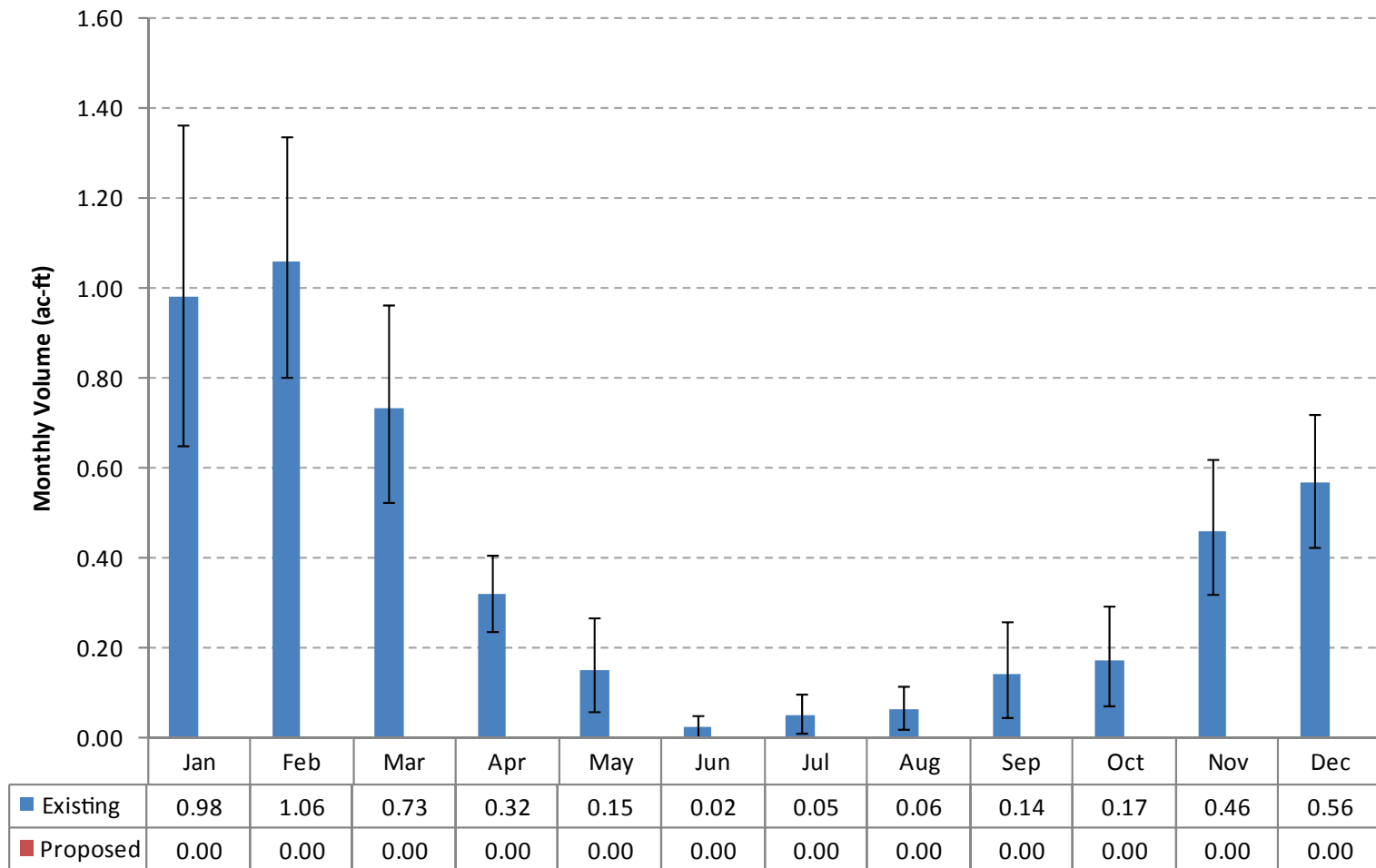


Figure 5.8-20

**Average Monthly Volumes Discharged
Directly to Off-Site Wetland**

Villages of Lakeview EIR No. 471

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts related to increased flows and water quality.

MM Hydro 1: To address potential significant adverse environmental impacts associated with interim conditions that may exist prior to the completion of the overall project storm drain and water quality treatment system, the following mitigation shall be required. Prior to approval of future Tentative Tract maps within THE VILLAGES OF LAKEVIEW Specific Plan which are proposed prior to completion of the overall project drainage improvements, hydrology studies will be required to analyze potential impacts and identify any needed improvements within the tract and/or within the Specific Plan or offsite which are required to accommodate storm water flows and address water quality, as required by the County of Riverside and Regional Water Quality Control Board. Potential operational BMPs may include vegetated swales, sand filtration systems, water quality inlets, mechanical separators, and/or other proprietary devices as needed to treat expected pollutants from development (see **Table 5.8-D**).

Summary of Project-Specific Environmental Effects After Mitigation Measures Are Implemented

Through project design and BMP implementation, impacts associated with drainage patterns, water quality standards, groundwater supplies, structures within 100-year flood hazard areas, water quality, environmental effects due to BMPs, absorption rates, and changes to surface water are considered **less than significant**.

Impacts to exceeding storm water drainage systems and altering drainage patterns after project buildout are considered **less than significant** as detailed above. With the implementation of **MM Hydro 1**, impacts associated with interim conditions where not all necessary upstream facilities are in place are considered **less than significant**.

Impacts to people or structures due to the failure of a levee or a dam are considered **less than significant** due to the extremely low risk of dam failure.

Summary of Cumulative Environmental Effects After Mitigation Measures Are Implemented

Section 7.1 of the DEIR includes additional information about cumulative effects.

The geographic context for the Hydrology and Water Quality cumulative impact analysis is the San Jacinto Watershed and the EMWD service area, including all anticipated cumulative growth within this geographic area as represented by full implementation of the RCIP General Plan and related projects list, as discussed above.

The project is within the San Jacinto Watershed. The main drainage within the San Jacinto watershed is the San Jacinto River. As discussed above, three future projects, both upstream and downstream of THE VILLAGES OF LAKEVIEW, are planned which may have cumulative effects: the San Jacinto River Stage 4 Project (San Jacinto area), the San Jacinto River Stage 3 Project (Perris Valley area), and the San Jacinto River Gap Project (San Jacinto Wildlife Area vicinity). These projects assess the alignments of the San Jacinto River to convey various level storm events while considering influences of several other factors such as biological resources, hydrologic conditions, and hydraulic requirements.

Cumulatively, these three projects will address flooding problems, water quality, sedimentation, and erosion issues through the reaches of the San Jacinto River most directly related to THE VILLAGES OF LAKEVIEW. Cumulatively, reduced flooding through agriculture, especially dairy lands, will reduce waste and pesticide contamination of local surface waters. Through the desiltation basin in the Stage 4 Project, sediment transport can be monitored and controlled for the benefit of areas such as Mystic Lake and the San Jacinto Wildlife Area (SJWA). Exact impacts of these river projects on sensitive plant and animal species are being evaluated through the environmental review process under CEQA and the MSHCP. The construction period for the Stage 4 Project is anticipated to take 15 months once environmental documentation that is currently being prepared is certified by the City of San Jacinto. Similarly, the City of Perris is working through the MSHCP process currently with respect to the Stage 3 Project.

Ultimately, one of the objectives of all three river projects is to protect the biological resource values and habitats along this stretch of the River. However, none of these projects are complete at this time, so the existing conditions of the San Jacinto River and its related watershed must be used today for evaluation of cumulative impacts of THE VILLAGES OF LAKEVIEW. Therefore, THE VILLAGES OF LAKEVIEW has designed its drainage and water quality management systems in such a way as to meet the current hydrological needs of the natural areas located north of the project while maintaining flexibility for the future should conditions change slightly as a result of these cumulative River projects. Therefore, cumulative impacts to the River and San Jacinto Wildlife Area are **less than significant**.

Water Quality

The Regional Water Quality Control Board (RWQCB) has issued a National Pollutant Discharge Elimination System (NPDES) permit (MS4 permit) to the Riverside County Flood Control and Water Conservation District (the District) for storm water discharges (Order No. R8-2002-0011, NPDES No. CAS 618033; Santa Ana Regional Water Quality Control Board). The District has prepared a storm water management program addressing requirements for meeting this NPDES permit. All development and future development must obtain coverage under the NPDES permit. The District reviews all plans and developments for compliance with existing ordinances (e.g., grading ordinance) and storm water management program requirements. A Water Quality Management Plan for Urban Runoff from New Development and Significant Redevelopment (WQMP) was adopted by the SARWQCB. This includes the preparation of a site-specific Water Quality Management Plan (WQMP) that will identify Best Management Practices (BMPs) to ensure that water quality of receiving waters is not degraded following development. Thus, while continued growth is anticipated to occur, new developments (and significant re-development)

will have to comply with these regulations and implement construction and operational BMPs to minimize pollutant transport. BMP's are also required to minimize vectors and odors.

The project proposes all development-generated runoff generated west of the wildlife corridor to be conveyed along proposed curb and/or gutters to storm collection inlet points for further conveyance via proposed storm drain systems. On-site generated runoff will then be conveyed by these storm drain systems to the Water Quality Basin (WQB) in the northwest portion of the project. The proposed WQMP basin will address the management of the project on-site water quality to protect receiving waters. The proposed WQMP basin will address the management of project on-site runoff quality by functioning as a treatment control BMP to meet the requirements of the MS4 permit at the project site (Order No. R8-2002-0011, NPDES No. CAS 618033; Santa Ana Regional Water Quality Control Board).

Runoff generated in the developed and undeveloped areas located east of the wildlife corridor will be collected in a similar fashion to the western areas of the project, but will be treated to meet water quality standards within Planning Area 77. Thus, through implementation of the designed WQB and overall WQMP, other design considerations such as open space preservation, parks and tree planting, an increase of the floodplain storage capacity, and adherence to NPDES requirements, the project will achieve infiltration rates to the maximum extent practicable, maintain historic storm flows, and take into consideration localized runoff as the project builds out thus minimization of runoff will be achieved. As analyzed in Section 5.8, potential exceedance of water quality standards and criteria, substantial contribution of pollutants to receiving waterbodies, and other potential causes of water quality degradation will be minimal and monitoring and reporting programs will ensure that the storm water management program is adequately protecting water quality or will be adjusted to meet water quality protection goals. Therefore, and the project's contribution is not cumulatively considerable, and thus not significant. Therefore, the project's cumulative contribution related to impacts to water quality degradation, standards, and environmental effects, such as vectors and objectionable odors, either through direct pollutant loading or erosion, is not cumulatively considerable and thus **less than significant**.

Drainage

Storm water flow and flood potential will increase as development results in greater amounts of impervious surfaces and channelization for conveyance of peak flows. However, the Master Drainage Plan (MDP) guide and govern local and regional hydrology and hydraulic modifications. The planned drainage capacities have been determined assuming a full build-out scenario. All development within the County of Riverside, including areas within the San Jacinto Watershed must comply with the requirements of the NPDES permit, District storm water management plan, MDP, and other pertinent local drainage and conveyance ordinances. Existing regulations effectively minimize potential impacts to flow conveyance and flooding and have incorporated necessary elements in the MDP. Accordingly, the project-related contribution to impacts associated with storm water flow conveyance and flood potential would not be cumulatively considerable, and thus **not significant**.

The drainage pattern within the area of the project generally slopes northwest towards the San Jacinto River. After project development, on-site generated runoff will be conveyed to the proposed finished surfaces along proposed curb and/or gutters to storm collection inlet points for further conveyance via the proposed storm drain system. At full build-out of the project, it is anticipated that the 100-year, 3-hour peak flow rate across Ramona Expressway will be the same or lower than that of the undeveloped state thereby reducing the potential for siltation or erosion on or off-site. As the project's impacts are considered less than significant, it is determined that the project will not have cumulative impacts resulting from siltation or erosion on or off site.

The County minimum street grade requires all on-site streets will be graded with a minimum 0.5 percent slope. Within the project area, surface runoff will be collected within the master storm drain facilities which will be constructed as part of, and in conjunction with, the project. The proposed Master Drainage Plan utilizes streets, underground storm drains, open channels, debris basins, and detention basins to collect the on-site and tributary off-site storm water, and convey it through the project and into the San Jacinto River floodplain area. These facilities will be required to accommodate developed 100-year storm runoff through the project to aid in the flooding protection of the site. After implementation of the proposed storm drain plan, the proposed project will not result in peak flows exiting the site that would result in flooding on or off site. Implementation of the proposed project would have negligible impacts, since the Q_{100} would be less than or equal to the existing conditions. Therefore, cumulative impacts that would alter the existing drainage pattern of the site or area which would result in substantial flooding on- or off-site, are considered less than significant. Also, the project includes the use of detention basins. The design of these basins has been such that absorption rates and runoff have been designed to equal post-construction conditions. Therefore, cumulative impacts that would change absorption rates or the rate and amount of surface runoff are considered **less than significant**.

Groundwater supply and aquifer overdraft are currently being assessed and management plans implemented by EMWD to minimize impacts with increased development on groundwater supplies. Over the next twenty years, normal groundwater production is expected to decrease slightly as groundwater basin management activities are executed and sustainable levels of pumping are achieved. Increased future demands are expected to be met with additional supplies from MWD (imported water) and groundwater management activities are expected to maintain groundwater levels and safe yields. These groundwater management activities will ensure that groundwater supplies are not depleted or degraded and therefore, cumulative impacts would be **less than significant**.

THE VILLAGES OF LAKEVIEW project and other new development projects outside of the cities of Hemet and San Jacinto will not use local groundwater sources as EMWD will supply water to these developments. EMWD relies on Metropolitan Water District (MWD) for 80 percent of its potable water supply and 20 percent from the basins below the San Jacinto Watershed. Therefore, the project will have no incremental contribution to any cumulative effect regarding depletion of groundwater supplies so **no impacts** will result.

Development projects, including commercial, industrial, and residential, individually and cumulatively will create more impervious surfaces thus reducing the total groundwater recharge area. Additionally, conversion of agricultural lands to urban lands is likely to result in higher

pollutant concentrations (primarily heavy metals, oils, and greases) in storm water run-off, while creating an overall reduction in nitrate and salts related to the agricultural production. However, projects located within the San Jacinto Watershed also have the possibility of adding to the San Jacinto groundwater basin through the addition of imported and/or recycled water. The water used for irrigation could offset the difference in the reduction of groundwater recharge area to rainfall-related recharge that occurs today. Specifically, THE VILLAGES OF LAKEVIEW project will have the same or greater recharge area within the floodplain of the river as it has today due to project design and use of recycled water for irrigation; therefore, it will have no incremental contribution to potential cumulative effects regarding loss of recharge area within the river floodplain. Also, as the project is required to comply with the NPDES, pollutant loads will be mitigated through introduction of BMP's and the removal of agricultural lands as contributors to the pollutant load.

Through implementation of the Regional WQMP, other Design Considerations such as open space preservation, parks and tree planting, an increase of the floodplain storage capacity, and adherence to NPDES requirements, the project will achieve infiltration rates to the maximum extent practicable, maintain historic storm flows, and take into consideration localized run-off as the project builds out thus, minimization of runoff will be achieved. Therefore, impacts to absorption rates or the rate and amount of surface run-off are considered **less than significant**.

The closest existing wells serve the Nuevo Water Company which serves the communities of Lakeview and Nuevo. THE VILLAGES OF LAKEVIEW project will be serviced through EMWD and as such, there will be no well water extraction from this or nearby projects (even cumulatively), and recharge will not be substantially altered; therefore, the aquifer volume should not be lowered such that existing land uses which rely on groundwater would be negatively impacted. **Less than significant** cumulative impacts will result.

Continued development within the San Jacinto River floodplain could cumulatively restrict flood flows and conveyance capacity as more structures are placed within the floodplain. The area on site devoted to the 100-year floodplain will remain the same as the existing, however the location will be adjusted through grading. THE VILLAGES OF LAKEVIEW project proposes no change in the capacity of the 100-year floodplain area and will therefore, not cause flood flow restrictions, redirect flows, or expose people or structures to a significant loss. Furthermore, development within the floodplain is restricted and permitted by the District. Additionally, the MDP for the San Jacinto watershed was prepared to define full build-out capacities within the MDP area. At full build-out, cumulative impacts on flood conveyance are expected to be less than significant and the proposed project would, therefore, have an impact that is not cumulatively considerable, and therefore, not significant. Through project design, flows into the San Jacinto River will be designed to mimic historic flows and thereby will not cause changes in the amount of surface water that enters the adjacent San Jacinto River and therefore, is not cumulatively considerable, and **less than significant**.

This project, in conjunction with all existing and future development located within the dam inundation areas of all the dams in this part of the County, will place more residents and structures at risk. As depicted in **Figure 5.8-16, Dam Inundation Area, Diamond Valley Reservoir, East Dam**, a portion of the project site is located within the dam inundation zone for

the East Dam of Diamond Valley Reservoir. The inundation area affects all of the Resort Village located north of Ramona Expressway, most of the mixed-use Town Center Village, and the eastern-most Planning Areas within the project. It shall be noted that, although there are no dam inundation maps available for Lakeview Dam, the site will be subject to inundation should the dam fail during a flooding event.

The residents and visitors to THE VILLAGES OF LAKEVIEW who will live and/or work within this dam inundation area could be exposed to a risk involving flooding if the Diamond Valley Reservoir East Dam failed. Even though new development within the project will be designed to avoid standard 100-year flood areas, new development within a dam inundation area could not be built to avoid flooding that would result from dam failure since the inundation area shown would place some areas under 30 feet of water. The “instantaneous failure of the dam,” as assumed for purposes of mapping on **Figure 5.8-16**, is unlikely. Therefore, repairs could be made to a leaking or damaged dam to avoid significant damage to life and/or property. The risk of dam failure has been projected to be an annual probability of 1 in 100 million under seismic loading conditions exceeding a maximum credible earthquake condition anticipated in the region. The County of Riverside concurs with these findings with respect to THE VILLAGES OF LAKEVIEW and potential impacts related to exposing 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, are considered **less than significant** due to the extremely low risk.

NOTE: Items referenced on CDs #1 - #4, herein, are available on CDs but the CDs are no longer numbered in this fashion for purposes of the FEIR.

5.9 LAND USE AND PLANNING

The focus of the following discussion is related to the potential impacts related to consistency with the site's existing or proposed zoning, the land use designations, and policies of the General Plan, and the potential to result in a substantial alteration of the present or planned land use of an area, including land use compatibility.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- County of Riverside, *Riverside County General Plan*, October 7, 2003. (Available for review at the County of Riverside Planning Department or on March 13, 2008 at <http://www.rctlma.org/genplan/default.aspx>)
- County of Riverside, *Riverside County General Plan, Lakeview/Nuevo Area Plan*, October 2003. (Available at County of Riverside Planning Department or on December 11, 2007 at <http://www.rctlma.org/genplan/content/ap2/lnap.html>)
- County of Riverside, *Riverside County Integrated Project General Plan Final Program Environmental Impact Report (State Clearinghouse No. 2002051143)*, March 2003. (Available at the Riverside County Planning Department and at <http://www.rctlma.org/genplan/default.aspx>)
- County of Riverside, *Geographic Information System Database*, (Available for review at the County of Riverside Planning Department or on December 21, 2006, at <http://www3.tlma.co.riverside.ca.us/pa/rclis/index.html>)
- County of Riverside, *RCIP General Plan Land Use Designations – Zoning Consistency Guidelines*. (Located on December 21, 2006 at <http://www.rctlma.org/planning/index.html>)
- Southern California Association of Governments. (Accessed on May 22, 2007 at <http://www.scag.ca.gov>)
- San Jacinto Wildlife Area. (Accessed on May 22, 2007 at www.sanjacintowa.org)
- Wikipedia Encyclopedia, *Shotgun*. (Accessed on May 25, 2007 at <http://en.wikipedia.org/wiki/shotgun>)
- California Department of Fish and Game, *Summary of Hunting Regulations & Laws*. (Accessed May 25, 2007 at <http://www.dfg.ca.gov/licensing/pdffiles/2007HuntingDigest-BigGamePages48-54.pdf>)
- California Code of Regulations, *Fish and Game Code, Section 3000-3012*. (Accessed March 4, 2008 at <http://www.leginfo.ca.gov/calaw.html>)
- County of Riverside, *Ordinance No. 514.10*, accessed 5/25/2007. (Available at <http://www.clerkoftheboard.co.riverside.ca.us/ords/500/514.htm>)
- County of Riverside, *Ordinance No. 625*, accessed May 25, 2007. (Available at <http://www.clerkoftheboard.co.riverside.ca.us/ords/600/625.1.pdf>)

- Albert A. Webb Associates for Nuevo Development Company, LLC Corporation, *RCIP General Plan Foundation Component Amendment Request and Required & Optional Findings, The Villages of Lakeview (SP 342)*, May 30, 2006. (Available at County of Riverside.)
- County of Riverside Planning Department, Robert C. Johnson, Planning Director, *Submittal to the Board of Supervisors [Staff Report]*, revised 6/9/2006. (Available at County of Riverside Planning Department.)
- County of Riverside Board of Supervisors, *Transcript of Public Hearing and Action*, June 13, 2006. (Available at County of Riverside Planning Department.)

Setting

THE VILLAGES OF LAKEVIEW Specific Plan (project) is located in the unincorporated area Riverside County known as Lakeview/Nuevo. The project is nestled between the Lakeview Mountains and San Jacinto River, and is adjacent to the San Jacinto Wildlife Area. The site consists of approximately 2,800 acres along the north and south sides of Ramona Expressway. More precisely, the project is situated east of the city of Perris and directly west of the city of San Jacinto. Existing land uses on site include the McAnally chicken ranch which will be demolished and removed, the Metropolitan Water District (MWD) Colorado River aqueduct and basin which will continue to be owned by MWD and will remain, a thoroughbred farm which will be removed, an abandoned RV park which will be demolished, a portion of the Lakeview Mountains which will be retained in open space, a few scattered residences, and vacant or farm land upon which the project will be constructed. See **Figure 5.9-1, Existing and Surrounding Land Uses**. The location and acreages for the MWD aqueduct and basin are clearly shown on **Figure 5.9-2, Conceptual Land Use Diagram**. The aqueduct contains approximately 95 acres; Planning Area 38 is the MWD basin which is 41 acres. Both these MWD facilities will remain undeveloped and act as open space for the project, with potential development of trails and landscaping within the aqueduct property and along the edges of the basin. A majority of the existing land on site, except for what is mentioned above, is vacant and undeveloped. At the time that the NOP was circulated, all of the existing land uses and facilities identified above were present at the project location as were less than ten residences, some located on Davis Road and some scattered agriculturally related residences associated with the chicken ranch and thoroughbred farm.

Features located adjacent to the project site include the Lakeview Mountains, Bernasconi Hills, the San Jacinto River, Mystic Lake, the San Jacinto Wildlife Area, and agricultural land, including the Nutrilite facility, which is located directly west of the project site, and will continue to run operations adjacent to the project. Also immediately adjacent to the project site, is the closed Lakeview Burn Dump. The County Solid Waste Management department closed this facility in 1976, and it has recently been cleared under CEQA for final remediation. A drainage channel, which is part of the project, will traverse this off-site area.

Riverside County Integrated Project (RCIP) General Plan is divided into 19 Area Plans to provide more detailed land use and policy direction regarding local issues, such as land use, circulation, and open space. The project lies within the Lakeview/Nuevo Area Plan. As per the Riverside County Integrated Project (RCIP) General Plan and the Lakeview/Nuevo Area Plan,

the designated Land Uses across the project site consist of Agriculture with a Community Development Overlay, Rural Residential with a Community Development Overlay, Low Density Residential, Very Low Density Residential, Rural Mountainous, Open Space Conservation, and Commercial Retail. (See **Figure 5.9-3, General Plan Land Use Designations.**)

The Lakeview/Nuevo Area Plan's Land Use Designations surrounding the project site include: Medium Density Residential, Commercial Retail, Light Industrial, and Very Low Density Residential to the south and west; Agriculture and Conservation – Habitat to the north; and to the east in the city of San Jacinto and their adjacent land use designations include Open Space and Estate Residential. The current use of the surrounding properties includes vacant land, dry land, and irrigated farmland and other agricultural land, dairy farms, an agricultural products (Nutrilite) processing plant, and a few other local commercial uses.

The current zoning on the project site is A-1-10 (Light Agricultural-10 ac minimum), A-2-10 (Heavy Agricultural-10 ac minimum), A-P (Light Agricultural with Poultry), C-R (Rural Commercial), M-SC (Manufacturing-Service Commercial), R-1 (One-Family Dwelling), R-A (Residential Agricultural), R-A-1 (Residential Agricultural – 1 ac minimum), R-A-10 (Residential Agricultural, 10 ac minimum), R-A-2^{1/2} (Residential Agricultural - 2^{1/2} ac minimum), and R-R (Rural Residential). (See **Figure 5.9-4, Existing Zoning.**)

The proposed project includes a General Plan Amendment and a Change of Zone to permit development which includes a mix of residential housing types totaling a maximum of 11,350 dwelling units, open space, a mixed-use town center that integrates commercial and residential uses, public facilities including K–8 schools, and parks. Additionally, the project includes Circulation Element Amendment to modify the Circulation Element of the Riverside County General Plan, including ~~changes to trails, and a Development Agreement to provide vested development rights, legally binding on the County of Riverside during the build-out of the project.~~

The following is a detailed list of the project's land use applications:

1. **General Plan Amendment No. 720:** Proposes the following amendment to the Land Use Element of the General Plan:

- *Land Use Element Amendment*

The proposed project will require a General Plan Amendment to change the land use designations in the Lakeview Area Plan and establish a Community Development Specific Plan. The Land Use Element Amendment consists of three components. The first component required is a Technical Correction Amendment needed to rectify errors related to mapping which resulted in inaccuracies related to areas within the Lakeview Mountains and those in the lowlands. The second component will be a Foundation Amendment to change underlying designations generally within the Rural and Rural Community Foundation to the Community Development Foundation. The third component will be an Agricultural Foundation Change, utilizing the County's seven (7) percent conversion allowed

under the General Plan. See Appendix B (CD #3) for the detailed findings related to these components.

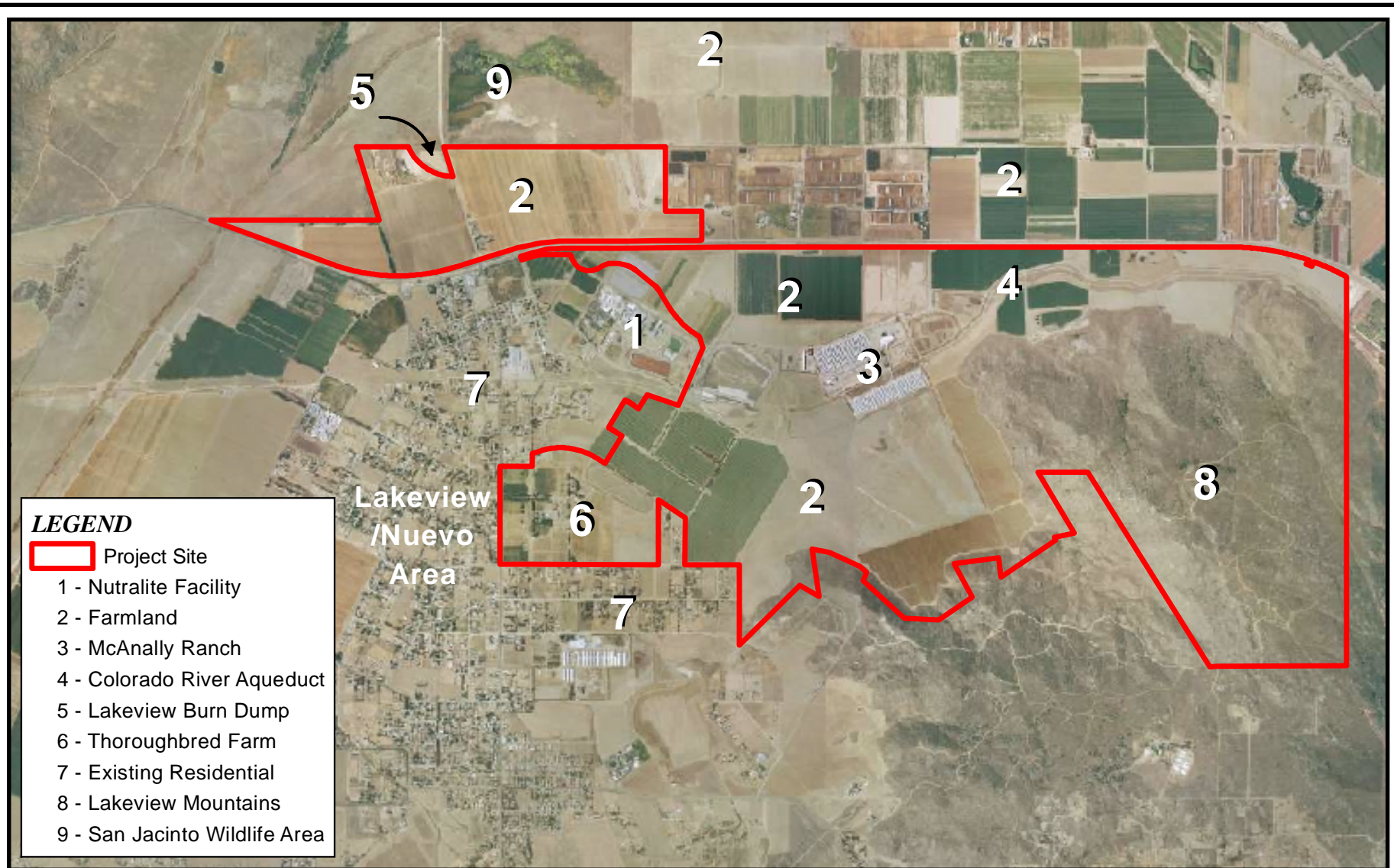
2. **General Plan Amendment No. 721:** Implementation and development of THE VILLAGES OF LAKEVIEW requires an amendment to the County's General Plan to reflect circulation improvements proposed by THE VILLAGES OF LAKEVIEW project. The following amendment to the County's Circulation Element has been submitted:

- *Circulation Element Amendment*

THE VILLAGES OF LAKEVIEW also proposes to modify the Circulation Element of the Riverside County General Plan. The project will include upgrading and downgrading numerous existing and proposed roadway classifications shown on the current Circulation Element for the Lakeview/Nuevo Area Plan and RCIP General Plan Circulation Element Map, **Figure 3-6, RCIP General Plan Circulation Element. Figure 3-7, Proposed Project Circulation Plan** shows that several key changes are proposed between the County Circulation Element and the project including, but not limited to: the elimination of 9th Street/Yucca Avenue as a through street from the project boundary easterly, the rerouting of 10th Street/Wolfskill Avenue as a Major roadway east of Hansen Avenue. (The existing alignment of Wolfskill will remain a local street east of Hansen and will not be upgraded.) Hansen Avenue will be reclassified from a Major roadway (118' right-of-way) to a Collector Street (84' right-of-way), and Bridge Street, 3rd Street, 5th Street, and 6th Street will be eliminated on the project site and will not have direct access to Ramona Expressway as access to Ramona will be shifted to Town Center and Park Center Boulevards exclusively in this vicinity. A list of the detailed proposed modifications to standard County roadway cross sections is shown in THE VILLAGES OF LAKEVIEW Specific Plan, Table 3, Street Section Comparison Between the County of Riverside and Specific Plan.

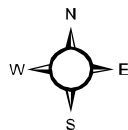
Currently, the project area has one RCIP General Plan-designated Regional Trail located north/south through the Lakeview Mountains along the eastern project boundary (**Figure 3-8, RCIP Trails and Bikeways**). The project proposes a General Plan Amendment to the Circulation Element Trails and Bikeways System to include ~~the Regional~~ a Community Trail designation for the trails proposed within the project boundary. The Lakeview Mountains conservation open space has many dirt roads which are currently used as trails; these will be retained and one will be designated as Regional to address the RCIP required trail. ~~The Aqueduct Regional Trail~~ A Multi-Purpose Community Trail (Restricted Use) will run the length of the MWD aqueduct property east of Central Park and then connect, via a connection between Planning Areas 22 and 26, with the ~~River Regional Trail~~ Multi-Purpose Community Trail in the Greenbelt. ~~Other trails proposed by the project connecting various components of the project to the existing surrounding trails are not proposed for Regional Trail status.~~ A view of all the proposed trails within the project area is shown on **Figure 3-9, Project Trails Plan.**

3. **Specific Plan No. 342:** THE VILLAGES OF LAKEVIEW Specific Plan No. 342 will allow for a maximum of 11,350 dwelling units to be constructed within the Specific Plan villages. There will be a mix of residential and non-residential uses. The number of residences allowed within each village could range from 500-3,500 dwelling units, but no more than 11,350 dwelling units in total will be developed and no more than 500,000 square feet of commercial uses.
4. **Change of Zone No. 07055** proposes to change the zoning classifications of the subject site from A-1-10 (Light Agricultural-10 ac minimum), A-2-10 (Heavy Agricultural-10 ac minimum), A-P (Light Agricultural with Poultry), C-R (Rural Commercial), M-SC (Manufacturing-Service Commercial), R-1 (One-Family Dwelling), R-A (Residential Agricultural), R-A-1 (Residential Agricultural – 1 ac minimum), R-A-10 (Residential Agricultural, 10 ac minimum), R-A-2^{1/2} (Residential Agricultural - 2^{1/2} ac minimum), and R-R (Rural Residential) to SP (Specific Plan 342).
5. **Development Agreement 73:** The Development Agreement will include ~~items dealing with the provision of public improvements, requirements to dedicate land for parks and open space and development fees. The DA will be processed concurrently with the SP00342 and addressed in this DEIR.~~ but not be limited to provisions related to the construction of public improvements, requirements to dedicate land for parks, open space, conservation, and transportation, as well as the potential payment of and/or credit for Development Agreement fees and other development related fees.



Sources: Air Photo USA, Apr. 2007;
SP No. 342.

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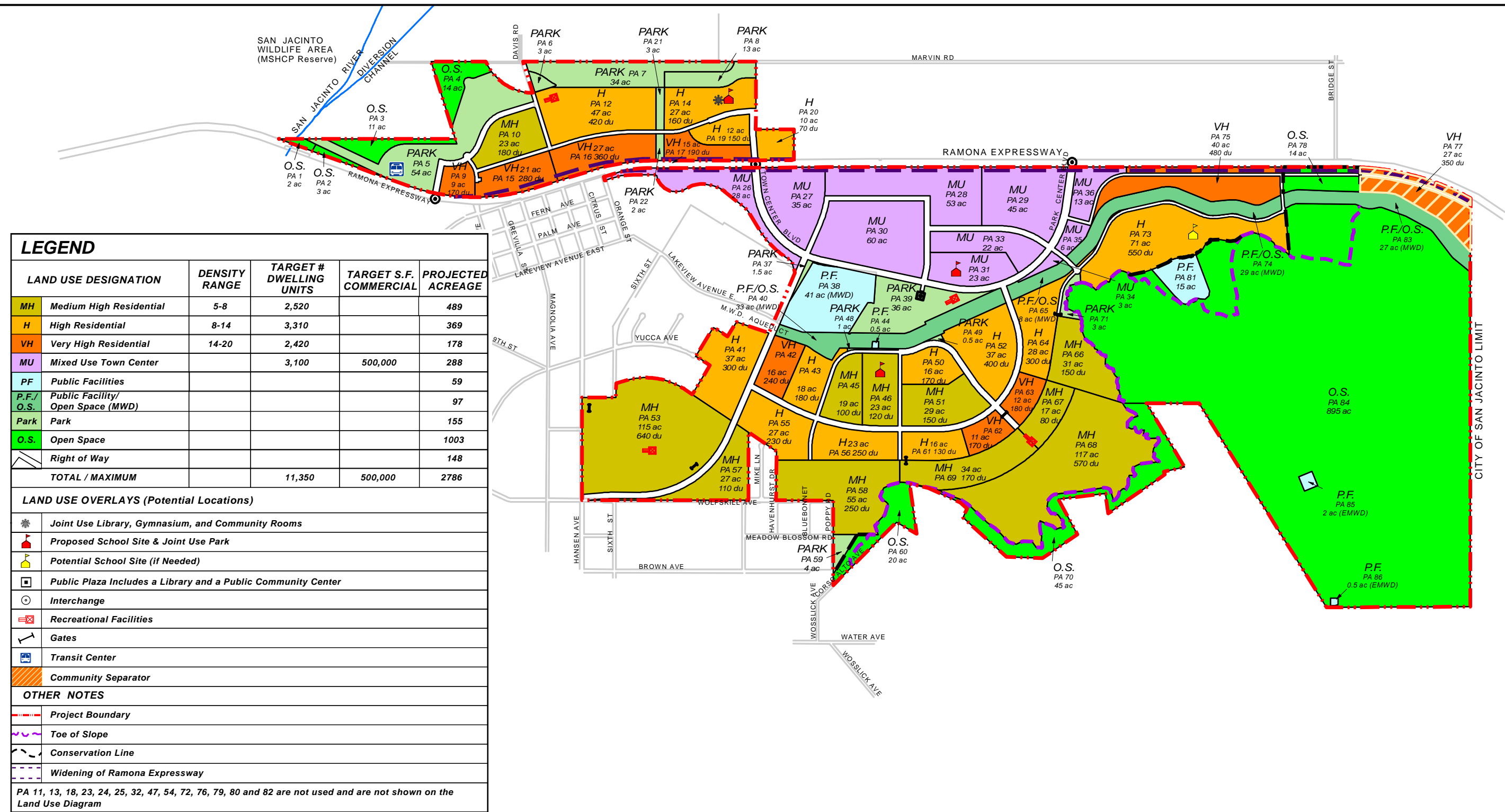


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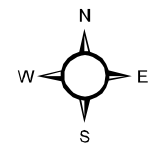
Figure 5.9-1

Existing and Surrounding Land Uses

The Villages of Lakeview EIR No. 471



Source: SP No. 342

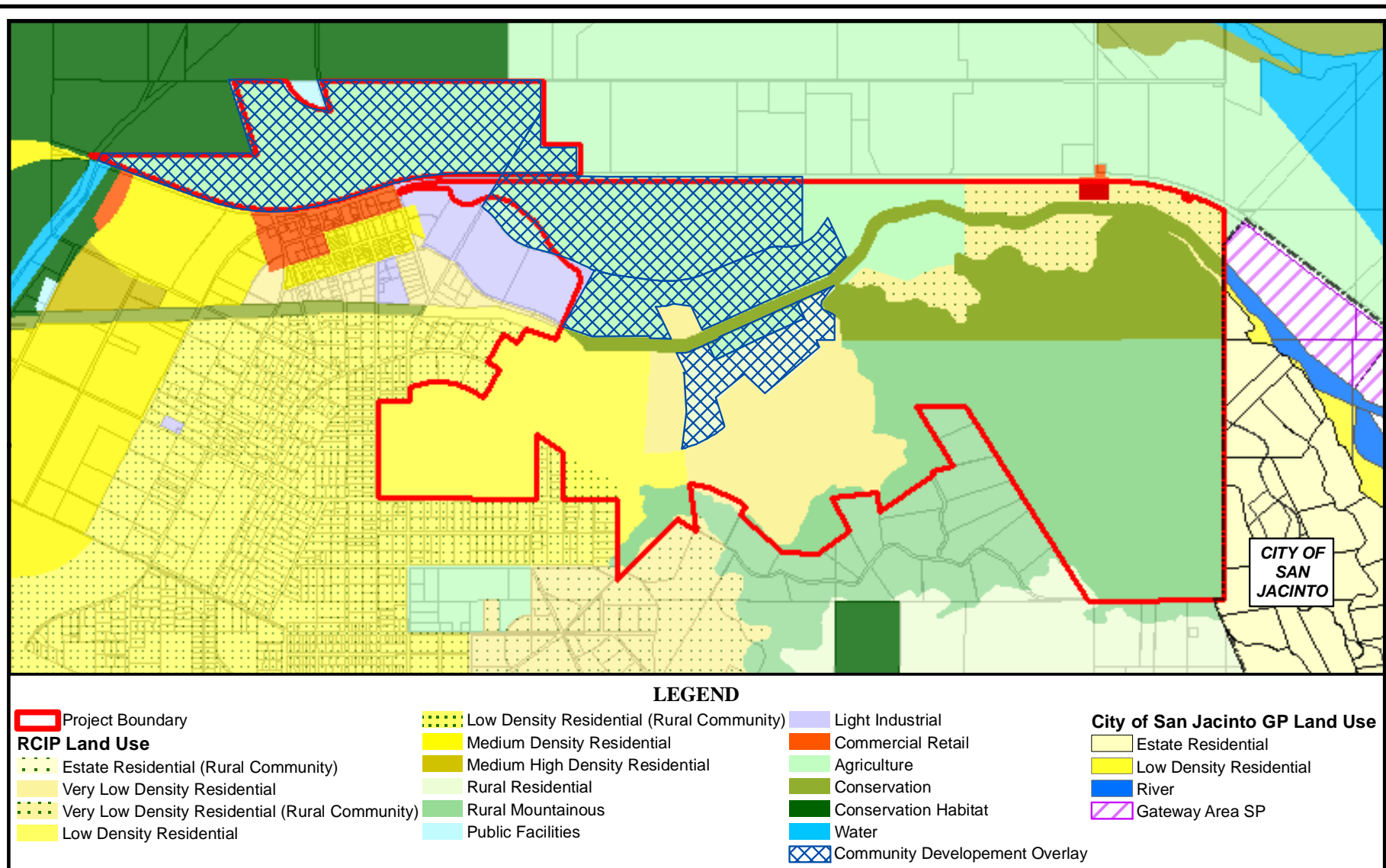


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Figure 5.9-2

Conceptual Land Use Diagram

The Villages of Lakeview EIR No. 471



Sources: Riverside County RCIP, Updated Nov. 2007;
City of San Jacinto Draft General Plan, Feb. 2007.

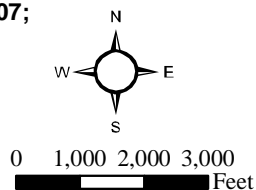
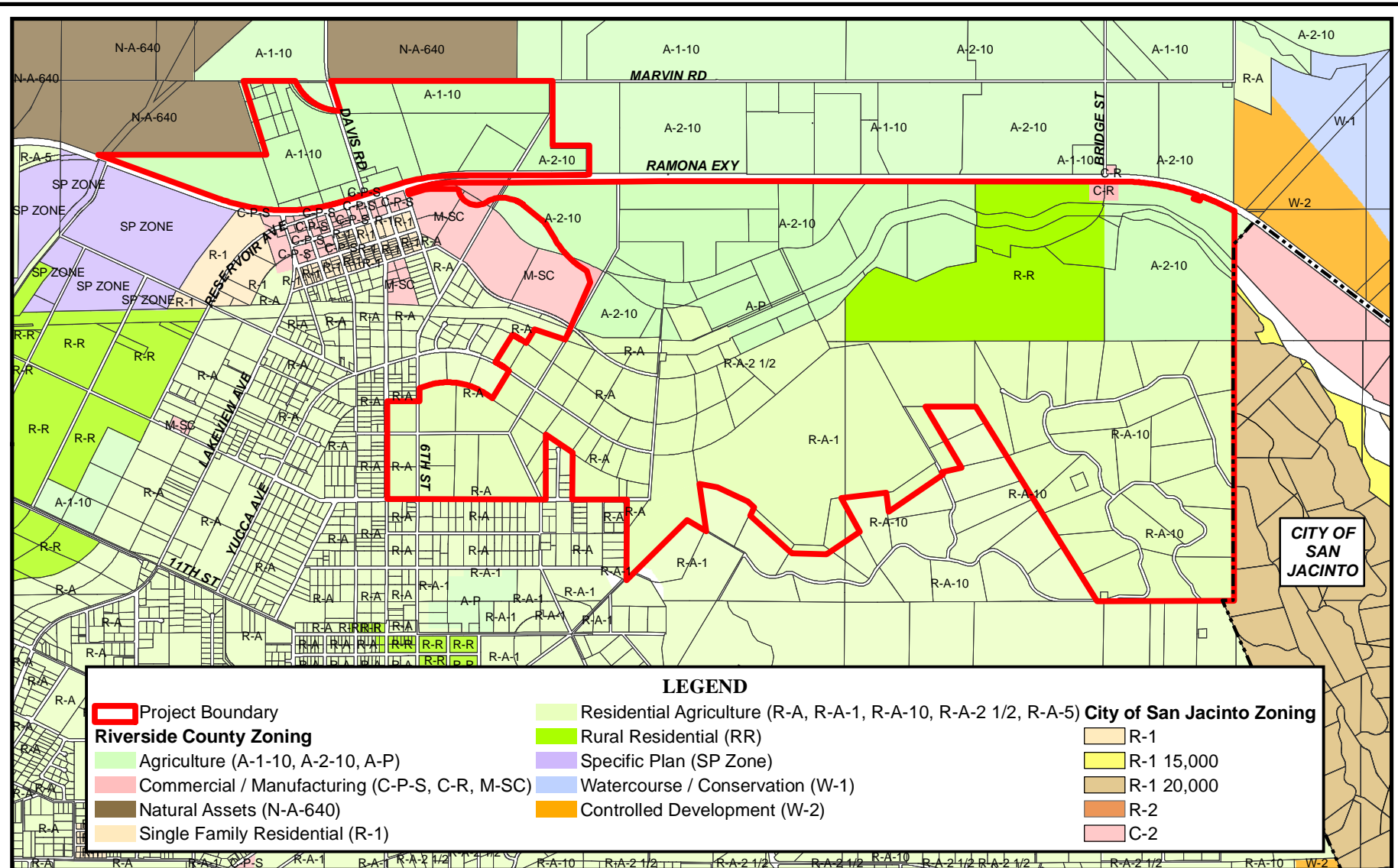


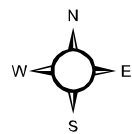
Figure 5.9-3

General Plan Land Use Designations

The Villages of Lakeview EIR No. 471



Sources: Riverside County GIS, 2008;
City of San Jacinto, 2006.



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Feet

Figure 5.9-4

Existing Zoning

The Villages of Lakeview EIR No. 471

Related Regulations

The proposed project is required to comply with the applicable provisions of the Riverside County Integrated Program (RCIP) including but not limited to: General Plan Land Use Designations and policies, the Lakeview/Nuevo Area Plan, the Multiple Species Habitat Conservation Plan, Community and Environmental Transportation Plan Project, and the zoning provisions of Riverside County. Consistency with these documents is discussed below.

General Plan

On October 7, 2003, the County of Riverside approved the General Plan component of the RCIP. The General Plan includes land use development policies and land use maps to guide the future development of Riverside County. As part of the General Plan Community Area Plans were established that define the nature of those communities and define the land use designations that are appropriate for the development envisioned. THE VILLAGES OF LAKEVIEW Specific Plan site is located within the Lakeview/Nuevo Area Plan of the RCIP General Plan. Land Uses shown on **Figure 5.9-3, General Plan Land Use Designations**, do not correspond to those proposed by the project, therefore, a General Plan Amendment is proposed.

Community and Environmental Transportation Plan (CETAP)

The CETAP identifies improvements for highways and transit systems. An important goal of the CETAP is to complete environmental documentation to allow for the preservation of right-of-way for regional transportation facilities. The main purposes of the CETAP are to identify and set aside areas for major transportation facilities (both highway and transit) that will be necessary to support the future growth in Western Riverside County, and to ensure that the transportation infrastructure will be in place to foster the economy of Riverside County and provide access for its citizens to jobs, schools, shopping, and other daily activities.

Through early CETAP planning studies, four major transportation corridors were identified for more detailed analysis including Hemet to Corona/Lake Elsinore, Banning/Beaumont to Temecula, Riverside County to Orange County, and Moreno Valley to San Bernardino County. Further study of the transportation corridor between Hemet to Corona/Lake Elsinore is currently underway. This transportation corridor is being called the “Mid County Parkway Project.” The Mid County Parkway Project is a 32-mile transportation corridor from Interstate 15 on the west to State Route 79 on the east and the study area ranges from 1 to 4 miles in width. In September 2007, RCTC identified its locally preferred alternative. THE VILLAGES OF LAKEVIEW project area stretches four and a half miles along both sides of the Ramona Expressway which is the corridor’s proposed alignment between the cities of Perris and San Jacinto.

The Notice of Preparation of an Environmental Impact Statement and Environmental Impact Report for the Mid County Parkway Project (NOP) was issued on November 18, 2004 and a Supplemental NOP was published in September 2007. It identifies eight seven alternatives for environmental analysis. The Riverside County Transportation Commission’s current schedule for the Mid County Parkway Project has the environmental approval process running through 2009,

with final design and right-of-way acquisition occurring in 2010 and 2011. Construction of the Mid County Parkway Project is estimated to begin in 2012.

The Mid County Parkway follows the current alignment of Ramona Expressway through the community of Lakeview and the project site in all alternative alignments proposed for the parkway. Since this alignment, as defined, is not likely to be subject to change during the Mid County Parkway Project environmental review, approval, and design stages, the traffic volumes associated with this alignment are therefore assumed for the purposes of this analysis, and are discussed in Section 5.14, Transportation, of this document. All of the other potential environmental impacts associated with the Mid County Parkway will be addressed in the Mid County Parkway's Environmental Impact Statement and Environmental Impact Report.

Multiple Species Habitat Conservation Plan (MSHCP)

On June 17, 2003, the Riverside County Board of Supervisors approved the MSHCP, certified the EIR/EIS for the Plan, and authorized the Chairman to sign the Implementing Agreement. The County of Riverside, a signatory to the Implementing Agreement (IA), is required to comply with all applicable policies and requirements of the MSHCP.

As outlined in Section 6 of the MSHCP, "Payment of the mitigation fee and compliance with the requirements of Section 6.0 are intended to provide full mitigation under the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), Federal Endangered Species Act, and California Endangered Species Act for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the U.S. Fish and Wildlife Service, the California Department of Fish and Game and/or any other appropriate participating regulatory agencies and as set forth in the Implementing Agreement for the MSHCP." MSHCP compliance is discussed in more detail in Section 5.4, Biological Resources. The proposed project is currently meeting MSHCP requirements.

Riverside County Ordinance No. 810.2

On July 22, 2003, the Riverside County Board of Supervisors adopted Ordinance Amendment 810.2, an amendment to Ordinance No. 810, which establishes the Western Riverside County Multiple Species Habitat Conservation Plan Mitigation Fee. At the time of this writing, the fee schedule is as follows:

Single-family residential	\$1,651/per dwelling
Residential (8.1-14 dwelling units/acre)	\$1,057/per dwelling
Residential (>14.1 dwelling units/acre)	\$ 859/per dwelling
Commercial	\$5,620 per acre
Industrial	\$5,620 per acre

When land is conserved as a result of MSHCP compliance, offsets for the above fees are negotiated.

Zoning

Development of the project site is regulated by the County of Riverside Land Use Zoning Ordinance (Ord. No. 348). This ordinance contains the regulatory framework that specifies allowable uses for real property and development intensities; the technical standards such as site layout, building setbacks, heights, lot coverage, parking, etc.; aesthetics related to physical appearance, landscaping, and lighting; a program that implements policies of the General Plan; and the procedural standards for amending or establishing new zoning regulations.

Design Guideline Standards

This area of Riverside County has adopted two sets of design guidelines for residential, commercial, and community development. Residential Design Standards and Guidelines for Development in the Third and Fifth Supervisorial Districts were established in 2001. The *Lakeview/Nuevo Design Guidelines* were completed and adopted in March 2006 to establish the design attributes that should be applied to the area around the project site to maintain the rural character of the community. However, the proposal for THE VILLAGES OF LAKEVIEW Specific Plan includes its own development standards and design guidelines which supersede the Third and Fifth District Standards, noted in the Specific Plan.

Hunting Regulations

Hunting is allowed in both the San Jacinto Wildlife Area (SJWA) and in Lake Perris State Recreation Area (Perris SRA). As the SJWA is located immediately north of the project site, hunting regulations may have direct bearing on land use compatibility analysis. All hunting is regulated by the California Department of Fish and Game and state laws regulating hunting apply to the project situation because hunting is allowed on State properties

California Code of Regulations, Fish and Game Code, Sections 3000-3012 regulates hunting in the state. Key sections of the code are listed below as they relate directly to land use and allowable times when hunting is permitted.

“3004. (a) It is unlawful for any person, . . . to hunt or to discharge while hunting, any firearm or other deadly weapon within 150 yards of any occupied dwelling house, residence, or other building or any barn or other outbuilding used in connection therewith. The 150-yard area is a "safety zone." (b) It is unlawful for any person to intentionally discharge any firearm or release any arrow or crossbow bolt over or across any public road or way open to the public, in an unsafe manner.”

“3000. It is unlawful to take any bird or mammal, . . . between one-half hour after sunset and one-half hour before sunrise of the following day at the place of taking, . . .”

Hunting is also regulated by Riverside County Ordinance 514.10 (regulating the use & discharge of firearms), however, because the areas where hunting is allowed adjacent to the project site are on state property, state regulations listed above will be enforced.

Riverside County Ordinance 625

To help viable agricultural enterprises continue as urbanization approaches, the County of Riverside adopted Ordinance 625. This ordinance is known as the “Right to Farm” ordinance. The purpose of the ordinance is to allow agricultural facilities protection from nuisance complaints generated from new non-agricultural land uses. Ordinance 625 applies to new land divisions, and requires notice to owners of newly divided land that agricultural zoning exists within 300 feet of their property. The Ordinance restricts property owners from filing a nuisance grievance on “normal” operating activities of the neighboring agricultural properties.

Riverside County General Plan Agricultural Foundation Amendment Cycle

Pursuant to County Ordinance 348, Section 2.7, the Agriculture Foundation Amendment Cycle allows up to 7% of all land designated as Agriculture to change to other Foundation Components and land use designations during each 2½-year Agriculture Foundation Amendment Cycle. The first 2½-Year Cycle commenced January 1, 2004. As of that date, the County has determined the total acreage of land within the Agricultural Foundation Component for each of the following three areas: the area covered by the Palo Verde and Desert Center Area Plans and the Eastern Desert Land Use Plan; the area covered by the Eastern Coachella Valley and Western Coachella Valley Area Plans; and the area covered by all other Area Plans. The project site is located in the area covered by “other area plans”, as it is located in the Lakeview/Nuevo Area Plan. .

During the first 2½-Year Agricultural Foundation Amendment Cycle, 7% of the Agricultural Foundation Base Acreage for each of the areas listed shall be generally authorized for conversion from the Agricultural Foundation Component to any other Foundation Component (the "Agricultural Amendment General Authorization Acreage"). During each subsequent 2½-Year Agricultural Foundation Amendment Cycle the Agricultural Amendment General Authorization Acreage for each of the three areas listed above shall consist of an acreage equal to the Agricultural Amendment General Authorization Acreage for the first 2½-Year Agricultural Foundation Amendment Cycle plus the Agricultural Amendment General Authorization Acreage for all subsequent 2½-Year Agricultural Foundation Amendment Cycles reduced by the acreage of all General Plan amendments adopted after January 1, 2004 (except those adopted pursuant to Subsection g [of Section 2.7]) which converted land from the Agricultural Foundation Component to any other Foundation Component.

Thresholds of Significance

The Riverside County Planning Department has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the Riverside County Planning Department’s “Environmental Checklist” for the subject project (see Appendix A (CD #3) of this document) indicates that impacts related to THE VILLAGES OF LAKEVIEW Specific Plan may be considered potentially significant if the proposed project would:

- A. Result in a substantial alteration of the present or planned land use of an area;
- B. Have an effect on land use within a city sphere of influence and/or within adjacent city or county boundaries;

- C. Be inconsistent with the site's zoning or proposed zoning;
- D. Be incompatible with existing surrounding zoning;
- E. Be incompatible with existing and planned surrounding land uses;
- F. Disrupt or divide the physical arrangement of an established community (including a low-income or minority community); or
- G. Be inconsistent with the land use designations and policies of the General Plan (including those of any applicable Specific Plan).

Project Design Considerations

Design considerations refer to ways in which the proposed project will limit or mitigate for potential impacts through the design of the project.

The proposed project has been planned with sensitivity to adjacent cities and communities including the Lakeview/Nuevo community and the city of San Jacinto, existing environmental resources and surrounding conditions related to the San Jacinto Wildlife Area and San Jacinto River, and the proposed widening of Ramona Expressway.

The project includes policies and an environmental stewardship program for the preservation and ongoing viability of the river, Lakeview Mountains, and other natural open spaces within and surrounding the project. A park is planned in the area of the site near Hansen Avenue in Lakeview; the park is planned to include the preservation of some of the large trees currently located within the existing thoroughbred farm property in this area.

The southern edge of the project adjacent to the existing Lakeview/Nuevo community is identified in County documents and within the proposed plan to have ~~an equestrian trail~~ a Multi-Purpose Community Trail, which allows equestrian uses. A 30-foot wide landscape buffer with a ~~equestrian trail~~ Multi-Purpose Community Trail will be located along the east side of Hansen Avenue, the south side of Wolfskill Avenue, and the east side of Poppy Road. Some mature trees located within the existing thoroughbred farm will be retained by the proposed project within the park, if possible, which is to be built within Planning Area 53 near Hansen Avenue. The ~~equestrian trail~~ Multi-Purpose Community Trail and landscaping located along the project edges, and the retention of some trees where the thoroughbred farm currently exists, will provide a local pastoral view, similar to the existing view residents and those driving on public roads have today in the Hansen Avenue/Wolfskill Avenue area. A trailhead access point/park is proposed as part of the project along Poppy Road in Planning Area 59 which will maintain direct access for equestrian and hikers to the Lakeview Mountain trails which are used today by existing residents.

The proposed project has been designed to address and maintain compatibility with the San Jacinto Wildlife Area (SJWA) and the San Jacinto River. The Greenbelt, a 500-foot buffer area where no residential development is allowed, is included as part of the Resort Village's northern edge adjacent to the wildlife area and river. Allowable land uses in this area include passive park activities, water quality and drainage facilities, and natural open space. In addition to the 500 feet, the existing hydrology of the area, where surface runoff from the project site drains into

certain areas of the SJWA assisting to maintain wetlands and other natural habitats, will be matched as closely as possible so as not to disrupt habitats used by local and migratory wildlife as detailed in the Preliminary Regional Water Quality Management Plan, Hydromodification Study, and the Overall Drainage Study prepared for the project.

To be consistent with General Plan LU 13.4, development within the proposed project which is located adjacent to Ramona Expressway will be set back 50 feet which will minimize the effects of development adjacent to the scenic highway corridor. This requirement also means that the project will be impacted less by traffic on the highway.

Environmental Impacts Before Mitigation

***Threshold A:** Result in a substantial alteration of the present or planned land use of an area.*

Existing land uses on-site include a chicken ranch, Metropolitan Water District (MWD) Aqueduct property and basin, a thoroughbred farm, abandoned RV park, and additional farmland. Surrounding land uses include open farmland and dairies to the north, the Nutrilite farmland, the Lakeview Dump, vacant hillsides to the east, and rural residential and open space uses to the south and west.

The current land use designations for the project site set forth by the General Plan's Lakeview/Nuevo Area Plan Land Use Designations as shown on **Figure 5.9-3, General Plan Land Use Designation**, include:

- Agriculture (AG) with and without a Community Development Overlay (CDO)
- Rural Residential (RR) with a Community Development Overlay
- Low Density Residential – Rural Community (LDR-RC)
- Very Low Density Residential – Rural Community (VLDR-RC)
- Rural Mountainous (RM)
- Low Density Residential – Community Development (LDR-CD)
- Open Space Conservation (OS-C)
- Commercial Retail (CR)

General Plan Policy LU.2.1.a addresses this threshold by requiring proposed projects to “accommodate land use development in accordance with the patterns and distribution of use and density depicted on the General Plan Land Use Map (RCIP Figure VI-1) and the Area Plan Land Use Maps, [by] . . . provid[ing] a land use mix at the countywide and area plan levels based on projected need and supported by evaluation of impacts to the environment, economy, infrastructure, and services.”

Approximately 802 acres of THE VILLAGES OF LAKEVIEW Specific Plan area is already designated with a CDO. As defined within the County of Riverside General Plan (see Table LU 4 – Land Use Designations Summary), a Specific Community Development Designation Overlay “Permits flexibility in land use designations to account for local conditions.” The description also states, “Consult the applicable Area Plan text for details,” referring to development characteristics, densities, and specific policies for the CDO. However, the Lakeview Nuevo Area Plan is silent on the “details.” Therefore, without set development details, the project has

proposed to develop a mix of land uses with densities permissible within the Community Development Foundation, although the Lakeview/Nuevo Area Plan did not include the likely “building intensity range” for impact assessments (see Lakeview/Nuevo Area Plan, Table 2, Statistical Summary of Lakeview/Nuevo Area Plan) as they were for other overlays.

As set forth by the General Plan’s Lakeview/Nuevo Area Plan (Area Plan) the General Plan contemplates significant growth in its western half of the Area Plan near the city of Perris while residential densities gradually decrease east of the San Jacinto River. The Lakeview/Nuevo Area Plan states, “East of the San Jacinto River, the Land Use Plan generally reflects a pattern of predominantly low density residential character with pockets of commercial use interspersed within the communities of Lakeview and Nuevo. Continuing east past Lakeview Avenue, the land use plan provides primarily for Rural Community-Low Density Residential land uses with clusters of Medium Density Residential neighborhoods, Public Facilities, and Commercial Retail designations.” The Area Plan’s Land Use section goes on to state, “The intent is to enhance and/or preserve the identity and character of this unique area.”

The proposed project will need a General Plan Amendment (GPA) to the Land Use Element in order to develop. The following paragraphs outline the steps needed to complete the overall GPA.

The first step in the process is a Technical Correction. The project seeks a Technical Correction to rectify land use boundary lines on the Riverside County Integrated Project General Plan (RCIP) that were delineated based on imprecise survey data. The existing toe-of-slope line is believed to have been created in the late-1980s (Jerry Jolliffe, Riverside County Planning) and was hand-drawn using USGS 10-foot contours; whereas, the updated toe-of-slope line was obtained from a field survey and recently-flown aerial topography using 1-foot contours. The intent of the current RCIP boundary (based on the types of land uses, Rural Mountainous versus Community Development) was to delineate the uses according to topographic features. Clearly, drawing the land use boundaries between Medium Density Residential and Rural Mountainous was intended to be located on the toe-of-slope line as this is the distinction between mountainous land and non-mountainous. The updated toe-of-slope line is reflected throughout Specific Plan No. 342 and the DEIR.

With the Land Uses technically corrected to reflect the intent of the existing RCIP General Plan, the GPA can address the proposed Foundation Component Amendments. In 2006, a request was filed with the Board of Supervisors to receive permission to proceed with the Foundation Amendment component of the General Plan Amendment. Permission to proceed with the process was granted by the Riverside County Board of Supervisors in June of 2006. In the 2006 Foundation Amendment Request, it was identified that the underlying designations generally within the Rural and Rural Community Foundations would be changed to the Open Space and Community Development Foundations. Of the approximately 820 acres of conversion requested in this component of the General Plan Amendment, over 700 acres was to be changed to Open Space and over 120 acres to Community Development. However, General Plan Policy LU 1.11 explains that, “each adopted Specific Plan is identified as a “Community Development” Specific Plan, a “Rural Community” Specific Plan, or a “Rural” Specific Plan.” Therefore, the Riverside County General Plan does not permit split foundations for one specific plan. Thus, Specific Plan

No. 342 will be a “Community Development” Specific Plan with approximately 820 acres of newly-designated Open Space land, in addition to areas that are currently designated as Open Space in the General Plan. This step is addressed in detail in *RCIP General Plan Foundation Component Amendment Request and Required & Optional Findings, The Villages of Lakeview (SP 342)*, May 30, 2006.

The third component will be an Agricultural Foundation Change, utilizing the County’s seven (7) percent conversion allowed every 2.5 years, which is currently allowed under the General Plan. This Agriculture Foundation Change would generally convert 102 acres of Agriculture Foundation to Community Development Foundation, with two of the acres remaining as designated Open Space in the Specific Plan.

In summary, the General Plan Land Use Element Amendment proposes to convert Rural, Rural Community, Open Space, and Agriculture Foundations to the Community Development Foundation, as allowed in the existing General Plan. In the end, THE VILLAGES OF LAKEVIEW Specific Plan will be left with approximately 2,800 acres (the entire site) of development within the Community Development Foundation. After the project is implemented per THE VILLAGES OF LAKEVIEW Specific Plan, approximately 48 percent will be residential, commercial, and civic land uses; and 52 percent will remain in various forms of open space (conservation, parks, trails, earthen drainage channels, landscape setbacks, terrace slopes, and open space).

THE VILLAGES OF LAKEVIEW Specific Plan would establish zoning consistent with land use designations similar to the Riverside County General Plan’s designations for:

- Medium-High Density Residential (MHDR)
- High Density Residential (HDR)
- Very High Density Residential (VHDR)
- Highest Density Residential (HHDR)
- Open Space Conservation (OS-C)
- Commercial (CR)
- Parks
- Public Facilities

THE VILLAGES OF LAKEVIEW Specific Plan proposes a Mixed-Use Town Center (residential uses to HHDR, community facilities, parks, and commercial retail).

Land use intensities anticipated by the Lakeview/Nuevo Area Plan for the project area can be calculated from the Lakeview/Nuevo Area Plan, Table 1, Land Use Designations Summary under the listed building intensity range. Based on the land use designations for all land within the project site without the Community Development Overlay taken into consideration, there could be approximately 1,310 dwelling units. There are also 5.5 acres designated for Commercial Retail and 6.0 acres with Light Industrial. Based on the Building Intensity Range there could be a maximum of 82,764 sq. ft. of commercial development and 156,816 sq. ft. of industrial development within the project site, as shown in **Table 5.9-A, Lakeview/Nuevo Area Plan Projected Build-out Within the Project Site.**

Table 5.9-A
Lakeview/Nuevo Area Plan Projected Build-out Within the Project Site

Land Use Designation without Overlay	Acreage	Building Intensity Range	Total Dwelling Units	Total Building Square Footages
Agriculture (A)	826	10 ac min.	82	
Commercial Retail (CR)	5.5	0.20 - 0.35 FAR		47,916 – 82,764
Low Density Residential (LDR)	337.3	½ ac min.	674.6	
Low Density Residential – RC (LDR-RC)	16.4	½ ac min.	32.8	
Light Industrial (LI)	6.0	0.25 – 0.60 FAR		65,340 – 156,816
Open Space Conservation (OS-C)	373.3	N/A	N/A	N/A
Open Space Conservation Habitat (OS-CH)	2.3	N/A	N/A	N/A
Public Facilities (PF)	8.6			
Rural Mountainous (RM)	680.9	10 ac min.	68	
Rural Residential (RR)	82.7	5 ac min.	16.7	
Very Low Density Residential (VLDR)	285.8	1 ac min.	285.8	
Very Low Density Residential – RC (VLDR-RC)	149.9	1 ac min.	149.9	
Roads				
Totals	2,774.7		1,309.8	Com. 82,764 Ind. 156,816

- Building Intensity Range based on figures provided from Lakeview/Nuevo Area Plan, *Table 1: Land Use Designations Summary*.
- Where “Rural” or “– RC” is listed, that particular Land Use falls under the Rural or Rural Community Foundation Component instead of the Community Development Foundation.
- Acreages are approximate based on County GIS.

Approximately 719 acres of land designated as Agriculture and 83 acres of Rural Residential designated land have a “Community Development Overlay,” based on the *Foundation Component Amendment Request and Required & Optional Findings* prepared for THE VILLAGES OF LAKEVIEW Specific Plan, May 30, 2006. According the County of Riverside General Plan, “the Community Development Overlay is a tool that allows Community Development land use designations to be applied through General Plan Amendments in the future within specified areas lying within Rural, Rural Community, Agriculture, or Open Space Foundation Component areas, while maintaining the underlying land use designations of these other foundation components until such time as the Community Development land uses are approved. Typically, such overlays will contain special policies within the appropriate area plan texts that address important local issues, such as buffering between existing uses and designations and proposed new Community Development designations, and the permitted density and intensity of development.” The Lakeview Nuevo Area Plan is silent with respect to the Community Development Overlay in the project area, therefore with respect to this analysis, the level of development proposed has been compared to both the Area Plan land use designations without the overlay (to which the text of

the Lakeview/Nuevo Area Plan speaks), and the proposed designation and project design with respect to General Plan policies associated with the Community Development Foundation in general.

Based on THE VILLAGES OF LAKEVIEW Specific Plan's Land Use Designations, the project will include a maximum of 11,350 dwelling units and up to a combination of 500,000 sq. ft. of commercial, and office uses as shown in **Table 5.9-B, Proposed Specific Plan Land Use Ultimate Build-out.**

Table 5.9-B
Proposed Specific Plan Land Use Ultimate Build-out

Proposed Land Use Designation	Acreage	Building Intensity Range	Total Dwelling Units	Target Building Square Footages
Medium-High Density Residential (MHDR)	490	5–8 du/ac	2,520	
High Density Residential (HDR)	371	8–14 du/ac	3,310	
Very High Density Residential (VHDR)	183	14–20 du/ac	2,420	
Mixed-Use Town Center (residential uses to HDR and commercial retail)	288	5–40 du/ac	3,100	500,000 s.f.
Parks	155	N/A	N/A	N/A
Public Facilities	59	N/A	N/A	N/A
Public Facilities/Open Space	95	N/A	N/A	N/A
Open Space (OS)	998	N/A	N/A	N/A
Road Rights-of-Way	147	N/A	N/A	N/A
Totals	2,786		11,350	500,000 s.f.

Comparing **Tables 5.9-A and 5.9-B** shows that under the RCIP General Plan's existing Lakeview/Nuevo Area Plan, approximately 1,310 dwelling units and 239,580 commercial/industrial square feet could be developed while under THE VILLAGES OF LAKEVIEW Specific Plan, a maximum of 11,350 dwelling units and 500,000 commercial square feet could be built. This represents a substantial change in planned land uses if no Community Development Overlay were in place. Even if areas with the CDO are considered consistent because no policies or guidelines exist within the Area Plan for their development, the other areas not presently covered by a CDO and located within the existing Community Development Foundation would experience substantial increases in allowable units of more than double. Current General Plan land use designations would go from Low and Very Low (approximately 960.4 units) to the Medium-High, High, and Very High (approximately 2,175 units) as proposed. Areas not currently located within the CDO or the existing Community Development Foundation

would either be maintained in, or converted to, Open Space, or ultimately require the foundation amendment to achieve development at levels higher than Agriculture and Very Low Density–RC allow. Substantial changes in existing planned land uses will occur when comparing existing General Plan land uses with those proposed by the project.

Based on the above comparison of the current General Plan/Area Plan and the proposed Specific Plan, **significant impacts** will result in relation to existing land uses and the intent of the current Area Plan. No mitigation, regulation, or design consideration can lessen the impacts. Section 8.0 of the DEIR evaluates Alternatives which have fewer units and varied land uses, one of which (Alternative 2) retains the current General Plan/Area Plan land use designations.

However, the project proposes to change all development areas of the project to the Community Development Foundation. When comparing the proposed project to the intent of the Community Foundation General Plan Policies, the proposed project does not represent a substantial change. The proposed project will retain the Lakeview Mountains and areas along the San Jacinto River as Open Space and will exclude development from the floodplain. Under existing land use designations and zoning, some development would be allowed in these areas, including up to approximately 68 homes within the Lakeview Mountains and 13 houses in areas adjacent to the river and the SJWA. The proposed project is located along the major transportation corridor known as the Ramona Expressway, which will become the Mid County Parkway in the future. This transportation corridor does not currently propose bus or rail transit improvements, but will not preclude implementation of such facilities in the future to facilitate ~~will allow for bus~~ transit connections to rail transit planned along the I-215. If the proposed project is approved, land uses and the design of the project will be consistent with General Plan Community Design policies related to the Community Development Foundation, as shown below:

LU 22.2 Accommodate higher density residential development near Community Centers community centers, transportation centers, employment, and services areas.

LU 22.3 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed residential land use.

LU 22.4 Accommodate the development of a variety of housing types, styles, and densities that are accessible to and meet the needs of a range of lifestyles, physical abilities, and income levels.

LU 22.5 Integrate a continuous network of parks, plazas, public squares, bicycle trails, transit systems, and pedestrian paths to provide both connections within each community and linkages with surrounding features and communities.

LU 22.6 Require setbacks and other design elements to buffer residential units to the extent possible from the impacts of abutting agricultural, roadway, commercial, and industrial uses.

LU 22.7 Allow for reduced street widths to minimize the influence of the automobile and improve the character of a neighborhood, in accordance with the Riverside County Fire Department.

LU 22.8 Establish activity centers within or near residential neighborhoods that contain services such as child or adult-care, recreation, public meeting rooms, convenience commercial uses, or similar facilities.

LU 22.9 Require residential projects to be designed to maximize integration with and connectivity to nearby community centers, rural villages, and neighborhood centers.

Table 5.9-D, RCIP General Plan: Land Use Policy Analysis and Lakeview/Nuevo Area Plan Policies Analysis, presents a comprehensive analysis of how the project implements General Plan policies. As a result of the project Design Considerations, based from the Specific Plan presented previously, the above Community Foundation Policies, and **Table 5.9-D**, the proposed project would not present a substantial alteration of the planned land use of the area if approved, as the plan would be consistent with the intent of the General Plan areas within the Community Development Foundation.

Threshold B: *Affect land use within a city sphere of influence and/or within adjacent city or county boundaries.*

THE VILLAGES OF LAKEVIEW is not within a city sphere of influence but is adjacent to the city of San Jacinto. The project site abuts property with land use designations of Estate Residential (0 to 0.5 du/ac), Low Density Residential (2.1 to 5 du/ac), and Gateway Specific Plan. (See **Figure 5.9-3**.) Most of the land in this area of San Jacinto is currently undeveloped or utilized for agricultural purposes with a few residential (ranch) units. The project proposes open space/conservation adjacent to the Estate and Low Density Residential, and Planning Area 77, directly south of Ramona Expressway and west of the city of San Jacinto. PA 77 is immediately adjacent to the Gateway Specific Plan in San Jacinto, which offers 1,700 acres of retail, office, business park, healthcare, residential, civic, and mixed-use opportunities. As shown on **Figure 3-1, Conceptual Land Use Plan**, a Community Separator Overlay applies to PA 77. This overlay, as described in THE VILLAGES OF LAKEVIEW Specific Plan, will include a major sign/monument and can include several possible approaches to design, including: land uses to provide a buffer, or intense landscaping to screen the Very High Density Residential from Ramona Expressway. Additionally, the Specific Plan zoning code allows Planning Area 77 to have other land uses which could create a Community Separator including boat / RV storage and parking, green waste recycling for waste generated within the Specific Plan area, horticulture/agricultural uses such as nurseries, park, and office uses. The exact nature of the Community Separator will be determined through the Village Refinement Process at a point in time when the Enclave Village is mapped, possibly 20 years from now.

Other impacts associated with the development of THE VILLAGES OF LAKEVIEW Specific Plan could include additional traffic utilizing Ramona Expressway as residents commute for jobs or shop for goods and services. Any impacts associated with traffic, which may affect other

jurisdictions located further from the project site are analyzed in the Traffic Section (5.14) of this DEIR. Because the project includes a Community Separator and land uses proposed adjacent to the city of San Jacinto, which are in keeping with the nature of existing and planned uses within that city, the project would have a **less than significant** affect on the city of San Jacinto with respect to land uses without mitigation.

Threshold C: Be consistent with the site's existing or proposed zoning.

Under the County's existing Zoning Ordinance No. 348, the zoning across the project site includes:

- A-1-10 (Light Agricultural 10 acre minimum)
- A-2-10 (Heavy Agricultural 0 acre minimum)
- A-P (Light Agriculture with Poultry)
- Commercial-Retail (CR)
- M-SC (Manufacturing-Service Commercial)
- R-A-1 (Residential Agricultural 1 acre minimum)
- R-A-10 (Residential Agricultural 10 acre minimum)
- RR (Rural Residential)

The project would not be consistent with the site's existing zoning in similar ways as were discussed above related to existing General Plan land uses.

The project proposal includes a Change of Zone across the site to Specific Plan (SP) to establish site-specific development standards that will be unique to the project area. The project's proposed residential development areas have dwelling unit densities (per acre) that would be comparable to the County's "Medium-High, High, and Very High Density Residential" standards found in the current Zoning Ordinance. A Mixed Use Town Center land use is proposed that does not match to a current zoning classification but would be a blend of commercial and varied levels of high density residential uses. The remaining areas of the project will be utilized for open space, parks, schools, and public facilities. Approval of the project's proposed zone change will create consistency between project zoning and the general plan, as amended by the proposed project. Therefore, because the proposed Specific Plan zoning will create consistency with the General Plan as amended by the proposed project (and the Specific Plan cannot be adopted without the approved GPA) and zoning standards will be similar or higher than those established in the existing Zoning Ordinance, **less than significant impacts** will result without mitigation.

Threshold D: Be compatible with existing surrounding zoning.

The project is compatible with existing surrounding zoning in some locations but would not be compatible with the existing surrounding zoning in other locations around the project perimeter. The County's zoning for the area surrounding the project site is listed below. (See **Figure 5.9-4, Riverside County Existing Zoning.**)

to the north:

A-1-10 Light Agricultural 10 acre minimum)
 A-2-10 (Heavy Agricultural 10 acre minimum
 A-D (Agriculture-Dairy)
 N-A-640 (Natural Areas)

to the south and west:

M-SC (Manufacturing-Service Commercial)
 MDR (Medium Density Residential 2–5 du/ac)
 R-A-1 (Residential Agricultural 1 acre minimum)
 R-A-2½ (Residential Agricultural 2.5 acre minimum)
 Rural Residential (RR)
 SP Zone (Specific Plan Zone)

The city of San Jacinto borders the eastern boundary with a zoning designation of R-1 (Residential 20,000 sq. ft. minimum lot size) and low density. The San Jacinto zoning classifications are located adjacent to Open Space within the project so no conflicts result there in addition to those discussed in the Biological Resources section (Section 5.4) regarding urban-wildland interface.

At the northern edge of the project area where it abuts the SJWA and agriculturally zoned land, there is a proposed minimum 500-foot setback within the project. Uses proposed within the Greenbelt setback include passive park, agriculture, water quality basin, and open space/conservation land. Thus, from a zoning perspective, proposed zoning is consistent with existing zoning along the northern edge of the project. Other land use compatibility issues between the project and the SJWA are discussed under the next threshold and in other sections of the DEIR.

The eastern edge of the Resort Village and the north side of Planning Area 20 and the northern boundary of all Planning Areas located east of Planning Area 20 and south of Ramona Expressway abut agriculturally-zoned land which is currently used as active dairies. Setbacks or other means of reducing potential incompatibilities such as odors and flies would be necessary to reduce potential significant impacts along these areas to less than significant. County Ordinance 625, Right to Farm, maintains rights for the farmer and requires that landowners of newly subdivided land located within 300 feet of agriculturally zoned land be notified of issues related to living next to agriculture and removes their right to file “nuisance” complaints. Although this ordinance provides for notification, it does not eliminate the incompatibility of land uses.

The remaining portion of the northern project boundary is bordered by the Ramona Expressway. The expressway serves as a barrier and will be expanded in the future to a 220-foot right-of-way, with or without the proposed project. The road serves to buffer uses (zoning) from one side of the expressway to the other. Therefore, zoning consistency along this portion of the project’s boundary raises less than significant inconsistencies. Potential significant impacts of the expressway itself on adjacent land uses are discussed in the Air Quality and Noise sections of the DEIR.

To the south and west of the project are the communities of Lakeview and Nuevo (Lakeview/Nuevo). The existing, and to a greater extent future, Ramona Expressway separates the southern boundary of the Resort Village from the existing Lakeview community. This

existing barrier which will be expanded in the future, with or without the proposed project, serves to buffer uses (zoning) from one side of the expressway to the other. Therefore, zoning consistency along this portion of the project's boundary raises less than significant inconsistencies. Potential significant impacts of the expressway itself on adjacent land uses are discussed in the Air Quality and Noise sections of the DEIR.

Along the western edge of the project, off-site zoning includes M-SC for the Nutrilite plant, and various levels of RA residential zones. Along this edge, the project proposes mixed-use, high (8–14 du/ac) and medium-high (5–8 du/ac) residential areas, and a park along Hansen Avenue. Since the mixed-use zone is adjacent to the Nutrilite facility only, zoning is considered compatible. The park proposed on Hansen Avenue opposite residentially zoned areas will retain some of the existing trees and character of the existing thoroughbred farm thus maintaining consistency with present uses. The portions of the western boundary where RA zoning abuts high and medium-high zones within the project are consistent with respect to being residential zones, but are inconsistent from a zoning intensity or density perspective. Likewise, the portions of the southern project boundary where high- and medium-high density zones abut existing RA zones are not consistent from a zoning intensity or density perspective. However, a 30-foot wide landscape setback with ~~equestrian trail~~ a Multi-Purpose Community Trail, allowing equestrian uses, is proposed along this southern edge of the proposed project (Wolfskill Avenue) and along Poppy Road. The trail will be landscaped to retain the rural character of the area and will provide an additional setback between the more intense development of the proposed project and the existing rural community. Along Mike Lane, however, conditions will exist between 1/2-acre lots, and Medium-High and High density proposed development. The remainder of the southern project boundary (Lakeview Mountains) is proposed to remain in open space which is considered consistent.

Therefore, the proposed project zoning is generally consistent with surrounding zoning but is not consistent with surrounding zoning in some areas. Therefore, not the entire project's proposed zoning designations can be considered compatible with the existing surrounding zoning. THE VILLAGES OF LAKEVIEW Specific Plan will have a **significant impact without mitigation** on the existing surrounding zoning along portions of the east end of the Resort Village and Mike Lane due to inconsistencies between agriculture and non-agriculture uses, and in substantial zoning intensity/density differences. With mitigation measures **MM Land Use 1** which requires that residences, school buildings, and commercial structures be set back 300 feet from existing active agricultural uses of an offensive nature which are defined as: corrals, chicken houses, dairy waste ponds, manure stockpiles, or livestock, **MM Land Use 2** which requires evidence showing avoidance of views from proposed residences into existing homes on Mike Lane, and the design features already built into the project, such as the Multi-Purpose Community Trail, which allows equestrian uses ~~equestrian trail~~, impacts of the project to surrounding zoning will be reduced to **less than significant**.

***Threshold E:** Be compatible with existing and planned surrounding land uses.*

The community of Lakeview is primarily made up of agricultural land, an agricultural products processing plant (Nutrilite), and rural or low density residential development. Existing surrounding properties to the north include land currently in agricultural use for crop farming and

dairies, the San Jacinto River and the San Jacinto Wildlife Area. To the southeast most of the land is undeveloped or sparsely sprinkled with a few homes on large lots. South and west of the project site are numerous single-family homes on large lots with many of the properties also housing horses and/or other livestock, and neighborhood commercial uses.

“Compatible” land uses create less than significant environmental impacts on each other. “Incompatible” land uses create environmentally significant impacts between the land uses. In addition to the compatibility issues discussed below under this threshold, potential land use compatibility issues include such potential impacts as unsuitable noise levels, unsafe traffic conditions, offensive views, odors, and air/water quality degradation. Such compatibility issues can in some cases be quantified, but can become very subjective in other cases. What is a nuisance or concern about a neighboring use for one business owner or individual property owner, may not be a problem for the next.

Each of these issues which can result in land use incompatibilities, is identified and discussed in the following sections of this document: Aesthetics (Section 5.1), Air Quality (Section 5.3), Biology (Section 5.4), Hydrology (Section 5.8), Noise (Section 5.10), Population/Housing (Section 5.11), and Transportation/Traffic (Section 5.14). If impacts for each of these topics are determined to be less than significant, then land uses are considered compatible and potential land use compatibility impacts are below a level of significance. Additional issues related to Land Use Compatibility, which are discussed in this section, include development intensity and hunting activities allowed in the San Jacinto Wildlife Area (SJWA).

As defined in the Lakeview/Nuevo Area Plan, *Table 2, and Statistical Summary of Lakeview/Nuevo Area Plan*, the combined communities could expect approximately 26,778 dwelling units at buildout within the 27,745 acres that comprise Lakeview and Nuevo. THE VILLAGES OF LAKEVIEW Specific Plan proposes 11,350 homes within its approximately 2,800 acres. By comparison, the project area makes up approximately 10 percent of the Area Plan while the number of dwelling units makes up 42 percent of all the dwelling units anticipated. Based on the Area Plan’s statistics, there would be approximately one dwelling unit per acre while the project would provide four times that density. Within the project development the lowest density proposed is 5–8 dwelling units per acre to a high of 40 dwelling units per acre in the Town Center. This level of development intensity will be very different from the adjacent rural community and its physical arrangement which includes single-family homes on large lots.

As discussed in the previous threshold, however, all edge conditions where existing large-lot residential abuts proposed suburban densities, trails, parks, and landscaping will provide adequate buffers and transitions between land uses. Large lots located on Mike Lane, however, will directly abut proposed residential development between 5 and 14 dwelling units per acres. Mike Lane, according to the County General Plan and Zoning Ordinance, is planned to remain in similar use with a General Plan designation of Low Density-Rural Community and zoning classification of Residential Agriculture. The types of potential impacts associated with placing these types of uses adjacent to each other can include loss of privacy for the large lot owners as many people could now see into their backyards and houses. Conversely, the types of uses, animals, etc., which are allowed and common in rural large-lot areas, may be visually, or otherwise, offensive to new residents unfamiliar with rural communities. Thus, the proposed

project would be incompatible with existing and planned land uses on Mike Lane, which would result in **significant adverse impacts** without mitigation. Implementation of **MM Land Use 2**, which requires evidence showing avoidance of views from proposed residences into existing homes on Mike Lane, will reduce this potentially significant impact to **less than significant with mitigation**.

Additionally, a portion of Resort Village's northern boundary is adjacent to the San Jacinto Wildlife Area. The San Jacinto Wildlife Area is open to Upland Game Hunting from July 1st through January 31st. Upland game include dove, quail, snipe, and rabbits. Shotguns are the only firearm permitted within the Wildlife Area. For the typical 12-gauge shotgun, most popular with upland hunting, the effective range of the ammunition is from 20–40 yards (60–120 feet).

According to the Specific Plan, a 500-foot (167-yard) buffer is proposed between the San Jacinto Wildlife Area and any proposed residential development. Therefore, safety concerns related to ammunition directly impacting homes would be less than significant. Potential noise impacts related to firearms are discussed in the Noise section of the DEIR.

All hunting is regulated by the California Department of Fish and Game. According to Fish and Game Code Section 3004, "it is unlawful for any person . . . to hunt or to discharge while hunting, any firearm or other deadly weapon within 150 yards (450 feet) of any occupied dwelling house, residence, or other building or any barn or other outbuilding used in connection therewith." Fish and Game Code Section 3000 limits hunting to the hours from ½ hour before sunrise until ½ hour after sunset. Therefore, due to the range of a shotgun being no more than 120 feet, and the 500-foot buffer between the SJWA and all homes within THE VILLAGES OF LAKEVIEW Specific Plan is greater than the 450-foot Fish and Game Code requirement, **less than significant impacts** would result.

Threshold F: *Disrupt or divide the physical arrangement of an established community (including a low-income or minority community).*

The proposed project is within the existing Lakeview/Nuevo area, on existing agricultural land. Although there are several homes located north of Ramona Expressway, the existing Lakeview/Nuevo community is located to the south and west of the proposed project. The proposed development does not divide an established community, but instead is adjacent to an existing community, therefore impacts are considered **less than significant without mitigation**.

Threshold G: *Be inconsistent with the land use designations and policies of the General Plan (including those of any applicable Specific Plan).*

General Plan land use designation inconsistencies are discussed above, under the first threshold. Assessment of the project for consistency with the policies of the General Plan is addressed in **Table 5.9-D, RCIP General Plan: Land Use Policy Analysis and Lakeview/Nuevo Area Plan Policies Analysis** and Appendix N (CD #3) of THE VILLAGES OF LAKEVIEW Specific Plan. The following discussion summarizes the findings in **Table 5.9-C**. No existing Specific Plans are approved within the project area.

THE VILLAGES OF LAKEVIEW Specific Plan is consistent with most applicable General Plan and the Lakeview/Nuevo Area Plan policies. Some inconsistencies exist and **Table 5.9-C, Summary of Inconsistencies with General Plan/Area Plan Policies**, discusses those policies with which the project is in some way inconsistent.

Table 5.9-C, Summary of Inconsistencies with General Plan/Area Plan Policies	
General Plan Policies	Relationship of the Project to the Policy
LU.2.1.a. Provide a land use mix at the countywide and area plan levels based on projected need and supported by evaluation of impacts to the environment, economy, infrastructure, and services.	THE VILLAGES OF LAKEVIEW Specific Plan will exceed the housing needs based on the County's original evaluation of the Lakeview/Nuevo Planning Area. As seen in <i>Table 5.9-A – Lakeview/Nuevo Area Plan Projected Buildout</i> , the project proposes approximately 9 times the residential density and double the commercial square footage depicted by the General Plan Land Use Map. Although THE VILLAGES OF LAKEVIEW has a mix of residential densities and other land uses, the amount of growth proposed by THE VILLAGES OF LAKEVIEW was not anticipated by the Lakeview/Nuevo Area Plan. I
LU.2.1 e. Concentrate growth near or within existing urban and suburban areas to maintain the rural and open space character of Riverside County to the greatest extent possible.	Currently, Lakeview/Nuevo Area Plan anticipates that the western half of the planning area, near the city of Perris, would be comprised of concentrated growth near an existing suburban area and to maintain the rural and open space character of the portion of Riverside County. The proposed THE VILLAGES OF LAKEVIEW Specific Plan proposes new urban and suburban areas in proximity to other areas within the Lakeview/Nuevo Area Plan that are designated for urban and suburban development. However, there are areas within THE VILLAGES OF LAKEVIEW that are currently designated for agricultural and rural uses, and open space. Yet, even portions of these areas were provided with a "Community Development Overlay" by Riverside County. This project also provides for approximately 1,000 acres of open space on its land use plan, and concentrates development of biologically sensitive areas. The project is proposed to concentrate growth near the existing Ramona Expressway (future CETAP Mid County Parkway). Regardless, this project will present a change in residential densities next to existing rural properties and is not located adjacent to any existing urban or suburban area. With the implementation of the proposed buffers and setbacks, Design Guidelines of the Lakeview/Nuevo Area Plan and THE VILLAGES OF LAKEVIEW Specific Plan, the impacts to the existing rural properties will be minimized. I
LU3.1 Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the General Plan Land Use Maps (RCIP Figure VI-1) and the Area Plan Land Use Maps	A large portion of the proposed THE VILLAGES OF LAKEVIEW Specific Plan is proposed for inclusion to a Community Development Overlay area as identified by the RCIP. However, the existing properties within the

**Table 5.9-C, Summary of Inconsistencies
with General Plan/Area Plan Policies**

General Plan Policies	Relationship of the Project to the Policy
in accordance with the following concepts: b. Assist in and promote the development of infill and underutilized parcels which are located in Community Development areas, as identified on the General Plan Land Use Map.	geographic area of THE VILLAGES OF LAKEVIEW have not developed in accordance with those designations, so the existing land uses of the geographic area of THE VILLAGES OF LAKEVIEW are considered underutilized. I
LU 4.1 Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts: h. Encourage the provision of public art.	Although not specifically discussed in the Specific Plan, public art is not discouraged. I
LU 10.1 Provide sufficient commercial and industrial development opportunities in order to increase local employment levels and thereby minimize long-distance commuting.	The Land Use Designations within the center of the project area are intended for commercial development with a limit of 500,000 square feet of commercial floor area which equates to approximately 1,000 jobs. The project also proposes approximately 11,350 homes, which would equate to approximately 34,000 inhabitants. Since the project area is situated in a rural area, outside of an existing urban core, the number of available jobs in the area is currently limited. Although this project will increase local employment opportunities, many of the residents of the proposed project will need to commute outside of the community. I
LU 16.1 Encourage retaining agriculturally designated lands where agricultural activity can be sustained at an operational scale, where it accommodates lifestyle choice, and in locations where impacts to and from potentially incompatible uses, such as residential uses, are minimized, through incentives such as tax credits.	THE VILLAGES OF LAKEVIEW Specific Plan would not retain the Agriculture (AG) designated lands within its project area. The Lakeview/Nuevo Area Plan contains 2,031 acres of AG designated land, which is 7.3 percent of all the land comprising this Area Plan. Within Riverside County, only the San Jacinto Valley Area Plan designates a greater percentage of land to AG with 9.4 percent. The majority of the Lakeview/Nuevo AG designated land is concentrated along the northern boundary of Lakeview area and separated from other communities by dedicated conservation lands or parklands. THE VILLAGES OF LAKEVIEW project propose development upon approximately 106 acres of AG land not covered by a CDO. A Community Development Overlay exists over 714 acres of this AG land allowing this property to be developed with a wide variety of land uses permitted under the Community Development Foundation. These approximately 820 acres represents 40 percent of all the AG designated land within the Lakeview/Nuevo Area Plan. The proposed project is consistent with the CDO and CDF intent. The 106 acres of AG designated land will be converted to CDF within the standard 2.5-year provision of 7% agriculturally designated land conversions. The Ramona Expressway and the Lakeview Mountains will separate most of the proposed residential development from the remaining Agriculturally designated land to the north. A 300-foot setback between development and active agricultural uses is required as mitigation within this DEIR. I

**Table 5.9-C, Summary of Inconsistencies
with General Plan/Area Plan Policies**

General Plan Policies	Relationship of the Project to the Policy
LU 16.2 Protect agricultural uses, including those with industrial characteristics (dairies, poultry, hog farms, etc.) by discouraging inappropriate land division in the immediate proximity and allowing only uses and intensities that are compatible with agricultural uses.	The Ramona Expressway and the Lakeview Mountains will separate most of the proposed residential development from the remaining Agriculturally designated land to the north. To avoid potential impact, a 300-foot setback between development and offensive agricultural uses is required as mitigation within this DEIR. I
LU 16.4 Encourage conservation of productive agricultural lands. Preserve prime agricultural lands for high-value crop production.	THE VILLAGES OF LAKEVIEW Specific Plan and its related General Plan Amendments will eliminate the AG (agricultural) designation within the project boundaries. Designated Farmland is a resource based on soil types which is regulated by the California Department of Conservation. The Department of Conservation maintains maps identifying important farmland across the state. Based on the maps for Western Riverside County, the project site is identified as having Prime Farmland, Farmland of Statewide Importance, and Farmland of Local Importance. Prime Farmland includes lands with the best combination of physical and chemical features for the production of agricultural crops, and encompasses approximately 367 acres of the project site. Farmland of Statewide Importance encompasses approximately 246 acres. Unique Farmland includes 23 acres on site. Farmland of Local Importance encompasses approximately 839 acres, which includes a broad spectrum of lands. Currently, there is approximately 250 acres of active agriculturally productive lands, 89 acres of active egg production, and 150 acres active thoroughbred ranch. The proposed project does not accommodate the preservation of these designated Farmlands, however, some local agricultural uses may be allowed such as community and/or demonstration gardens. Mitigation measures within Section 5.2 of this DEIR require agricultural easements on off-site lands within the area, setbacks from some existing agriculture, and community gardens on-site. Although this is consistent with Policy LU 16.4, it does not reduce potential significant impacts to less than significant. I
LU 17.3 Ensure that development does not adversely impact the open space and rural character of the surrounding area.	<p>THE VILLAGES OF LAKEVIEW Specific Plan ensures that development within the Lakeview Mountains will be avoided by designating the entire area as Open Space. Additionally, sensitive archeological sites and sensitive biological resources within the open space will be preserved.</p> <p>The project includes the development of a relatively high-density residential development near a rural community. Setbacks, trail easements, and trailheads will allow for appropriate transitions to surrounding uses and compatibility issues can be addressed to retain rural</p>

**Table 5.9-C, Summary of Inconsistencies
with General Plan/Area Plan Policies**

General Plan Policies	Relationship of the Project to the Policy
	<p>character adjacent to existing rural areas.</p> <p>The intensity of the development will also place a greater number of people within easy reach of open space. Over 1,000 acres of open space will be preserved as part of this project. As part of the management of the open space, limited recreational uses will be allowed within this area (trails, horseback riding, etc.). However, with the introduction of over 30,000 people into the area, potential significant impacts to archaeological and biological resources within the project open space and the San Jacinto Wildlife Area will still remain. I</p>
<p>LNAP 8.2 Maintain the County's roadway Level of Service standards as described in the Level of Service section of the General Plan Circulation Element.</p>	<p>A traffic report was prepared for the project that addresses potential future traffic, roadway and intersection levels of service, planned roadway improvements and mitigation measures. On-site project intersections are all proposed to accommodate projected traffic at County General Plan standards or better. As development occurs, roadway levels of service will fluctuate, however, because not all roads/intersections off-site which rely on TUMPF, DIF, RBBD or other funding may be completed concurrently with project phasing. Therefore, on a temporary basis, the project may result in Levels of Service that do not meet County standards. At full build-out of the current General Plan roadway system and the project, some roadway segments and intersections will not meet required standards (see Section 5.14 of this DEIR). I</p>

Policy LU.2.1.a. deals with the provision of a land use mix at the countywide and area plan levels based on projected need and supported by evaluation of impacts to the environment, economy, infrastructure, and services. THE VILLAGES OF LAKEVIEW Specific Plan will exceed the housing needs based on the County's original evaluation of the Lakeview/Nuevo Planning Area. As seen in **Table 5.9-A – Lakeview/Nuevo Area Plan Projected Buildout**, the project proposes approximately 9 times the residential density and double the commercial square footage depicted by the General Plan Land Use Map. Although THE VILLAGES OF LAKEVIEW has a mix of residential densities and other land uses, the amount of growth proposed by THE VILLAGES OF LAKEVIEW was not anticipated by the Lakeview/Nuevo Area Plan. The Lakeview/Nuevo Master Plan of Water, Sewer, and Recycled Water (2007) addresses the infrastructure needs for the area at the proposed rates of development and has been reviewed under CEQA (Certified January 21, 2009). This DEIR addresses the economy and impacts to jobs in the Population and Housing Section of this DEIR. Public services are also evaluated in this DEIR. Due to the project's significant change in land use intensity from that contemplated in the Area Plan, inconsistency with this policy is **considered significant**.

With respect to LU.2.1.e and LU.3.1, the proposed project is not an infill project nor is it located immediately adjacent to an existing urban or suburban area, therefore the project is inconsistent with policies which encourage such. However, not all new development which will be required

to meet projected population demand within the County in the next 25 years can be accommodated with infill development. Policies such as L.U.2.1.e, which concentrate development along key transportation corridors, such as the future Mid County Parkway, are supported by this project. In addition, it is located adjacent to the existing rural community of Lakeview which can provide some services to THE VILLAGES OF LAKEVIEW and which will benefit from some services provided by the project. Therefore, based on the project's consistency with other General Plan Policies, its adjacency to Lakeview/Nuevo, and the benefits of the project which include the preservation of over 1,000 acres of open space, inconsistency with this policy is considered **less than significant**.

Public art is encouraged in policy LU.4.1. THE VILLAGES OF LAKEVIEW Specific Plan is silent on this issue and therefore does not discourage public art. Public art enhances the environment and quality of public outdoor meeting areas. It can take many forms, but provides an excellent opportunity for interpretation of the local area and/or history. A project of this size could accommodate and allow for public art at the community scale. Without mitigation, inconsistencies with this policy are **considered significant**. Mitigation Measure **MM Land Use 3** requires public art and therefore, inconsistency with this policy is reduced to **less than significant with mitigation**.

The Land Use Designations within the center of the project area are intended for commercial development with a limit of 500,000 square feet of commercial floor area which equates to approximately 1,000 jobs. Policy LU.10.1 promotes balanced jobs/housing creation. The project also proposes approximately 11,350 homes, which would equate to approximately 34,000 inhabitants. Since the project area is situated in a rural area outside of an existing urban core, and the unincorporated portions of Riverside County are considered jobs-poor, the number of available jobs in the area is currently limited. Although this project will increase local employment opportunities, many of the residents of the proposed project will need to commute long distances outside of the community. Inconsistencies with this policy are **considered significant**. The Design Considerations within the project, such as compact development, trails, and sidewalks, which connect to local community and commercial centers, help reduce internal trips, but do not eliminate the need for long commutes.

Policies LU 16.1, 16.2, and 16.4 encourages conservation of agriculturally designated land, agricultural uses of an industrial nature, and productive agricultural lands and prime agricultural lands for high-value crop production. The proposed project does not accommodate the conservation on-site of any of the existing agricultural uses, however **MM Ag 3** requires creation of a community garden. Some Designated Farmland soils are conserved due to the preservation of open space in some areas, however, if farming were to continue in those areas, habitat and other values would be lost. Inconsistencies with this policy are **considered significant** and are discussed in detail in the Agricultural Resources section of this DEIR.

Policy LU 17.3 endeavors to ensure that development does not adversely impact the open space and rural character of the surrounding area. The proposed project will preserve over 1,000 acres of open space and design considerations, setback, etc. within the project and/or mitigation measures will transition from the rural community to the higher density project. So, the intent of this policy is met directly by the project. Indirectly, however, introducing over 34,000 people

into the area may impact the open spaces and rural character surrounding the site, such as the San Jacinto Wildlife Area. Therefore, inconsistencies with this policy are **considered significant**.

Policy LNAP 8.2 aims to maintain the County's roadway Level of Service standards as described in the Level of Service section of the General Plan Circulation Element. As described in detail in Section 5.14 of this DEIR, both temporary and build-out levels of service may not meet County standards. Therefore, inconsistencies with this policy remain **significant**.

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). In addition to the mitigation measures below, the Alternatives Analysis (**Section 8.0, Alternatives to the Proposed Project**) evaluates other changes, which reduce potential significant impacts.

MM Land Use 1: To reduce potential significant adverse impacts due to incompatibility between agricultural uses and proposed suburban development, proposed residences, school buildings, and commercial structures shall be setback 300 feet from existing active agricultural uses of an offensive nature, which are defined as: corrals, chicken houses, dairy waste ponds, manure stockpiles, or commercial livestock. This setback shall not apply to areas of the project where Ramona Expressway intervenes between active agriculture and proposed development because the expressway will act as the buffer. The 300-foot buffer area may include public road rights-of-way, parking lots, and service or maintenance areas. In addition to project edge conditions, the 300-foot setback shall also apply to interim conditions on-site between occupied project-related buildings and existing on-site agricultural uses of an offensive nature (e.g., chicken ranch) that are located in a later phase of project development and may remain operational while earlier phases of development are being built. (Same as **MM Ag 1**.)

MM Land Use 2: To reduce potential land use density/intensity conflicts between existing rural residences on Mike Lane and future residential homes within Planning Areas 55, 57, and 58, a sight line study or evidence showing avoidance of views from proposed residences into existing homes on Mike Lane shall be submitted at the time of Tract Map submittal, or as otherwise approved by the Planning Director. Conflicts may be avoided through use of various means including but not limited to: location of windows and balconies, landscaping, walls, elevation differences, or setbacks.

MM Land Use 3: To eliminate inconsistencies with General Plan Policy LU.4.1, which encourages public art, and to provide a mechanism for interpretation of some of the historic land uses of the project site, public art and/or historic interpretation art or exhibits, shall be incorporated into the project in a minimum of three locations. At least one exhibit will focus on the project site's prehistoric archaeological resources and interpretation at a location(s) to be determined at a later date, depending on subject matter. Examples of the other exhibits may include but are not limited to: interpretative exhibits regarding the thoroughbred farm located within the park to be built in PA 53, art as a part of community entry monumentation, or art within fountains at a plaza within a pedestrian-oriented commercial center.

Summary of Project-Specific Environmental Effects after Mitigation Measures Are Implemented

Without mitigation, potential significant adverse impacts related to adjacent cities, zoning on site, consistency with General Plan Land Use Plan intent, and dividing an existing community, were found to be **less than significant**. With the implementation of mitigation measures, potential significant adverse impacts related to inconsistencies between the project and surrounding agricultural land and rural residences (**MM Land Use 1 and 2**), and the inclusion of public art in the project (**MM Land Use 3**), are reduced to **less than significant**. No feasible mitigations measures exist to address changes to existing land uses made by the project, and inconsistency with policies directed at conservation of agriculture, reduced commutes, and indirect effects of substantial population growth on open space and rural character. Section 8.0, Alternatives, presents alternatives which reduce the impact associated with the loss of agricultural land and changes in land use from the existing RCIP General Plan. These impacts cannot be completely reduced without creating additional impacts that the project alleviates. Therefore, impacts remain **significant** and a Statement of Overriding Consideration related to Land Use and Planning would be needed to permit approval of this project.

Summary of Cumulative Environmental Effects After Mitigation Measures Are Implemented

Cumulatively, THE VILLAGES OF LAKEVIEW project is one of several proposed development projects that will impact existing and proposed land uses within the Lakeview/Nuevo area and along the Ramona Expressway corridor between the cities of San Jacinto and Perris. Similar significant impacts will result from these projects as from the proposed project with respect to changes caused to existing land uses, loss of agriculture, and impacts to open space and rural character. Those other projects that are located closer to the I-215 will have lesser commutes than the project. As THE VILLAGES OF LAKEVIEW includes 11,350 dwelling units, and represents approximately 50 percent of the total future projects located on the Ramona Expressway between Perris and San Jacinto (see **Table 5.14-K** and **Figure 5.14-8a** for the list and location of cumulative projects considered). Therefore, THE VILLAGES OF LAKEVIEW contributes considerably to the overall new development along the Ramona Expressway Corridor, and because it is not consistent with General Plan Land Uses. Cumulative impacts are considered **significant and unavoidable** and a Statement of Overriding Consideration would be required prior to project approval.

Section 7.1 of this DEIR contains additional information about cumulative effects.