CITY OF WILDOMAR

HOUSING ELEMENT UPDATE 2013-2021

DRAFT ENVIRONMENTAL IMPACT REPORT

SCH No. 2013051001

Lead Agency:

CITY OF WILDOMAR
23873 CLINTON KEITH ROAD, SUITE 201
WILDOMAR, CA 92595

AUGUST 2013

CITY OF WILDOMAR

HOUSING ELEMENT UPDATE 2013-2021

DRAFT ENVIRONMENTAL IMPACT REPORT

Prepared for:

CITY OF WILDOMAR
23873 CLINTON KEITH ROAD, SUITE 201
WILDOMAR, CA 92595

Prepared by:

PMC
6020 CORNERSTONE COURT WEST, SUITE 260
SAN DIEGO, CA 92121

AUGUST 2013

5.0 OTHER CEQA ANALYSIS

6.0 ACRONYMS AND ABBREVIATIONS

7.0 REPORT PREPARERS

LIST OF APPENDICES (SEE ATTACHED DIGITAL COPY ON CD)

LIST OF FIGURES

LIST OF TABLES

ES EXECUTIVE SUMMARY

Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15123, this section of the Draft Environmental Impact Review (DEIR; Draft EIR) provides a brief summary of the project, significant impacts, and proposed mitigation measures. The remainder of the document and technical appendices provide the discussion and support for the conclusions found here. As this section represents a summary of the DEIR, if there are discrepancies between the summary table and the text, the text of the sections prevails.

ES.1 PURPOSE AND SCOPE OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

This DEIR will provide, to the greatest extent possible, an analysis of the potential environmental effects associated with the implementation of the proposed 2013–2021 Housing Element, pursuant to CEQA.

This DEIR analysis focuses on potential environmental impacts that could arise from implementation of the proposed project, as regulated and guided by the large number of federal, state, and local regulations, including ordinances, General Plan policies, and local resource plans. The DEIR is intended to provide a credible worst-case scenario of the impacts resulting from project implementation.

ES.2 PROJECT SUMMARY

The City's 2013–2021 Housing Element is designed to address the projected housing needs of current and future city residents and to comply with state law requiring amendment of the Housing Element every eight years (Sections 65580–65589.8 of the California Government Code). The proposed 2013–2021 Housing Element is the City's policy document guiding the provision of housing to meet future needs for all economic segments of Wildomar, including housing affordable to lower-income households. Please refer to Section 2.0, Project Description, for a detailed description of the proposed 2013–2021 Housing Element.

ES.3 PROJECT ALTERNATIVES SUMMARY

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project that could feasibly attain the basic objectives of the project and avoid and/or lessen the environmental effects of the project. Further, CEQA Guidelines Section 15126.6(e) requires that a "no project" alternative be evaluated in an EIR. The Draft EIR evaluates the following alternatives:

ALTERNATIVE 1: NO PROJECT ALTERNATIVE

The No Project analysis must discuss the circumstance under which the project does not proceed. In the context of revisions to land use or regulatory plans or policies, such as this project, the no project alternative will be the continuation of the existing plan or policy into the future. Thus, the impacts of the proposed project would be compared to the impacts that would occur under the existing plan. The analysis allows decision-makers to compare the impacts of approving the project with the impacts of not approving the project (CEQA Guidelines Section 15126.6(e)(3)(A)).

ALTERNATIVE 2: INCREASE ZONING DENSITY ON SITES 1 THROUGH 13

This alternative would allow the development at a density of 30 dwelling units per acre and allow up to 80 percent of the site to be developed, which would allow a total of 1,548 dwelling

units on 65 acres. Alternative 2 would reduce the area that would experience increased development density by approximately 83 acres (148 acres - 65 acres = 83 acres) and eliminate the need to add the Mixed Use overlay to target sites 14 through 21 and rezone target sites 22 through 25. Alternative 2 is illustrated in **Figure 4.0-1**.

ES.4 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

The City of Wildomar was identified as the lead agency for the proposed project. In accordance with Section 15082 of the CEQA Guidelines, the City prepared and distributed a Notice of Preparation (NOP) for the proposed project that was circulated for public review on May 2, 2013. Concerns raised in response to the NOP were considered during the preparation of the EIR. A copy of each letter is provided in **Appendix 1.0** of this DEIR. Section 1.0, Introduction, provides a summary of issues and areas of concern related to the proposed project, as presented to the City by agencies and the public during the NOP review period. The complete text of the NOP and the NOP comments are included as **Appendix 1.0** to this Draft EIR.

ES.5 SUMMARY OF ENVIRONMENTAL IMPACTS

Table ES-1 displays a summary of project impacts and proposed mitigation measures that would avoid or minimize potential impacts. In **Table ES-1**, the level of significance is indicated both before and after the implementation of each mitigation measure. For detailed discussions of all mitigation measures that would provide mitigation for each type of environmental impact addressed in this Draft EIR, refer to the appropriate environmental topic section (i.e., Sections 3.1 through 3.10).

The project does not propose site-specific development; however, the implementation of the proposed project is anticipated to result in high-density, primarily residential, development on 25 currently vacant sites. This development, in combination with long-term, region-wide growth and development, has the potential to generate environmental impacts in a number of areas, including direct construction impacts on biological and cultural resources, as well as indirect impacts associated with use of this built environment on areas such as transportation, air quality, and capacity impacts to utilities, such as stormwater drainage facilities.

Of the potential environmental impacts discussed in Section 3.0 of the DEIR, project impacts to air quality are considered cumulatively considerable and significant and unavoidable. CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance.

AREAS OF NO IMPACT

The potential for the proposed project to result in certain impacts was not included in **Table ES-1** because the City of Wildomar determined that the proposed project would not result in impacts to several environmental issue areas. Section 3.11 provides the rationale for the elimination of these issue areas; a summary of that discussion is provided below.

- **Aesthetics** – Although some of the 25 sites identified for land use redesignation and zoning ordinance revisions are located in proximity to the portion of interstate 15 (I-15) designated as an Eligible State Scenic Highway, the sites would be developed in accordance with development standards outlined in the proposed Mixed Use (MU) overlay zone and the Highest Density Residential zone. Additionally, all of the identified sites are located within Zone B of the Mount Palomar Nighttime Lighting Policy Area. As such, any potential future development associated with the implementation of the 2013–2021

Housing Element would require the adherence of the proposed project to Chapter 8.64 (Light Pollution) of the Wildomar Municipal Code.

- **Agricultural and Forestry Resources** – The 25 sites identified for land use designation and zoning ordinance revisions do not contain any active forestland or support trees that could be commercially harvested.

- **Hazards and Hazardous Materials** – Due to the residential nature of development, the proposed project would not involve the routine transport, use, or disposal of hazardous materials that would result in significant hazard to the public, to the environment, or to schools in proximity. Additionally, there are no airports within proximity of the 25 sites.

- **Noise** – Short-term noise impacts would be indirect, resulting from construction generated by future development of the 25 identified sites. Long-term noise would also be indirect, resulting from future traffic associated with the development. However, due to the minor incremental increase in traffic, noise would not be expected to increase to any significant degree.

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Air Quality				
Impact 3.1.1	Subsequent land use activities associated with implementation of the proposed project would not conflict with or obstruct implementation of the 2012 Air Quality Management Plan.	S	None available.	SU
Impact 3.1.2	Subsequent land use activities associated with implementation of the proposed project could result in short-term construction emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter.	SU	None available.	SU
Impact 3.1.3	Subsequent land use activities associated with implementation of the proposed project could result in long-term operational emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter.	SU	None available.	SU
Impact 3.1.4	Implementation of the project would not contribute to localized concentrations of mobile-source CO that would exceed applicable ambient air quality standards.	LS	None required.	LS
Impact 3.1.5	Implementation of the proposed project could result in increased exposure of existing or planned sensitive land uses to stationary or mobile-source TACs that would exceed applicable standards.	LS	None required.	LS
Impact 3.1.6	The proposed project would not include sources that could create objectionable odors affecting a substantial number of people or expose new residents to existing sources of odors.	NI	None required.	NI

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 3.1.7	Implementation of the proposed project, in combination with cumulative development in the SoCAB, would result in a cumulatively considerable net increase of criteria air pollutants for which the SoCAB is designated nonattainment.	CC	None available.	SU
Biological and Natural Resources				
Impact 3.2.1	Land uses and development consistent with the proposed 2013–2021 Housing Element could result in adverse effects, either directly or indirectly, on special-status plant and animal species and critical habitat. However, incorporation of a mitigation measure requiring project applicants to continue to follow the provisions of the MSHCP would address this impact.	PS	**MM 3.2.1** For the development of any of the subject sites associated with the proposed project, the project applicant(s) shall follow measures to preserve sensitive species and their critical habitats consistent with the requirements of the MSHCP. *Timing/Implementation: At all times* *Enforcement/Monitoring: City of Wildomar Planning Department*	LS
Impact 3.2.2	Implementation of the proposed project could result in the direct mortality or loss of habitat for raptors and other migratory birds.	PS	**MM 3.2.2** For any potential development of any of the subject sites associated with the proposed project, the project applicant(s) shall conduct construction and clearing activities outside of the avian nesting season (January 15–August 31), where feasible. If clearing and/or construction activities occur during nesting season, preconstruction surveys for nesting raptors and migratory birds shall be conducted by a qualified biologist, no more than 14 days before initiation of clearing or construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine if active nests are present. If the qualified biologist determines that nesting birds	LS

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		could be disturbed or harmed by the clearing or construction activities, the applicant shall minimize the potential impacts to nesting birds by establishing avoidance buffers around the active nests. The avoidance buffer shall be no less than: • 250 feet for active nests of state of federally listed migratory birds and all raptors • 50 feet for active nests of all other bird species. Avoidance within these buffers should be maintained throughout the nesting season until the young of the nests have fledged or the nest is abandoned. *Timing/Implementation: The project applicant(s) shall incorporate requirements into all rough and/or precise grading plan documents for any development on any of the 25 sites identified for potential development. The project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.2.3 Project implementation may result in the loss of western burrowing owls through destruction of active nesting sites, as well as incidental burial of adults, young, and eggs	PS	**MM 3.2.3a** Per MSHCP Species-Specific Objective 6, if any of the 25 project sites are within the Burrowing Owl Survey Area and suitable habitat is present, preconstruction presence/absence surveys for burrowing owl will be conducted for all covered activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season. The breeding period for burrowing owls is February 1 through August 31, with the peak being April 15 to July 15, the recommended survey window. Winter surveys may be conducted between December 1 and January 31. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. Surveys shall be completed for occupied burrowing owl burrows in all construction areas and within 150 meters (500 feet) of the project work areas (where possible and appropriate based on habitat). All occupied burrows will be mapped on an aerial photo. *Timing/Implementation: Prior to any vegetation removal or ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department* **MM 3.2.3b** Based on the burrowing owl survey results, the City shall require the project applicant(s) associated with potential development on any of the 25 subject sites to take the following actions to offset impacts prior to ground disturbance if owls are found to be present: • If paired owls are nesting in areas scheduled for disturbance or degradation, nest(s) shall be avoided	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		from February 1 through August 31 by a minimum of a 75-meter (250 feet) buffer or until fledging has occurred. Following fledging, owls may be passively relocated by a qualified biologist. • If impacts on occupied burrows in the non-nesting period are unavoidable, on-site passive relocation techniques may be used if approved by the CDFW to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season unless a qualified biologist verifies through noninvasive methods that the burrow is no longer occupied. Foraging habitat for relocated pairs shall be provided in accordance with guidelines provided by the CDFW (2012). • If relocation of the owls is approved for the site by the CDFW, the City shall require the developer to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include all of the following: o The location of the nest and owls proposed for relocation. o The location of the proposed relocation site. o The number of owls involved and the time of year when the relocation	

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		is proposed to take place. o The name and credentials of the biologist who will be retained to supervise the relocation. o The proposed method of capture and transport for the owls to the new site. o A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control). o A description of efforts and funding support proposed to monitor the relocation. • If paired owls are present within 50 meters (160 feet) of a temporary project disturbance (i.e., parking areas), active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify losses from nest abandonment and/or loss of reproductive effort (e.g., killing of young). *Timing/Implementation: Prior to any vegetation removal or ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.2.4 Implementation of the proposed project could result in disturbance and degradation of riparian habitat or other sensitive natural communities	PS	**MM 3.2.4** As part of the 1602 Streambed Alteration Agreement from the CDFW, the project applicant(s) associated with the	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
	identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.			development on any of the subject sites associated with the proposed project shall prepare and implement a Vegetation Mitigation and Monitoring Plan for disturbed vegetation. Ratios for mitigation will be determined by the CDFW at a minimum of 1:1 to ensure no net loss of vegetation within CDFW jurisdiction. *Timing/Implementation: Prior to project vegetation removal or ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.2.5	Implementation of the proposed project could result in the loss of jurisdictional waters of the United States and waters of the State.	PS	**MM 3.2.5**	A formal jurisdictional delineation shall be conducted for areas that will be permanently or temporarily impacted by projects associated with potential development on any of the 25 subject sites. If waters of the United States and waters of the State cannot be avoided, the project applicant(s) associated with potential development on any of the 25 subject sites shall apply for a CWA Section 404 permit from the USACE, a Section 401 permit from the RWQCB, and a 1602 Streambed Alteration Agreement from the CDFW. These permits shall be obtained prior to issuance of grading permits and implementation of any proposed project. The project applicant(s) associated with site-specific development on the 25 subject sits shall ensure that the project will result in no net loss of waters of the United States and waters of the State by	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		providing mitigation through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the CWA Section 404/401 permits and the 1602 Streambed Alteration Agreement. Compensatory mitigation may consist of (a) obtaining credits from a mitigation bank; (b) making a payment to an in-lieu fee program that will conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; these programs are generally administered by government agencies or nonprofit organizations that have established an agreement with the regulatory agencies to use in-lieu fee payments collected from permit applicants; and/or (c) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This last type of compensatory mitigation may be provided at or adjacent the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). The project proponent/permit applicant retains responsibility for the implementation and success of the mitigation project. Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities	

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			for the proposed project. *Timing/Implementation: Prior to any vegetation removal or ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department and Public Works Department*	
Impact 3.2.6	Implementation of the proposed project would not interfere substantially with the movement of native resident or migratory fish or wildlife species. No established migratory routes are identified within the project site. Therefore, no impact to the movement of any native resident or migratory fish or wildlife species, or established native resident or migratory wildlife corridors, and no impediment to the use of native wildlife nursery sites will occur as a result of the proposed project.	NI	None required.	NI
Impact 3.2.7	Implementation of the proposed project would not result in a conflict with a local policy or ordinance protecting biological resources.	LS	None required.	LS
Impact 3.2.8	Implementation of the proposed project could result in disturbance and degradation of riparian/riverine habitat, as defined in Section 6.1.2 of the MSHCP.	PS	**MM 3.2.8** If riparian/riverine habitats covered under the MSHCP cannot be avoided, the project applicant(s) shall submit a Determination of Biological Equivalent or Superior Preservation (DBESP), as outlined in Section 4.2 of the MSHCP Permittee Implementation Guidance Manual, to the City for approval. For development on any of the subject sites associated with the proposed project, the project applicant(s) shall ensure that no net loss of riparian/riverine habitats will result by providing mitigation through impact avoidance, impact minimization, and/or compensatory	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			mitigation for the impact, as determined in the DBESP. Mitigation accomplished under mitigation measure MM 3.2.4 may apply to meet the standards where appropriate. *Timing/Implementation: Prior to any vegetation removal or ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department and public Works Department*	
Impact 3.2.9	Implementation of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development, will result in the conversion of habitat and impact biological resources.	LCC	None required.	LCC
Climate Change and Greenhouse Gases				
Impact 3.3.1	Implementation of the proposed project will result in greenhouse gas emissions that would further contribute to significant impacts on the environment.	LS/LCC	None required.	LS/LCC
Impact 3.3.2	Implementation of the proposed project would be consistent with the goals of AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, etc.), as interim SCAQMD thresholds would not be surpassed.	LS/LCC	None required.	LS/LCC
Cultural and Paleontological Resources				
Impact 3.4.1	Implementation of the proposed project would not cause a substantial adverse change in the significance of a known historical resource.	NI	None required.	NI
Impact 3.4.2	Implementation of the proposed project could result in a substantial adverse change in the significance of a unique archaeological resource, as	PS	**MM 3.4.2a** Prior to beginning construction of any project contemplated in the Housing Element, the project applicant shall retain	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
well as the potential disturbance of currently undiscovered cultural resources (i.e., prehistoric archaeological sites, historical archaeological sites, and isolated artifacts and features) and human remains.		an archaeologist listed on the Riverside County qualified consultant list to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Any newly discovered cultural resource deposits shall be subject to a cultural resources evaluation in consultation with the Pechanga Tribe. *Timing/Implementation: As a condition of project approval, and implemented during grading permit and during ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department* **MM 3.4.2b** At least 30 days prior to beginning construction of any project contemplated in the Housing Element, the project applicant shall contact the Pechanga Tribe to notify the Tribe of grading, excavation, and the monitoring program, and to coordinate with the City and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall address the treatment of known cultural resources; the designation, responsibilities, and participation of professional Native American Tribal monitors during grading, excavation, and ground-disturbing activities; project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site consistent with Public Resources Code	

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Section 21083.2 and CEQA Guidelines Section 15064.5. *Timing/Implementation: As a condition of project approval, and implemented during grading permit and during ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department* **MM 3.4.2c** Prior to beginning construction of any project contemplated in the Housing Element, the project archaeologist shall file a pre-grading report with the City (if required grading is to be done) to document the proposed methodology for grading activity observation, which will be determined in consultation with the Pechanga Tribe. Said methodology shall include the requirement for a qualified archaeological monitor to be present and to have the authority to stop and redirect grading activities. In accordance with the agreement required in mitigation measure MM 3.4.2b, the archaeological monitor's authority to stop and redirect grading will be exercised in consultation with the Pechanga Tribe in order to evaluate the significance of any archaeological resources discovered on the property. Tribal and archaeological monitors shall be allowed to monitor all grading, excavation, and groundbreaking activities and shall also have the authority to stop and redirect grading activities. *Timing/Implementation: As a condition of project approval, and implemented during grading permit and*	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		during ground-disturbing activities *Enforcement/Monitoring: City of Wildomar Planning Department* **MM 3.4.2d** If inadvertent discoveries of subsurface archaeological/cultural resources are discovered during the grading for any project contemplated in the Housing Element, the developer, the project archaeologist, and the Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. Pursuant to California Public Resources Code Section 21083.2(b), avoidance shall be the preferred method of preservation for archaeological resources, including but not limited to sacred sites. If the parties above cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director for decision. The Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the Planning Commission and/or the Planning Commission's decision shall be appealable to the City Council. The landowner shall relinquish ownership	

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found in the project area, to the Pechanga Tribe for proper treatment and disposition, which may include curation at the Pechanga Cultural Resources Curation Facility, which meets the standards required by 36 CFR Part 79. *Timing/Implementation: As a condition of project approval, and implemented during grading permit and during ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.4.3 Implementation of the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	PS	**MM 3.4.3** Prior to issuance of a grading permit for a project contemplated in the Housing Element, the project applicant shall retain a qualified professional to assess the potential for presence of paleontological resources and the potential for project construction to affect such resources if present. If it is determined, to the satisfaction of the City, that there is low potential for discovery or disturbance of paleontological resources, no further action shall be required. If potential for discovery is deemed moderate to high, the project applicant shall retain a qualified paleontologist to monitor all initial ground-disturbing activities in native soils or sediments. If the paleontologist, upon observing initial earthwork, determines there is low potential for discovery, no further action shall be required and the paleontologist	LS

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		shall submit a memo to the City confirming findings of low potential. Should any paleontological resources (i.e., fossils) be uncovered during project construction activities, all work within a 100-foot radius of the discovery site shall be halted or diverted to other areas on the site and the City shall be immediately notified. A qualified paleontologist shall evaluate the finds and recommend appropriate next steps to ensure that the resource is not substantially adversely impacted, including but not limited to avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Further ground disturbance shall not resume within a 100-foot radius of the discovery site until an agreement has been reached between the project applicant, a qualified paleontologist, and the City as to the appropriate preservation or mitigation measures to ensure that the resource is not substantially adversely impacted. *Timing/Implementation: As a condition of project approval, and implemented during grading permit and during ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.4.4 Implementation of the proposed project could result in the inadvertent disturbance of undiscovered human remains. Any discovery of human remains would be potentially significant.	PS	**MM 3.4.4** If human remains are encountered, no further ground disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		as required by California Health and Safety Code Section 7050.5. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. The decision as to the treatment and disposition of the remains shall be made consistent with the procedures and standards contained in Health and Safety Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) and the Treatment Agreement described in mitigation measure MM 3.4.2b. *Timing/Implementation: As a condition of project approval, and implemented during grading permit and during ground-disturbing activities* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.4.5 Implementation of the proposed project, along with any foreseeable development in the vicinity, could result in cumulative impacts to cultural resources, i.e., unique archeological resources, historical resources, paleontological resources, and human remains.	LCC	None required.	LCC
Geology, Soils, and Mineral Resources			
Impact 3.5.1 The proposed project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map.	PS	**MM 3.5.1** Prior to the issuance of building permits for development on the subject sites associated with the proposed project, the project applicant(s) shall submit design-level, site-specific geotechnical reports and building plans to the City of	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Wildomar for review and approval. The geotechnical report shall summarize the subsurface investigations performed, interpret the existing geological conditions, establish the geotechnical design parameters for the various soils and rock strata encountered, provide geotechnical recommendations for design of the proposed foundations and/or geotechnical features, and identify existing conditions that may influence construction. The investigation shall include fieldwork, such as trench excavations and/or borings, geologic mapping, soils samples, laboratory analysis, and a thorough evaluation of all encountered geotechnical hazards. Additionally, for sites 13, 20, 22, and 24 (APNs 367050068, 367050064, 380220002, and 380270013, respectively) the report shall define and delineate any hazard of surface fault rupture and shall be prepared in accordance with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act (per Chapter 15.76 of the City of Wildomar Municipal Code). The recommendations in the report shall ensure that the project is built to standards outlined in the California Building Code. The project applicant(s) shall incorporate the recommendations of the approved project-level geotechnical study into project plans. The project's building plans shall demonstrate that they incorporate all applicable	

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			recommendations of the design-level geotechnical study and comply with all applicable requirements of the latest adopted version of the CBC. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. All on-site soil engineering activities shall be conducted under the supervision of a licensed geotechnical engineer or certified engineering geologist. *Timing/Implementation: Prior to the issuance of a building permit* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.5.2	The project area includes soils that may be subject to strong seismic ground shaking.	PS	Implementation of mitigation measure MM 3.5.1	LS
Impact 3.5.3	The city includes soils that may be subject to seismic-related liquefaction.	PS	Implementation of mitigation measure MM 3.5.1.	LS
Impact 3.5.4	Wildomar is located in a region designated as an area of low landslide activity.	LS	None required.	LS
Impact 3.5.5	The proposed project could result in substantial soil erosion or the loss of topsoil. However, compliance with National Pollutant Discharge Elimination System (NPDES) Storm Water General Construction Permit, the California Building Code, and local City ordinances would result in less than significant impacts.	LS	None required.	LS
Impact 3.5.6	Wildomar is 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	PS	Implementation of mitigation measure MM 3.5.1.	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
	off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.			
Impact 3.5.7	Sites 1 through 25 are not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), and therefore would not create substantial risks to life or property.	LS	None required.	LS
Impact 3.5.8	The proposed project would not propose the use of septic tanks or alternative wastewater disposal systems.	LS	None required.	LS
Impact 3.5.9	Wildomar is located in an area classified as having potential for mineral deposits to exist.	PS	**MM 3.5.9** Pursuant to the Public Resources Code, the Surface Mining and Reclamation Act, Chapter 9, Article 4, Section 2762(e), prior to the issuance of grading permit on lands classified by the State Geologist as MRZ-3 (as described in paragraph (3) of subdivision (b) of Section 2761), the County Geologist shall make a site-specific determination as to the site's potential to contain or yield important or significant mineral resources of value to the region and the residents of the State of California. • If it is determined by the County Geologist that lands classified as MRZ-3 have the potential to yield significant mineral resources which may be of "regional or statewide significance" and the proposed use is considered "incompatible" (as defined by Section 3675 of Title 14, Article 6, of the California Code of Regulations) and could threaten the potential to extract said minerals, the project applicant(s) shall prepare an evaluation	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		of the area in order to ascertain the significance of the mineral deposit located therein. This site-specific mineral resources study shall be performed to, at a minimum, document the site's known or inferred geological conditions; describe the existing levels of development on or near the site which might preclude mining as a viable adjacent use; and analyze the state standards for designating land as having "regional or statewide significance" under the Surface Mining and Reclamation Act. The results of such evaluation shall be transmitted to the State Geologist and the State Mining and Geological Board (SMGB). • Should significant mineral resources be identified, the project applicant(s) shall either avoid said resource or shall incorporate appropriate identified resources subject to a site-specific discretionary review and CEQA process. *Timing/Implementation: Prior to the issuance of a building permit* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.5.10 Implementation of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in Wildomar and nearby areas, would not contribute to cumulative geologic, soils, and minerals impacts.	LCC	None required.	LCC

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
Hydrology and Water Quality					
Impact 3.6.1	Potential development associated with the proposed project could result in erosion and water quality degradation of downstream surface water and groundwater resources. Compliance with the requirements of the SWRCB's Construction General Permit during construction and implementation of best management practices during operations would minimize the potential for such degradation.	PS	**MM 3.6.1**	Prior to the approval of the grading permit for future development on each of the project sites, the project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are less than significant The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the project site at all times. In addition, the project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan (WQMP) prior to the issuance of the grading permit for future development on the project site in order compliance with the Areawide Urban Runoff Management Program. The project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device. The project will be responsible for maintenance of the basins. *Timing/Implementation: Prior to issuance of a grading permit* *Enforcement/Monitoring: City of Wildomar Engineering Department*	
Impact 3.6.2	The proposed project would introduce impervious surfaces in the form of structures and parking lots to previously undeveloped parcels of land. This would result in an incremental reduction in recharge of the local groundwater aquifer. However, implementation of the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	LS	None required.	LS
Impact 3.6.3	Development of the proposed project may alter the existing drainage pattern of the sites to impact stormwater runoff rates and volumes compared to existing conditions.	PS	Implementation of mitigation measure MM 3.6.1.	LS
Impact 3.6.4	Several sites proposed for development are within	PS	**MM 3.6.4** Prior to the approval of grading permits	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
	Zone AE, a FEMA-designated 100-year floodplain.		for potential future development on sites 2, 3, 5, 7, 11, 14, and 19, the City of Wildomar shall require that flood control measures be implemented to protect any structures from flooding that would be located with the 100-year mapped floodplain areas (Zone AE). This will include gaining concurrence from FEMA that proposed development on MUPA sites 2, 3, 5, 7, 11, 14, and 19 meets all development standards for development in floodplains. *Timing/Implementation: Prior to the issuance of grading permit* *Enforcement/Monitoring: City of Wildomar Planning Department*	
Impact 3.6.5	The proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the Santa Margarita and Santa Ana watersheds, could alter drainage conditions, rates, volumes, and water quality, which could result in potential erosion, flooding, and water quality impacts within the overall watersheds.	LCC	None required.	LCC
Land Use and Planning				
Impact 3.7.1	Implementation of the proposed Housing Element Update would not result in the division of an existing community nor would it result in substantial land use compatibility issues.	LS	None required.	LS
Impact 3.7.2	The proposed project has been prepared to be consistent with the Wildomar General Plan and Zoning Ordinance.	LS	None required.	LS
Impact 3.7.3	Development allowed under the proposed project	PS	Implementation of mitigation measures MM 3.2.1 and	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
	could conflict with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) effort. Therefore, conflicts with an applicable habitat conservation plan are considered potentially significant.		MM 3.2.8, as discussed in Section 3.2, Biological Resources.	
Impact 3.7.4	Development of the proposed project will be consistent with the planning policies of the City of Wildomar General Plan and Municipal Code while being consistent with the surrounding land uses.	NI	None required.	NI
Population and Housing				
Impact 3.8.1	The proposed project would result in indirect housing and population growth through changes in land use and zoning designations.	LS	None required.	LS
Impact 3.8.2	The proposed project would not result in the displacement of people or housing. To the contrary, the proposed project would indirectly allow for the development of additional housing to meet the needs of a growing population.	NI	None required.	NI
Impact 3.8.3	Buildout of the 2035 General Plan plus implementation of the proposed project would not result in a population and housing growth in such substantial amounts or concentrations so as to result in significant cumulative impacts on population and housing. Cumulative population and housing impacts would be less than cumulatively considerable.	LCC	None required.	LCC
Public Services, Utilities, and Recreation				
Impact 3.9.1.1	Implementation of the proposed project would result in the need for additional fire protection and emergency services, which may result in the need for new or expanded facilities and infrastructure to provide adequate levels of service and fire flow	LS	None required.	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
	through 2021. Since the timing and location of potential necessary improvements is unknown at this time, it would be too speculative to analysis the environmental impacts associated with those improvements at this time. The timing and need would be determined during periodic review of service contract agreements and review of housing development proposals. Future development on the identified sites would be required to pay development impact fees to contribute their fair share toward necessary improvements. In addition, any necessary fire protection facility improvements (facilities and/or infrastructure) would be subject to subsequent environmental review at the time improvements are proposed, which would identify and mitigate any site-specific environmental effects.			
Impact 3.9.1.2	While the proposed project is located in an area that is identified as being exposed to a very high risk of wildfire, it is more specifically located in an area that is developed and well served by fire prevention services.	LS	None required.	LS
Impact 3.9.1.3	Implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the RCFD Battalion 2 service area, may increase the demand for fire protection and emergency medical services, as well as fire flow, and increase number of dwelling units within a wildfire hazard area. However, given the required periodic review of inter-jurisdictional fire response agreements and that all future development would bee requirement required for to comply with the California Fire Code and subsequent CEQA environmental review, the proposed project's contribution to fire protection and emergency	LCC	None required.	LCC

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
	services, fire flow, and wildfire hazards would not be cumulatively considerable.			
Impact 3.9.2.1	Implementation of the proposed project will not result in a significant increased demand for law enforcement services and will not result in the need for new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts.	LS	None required.	LS
Impact 3.9.2.2	Implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the service area of the RCSD's Lake Elsinore Station, would increase the demand for law enforcement services and thus require additional staffing, equipment, and facilities, the construction of which could cause significant environmental impacts. However, future development would be subject to subsequent project-level CEQA review, which would identify any future need for expanded services/facilities and provide mitigation for the construction of those facilities accordingly..	LCC	None required.	LCC
Impact 3.9.3.1	The proposed project will not result in significant increased enrollment in the local school district ultimately resulting in the need for construction of additional school facilities.	LS	None required.	LS
Impact 3.9.3.2	Population growth associated with implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, will not result in a significant cumulative increase in student enrollment.	LCC	None required.	LCC
Impact 3.9.4.1	Implementation of the proposed project will increase the amount of allowable development in	LS	None required.	LS

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
	the city, thereby increasing demand for water supply that could result in significant effects on the physical environment. However, adequate water supply and delivery infrastructure exists to accommodate the increased demand associated with the proposed project actions.			
Impact 3.9.4.2	Implementation of the proposed project would increase demand for water supply and thus require additional water supply infrastructure that could result in a physical impact to the environment.	LS	None required.	LS
Impact 3.9.4.3	Implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, would increase the cumulative demand for water supplies. However, this increased demand will not be sufficient to lead to a requirement for new water facilities and related infrastructure.	LCC	None required.	LCC
Impact 3.9.5.1	Implementation of the proposed project will not result in wastewater discharge that would exceed wastewater treatment requirements of the Regional Water Quality Control Board.	LS	None required.	LS
Impact 3.9.5.2	The proposed project will slightly increase wastewater flows. However, the increase represented by the proposed project will not require any additional infrastructure or treatment capacity.	LS	None required.	LS
Impact 3.9.5.3	Development associated with the proposed project, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, would contribute to the cumulative demand for wastewater service. However, continued implementation of EVMWD	LCC	None required.	LCC

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
	standards would ensure adequate wastewater facilities are provided.			
Impact 3.9.6.1	Implementation of the proposed project will generate increased amounts of solid waste that will need to be disposed of in landfills or recycled.	LS	None required.	LS
Impact 3.9.6.2	Implementation of the proposed project, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the region, would result in increased demand for solid waste services.	LCC	None required.	LCC
Impact 3.9.7.1	Implementation of the proposed project would increase the population that will be served by parks and recreation facilities.	LS	None required.	LS
Impact 3.9.7.2	Implementation of the proposed project, along with other existing, planned, proposed, approved, and reasonably foreseeable development, would increase the use of existing parks and would require additional parks and recreation facilities in the cumulative setting, the provision of which could have an adverse physical effect on the environment.	LCC	None required.	LCC
Transportation and Circulation				
Impact 3.10.1	The project will not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The proposed project would result in no new impacts over what has already been identified.	S	None feasible.	SU

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CCU – Cumulatively Considerable and Unavoidable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 3.10.2	Implementation of the proposed project would not conflict with the Riverside County Congestion Management Program or with any other adopted congestion management plans or standards.	NI	None required.	NI
Impact 3.10.3	Implementation of the proposed project would not affect airport traffic patterns.	NI	None required.	NI
Impact 3.10.4	Implementation of the proposed project would not substantially increase hazards due to dangerous design features or incompatible uses.	NI	None required.	NI
Impact 3.10.5	Implementation of the proposed project would not result in inadequacies in emergency access.	NI	None required.	NI
Impact 3.10.6	The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation.	LS	None required.	LS
Impact 3.10.7	Buildout of the 2035 General Plan plus implementation of the proposed project will not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.	CCU	None feasible.	CCU
Impact 3.10.8	Buildout of the 2035 General Plan plus implementation of the proposed project would not result in a cumulative adverse impact that would conflict with alternative transportation plans and policies.	NI	None required.	NI

S – Significant CC – Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI – No Impact
PS – Potentially Significant LCC – Less than Cumulatively Considerable CS – Cumulatively Considerable and Unavoidable

1.0 Introduction

This Draft Environmental Impact Report (Draft EIR; DEIR) was prepared in accordance with and in fulfillment of the California Environmental Quality Act (CEQA) and the CEQA Guidelines. As described in CEQA Guidelines Section 15121(a), an environmental impact report (EIR) is a public informational document that assesses the potential environmental impacts of a project. CEQA requires that an EIR be prepared by the agency with primary responsibility over the approval of a project (the lead agency). The City of Wildomar (City) is the lead agency for the proposed 2013–2021 Housing Element update (project; proposed project). Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development where feasible and have the obligation to balance economic, environmental, and social factors.

1.1 PURPOSE OF THE EIR

The California Department of Housing and Community Development (HCD) allocates regional housing needs numbers to regional councils of governments throughout the state. The Regional Housing Needs Plan (RHNP) for Riverside County is developed by the Southern California Association of Governments (SCAG) and allocates to cities and the unincorporated county their "fair share" of the region's projected housing needs, also known as the Regional Housing Needs Allocation (RHNA). The RHNP allocates the RHNA based on household income groupings over the eight-year planning period for each specific jurisdiction's housing element.

The City's 2013–2021 Housing Element is designed to address the projected housing needs of current and future city residents and to comply with state law requiring amendment of the Housing Element every eight years (Sections 65580–65589.8 of the California Government Code). The proposed 2013–2021 Housing Element is the City's policy document guiding the provision of housing to meet future needs for all economic segments of Wildomar, including housing affordable to lower-income households. Please refer to Section 2.0, Project Description, for a detailed description of the proposed 2013–2021 Housing Element.

1.2 KNOWN TRUSTEE AND RESPONSIBLE AGENCIES

For the purpose of CEQA, the term "trustee agency" means a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. In CEQA, the term "responsible agency" includes all public agencies other than the lead agency that may have discretionary actions associated with the proposed project. The following agencies have been identified as potential responsible or trustee agencies:

- US Army Corps of Engineers, San Diego District
- US Fish and Wildlife Service
- Native American Heritage Commission
- California Department of Transportation (Caltrans), District 8
- California Department of Fish and Wildlife
- California Department of Housing and Community Development
- South Coast Air Quality Management District
- State Water Resources Control Board
- Santa Ana Regional Water Quality Control Board
- San Diego Regional Water Quality Control Board
- Southern California Association of Governments
- Elsinore Valley Municipal Water District (EVMWD)

1.3 TYPE OF DOCUMENT

The proposed project makes changes to existing housing policies found in the Housing Element of the General Plan. This Draft EIR reviews the changes proposed in the 2013–2021 Housing Element and zoning ordinance and is considered a Program EIR due its programmatic evaluation of the policy changes, rather than detailed project level analyses of specific development proposals.

1.4 INTENDED USE OF THE EIR

This Draft EIR is intended to evaluate the environmental impacts of the proposed 2013–2021 Housing Element for adoption and incorporation into the City of Wildomar General Plan.

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the CEQA Guidelines identify content requirements for EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The environmental issues addressed in this Draft EIR were established through review of environmental documentation developed for the project, environmental documentation for nearby projects, and public agency responses to the Notice of Preparation (NOP). This Draft EIR is organized in the following sections:

EXECUTIVE SUMMARY

This section provides a project narrative and identifies environmental impacts and mitigation measures through a summary matrix consistent with CEQA Guidelines Section 15123.

SECTION 1.0 – INTRODUCTION

This section provides an overview that describes the intended use of the EIR, as well as the review and certification process.

SECTION 2.0 – PROJECT DESCRIPTION

This section provides a detailed description of the proposed project and project objectives, along with background information and physical characteristics consistent with CEQA Guidelines Section 15124.

SECTION 3.0 – ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES, AND CUMULATIVE IMPACTS

Section 3.0 contains an analysis of environmental topic areas as identified below. Each subsection contains a description of the existing setting of the project area and of the regulatory environment, identifies standards of significance, and identifies project-related and cumulative impacts and recommends mitigation measures. The major environmental topics are addressed in the following sections:

3.1 Air Quality
3.2 Biological and Natural Resources
3.3 Climate Change and Greenhouse Gases

3.4 Cultural and Paleontological Resources
3.5 Geology and Soils
3.6 Hydrology and Water Quality
3.7 Land Use
3.8 Population and Housing
3.9 Public Services, Utilities, and Recreation
3.10 Transportation and Circulation

SECTION 4.0 – PROJECT ALTERNATIVES

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project that could feasibly attain the basic objectives of the project and avoid and/or substantially lessen any of the significant effects of the project. This section discusses alternatives to the proposed project, including the CEQA mandatory "No Project" alternative, that are intended to avoid or reduce significant environmental impacts of the proposed project.

SECTION 5.0 – OTHER CEQA ANALYSIS

This section contains discussions and analysis of various topical issues mandated by CEQA. These topics include significant environmental effects that cannot be avoided if the project is implemented, as well as growth-inducing impacts.

SECTION 6.0 – ACRONYMS AND ABBREVIATIONS

This section defines acronyms and abbreviations used throughout the DEIR.

SECTION 7.0 – REPORT PREPARERS

This section lists all authors and agencies that assisted in the preparation of the report by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the EIR, as well as all technical material prepared to support the analysis. All technical appendices are provided on CD-ROM.

1.6 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the 2013–2021 Housing Element update project EIR will involve the following general procedural steps:

NOTICE OF PREPARATION

In accordance with Section 15082 of the CEQA Guidelines, the City prepared a Notice of Preparation (NOP) of an EIR for the project on May 2, 2013. The City was identified as the lead agency for the proposed project. The notice was circulated to the public, local, state, and federal agencies, and other interested parties to solicit comments on the proposed project. A scoping meeting was held on May 20, 2013, to receive additional comments. Concerns raised in

response to the NOP were considered during preparation of the Draft EIR. The NOP and comments by interested parties are presented in **Appendix 1.0.**

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives. Upon completion of the Draft EIR, the City will file the Notice of Completion (NOC) with the Governor's Office of Planning and Research (OPR) and a Notice of Availability (NOA) with the Riverside County Clerk to begin the public review period (Public Resources Code Section 21161).

PUBLIC NOTICE/PUBLIC REVIEW

Concurrent with the Notice of Completion, the City will provide public notice of the availability of the Draft EIR for public review and invite comment from the general public, agencies, organizations, and other interested parties. The public review and comment period is 45 days. Public comment on the Draft EIR will be accepted electronically, in written form and orally at public hearings. Notice of the date, time and location of the hearing will be published prior to the hearing in accordance with state and local laws. All comments or questions regarding the Draft EIR should be addressed to:

City of Wildomar
Housing Element Update 2013–2021 DEIR
Planning Department
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595
Attention: Matthew C. Bassi, Planning Director

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR (FEIR) will be prepared. The FEIR will respond to written comments received during the public review period and to oral comments made at any public hearing.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City of Wildomar City Council will review and consider the Final EIR and may certify the Final EIR if it finds that the EIR is adequate and complete. The rule of adequacy generally holds that the EIR can be certified if it shows a good faith effort at full disclosure of environmental information and provides sufficient analysis to allow decisions to be made regarding the project in contemplation of its environmental consequences. Note that certification of the EIR does not automatically result in project approval.

Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or reject the proposed project. Any decision to approve the project will be accompanied by written findings in accordance with CEQA Guidelines Section 15091. If applicable, the City Council may approve the project even with significant and unavoidable environmental impacts by adopting a statement of overriding considerations as outlined in CEQA Guidelines Section 15093. A Mitigation Monitoring and Reporting Program (MMRP), as described below, would also be adopted for mitigation measures that have been incorporated into or imposed upon the

project to reduce or avoid significant effects on the environment. The MMRP will be designed to ensure that these measures are carried out during project implementation.

MITIGATION MONITORING AND REPORTING PROGRAM

CEQA Section 21081.6(a) requires lead agencies to adopt a Mitigation Monitoring and Reporting Program to describe measures that have been adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The specific reporting or monitoring program required by CEQA is not required to be included in the EIR; however, it will be presented to the City Council for adoption. Throughout the EIR, mitigation measures have been clearly identified and presented in language that will facilitate establishment of an MMRP. Any mitigation measures adopted by the City as conditions for approval of the project will be included in an MMRP to verify compliance.

2.0 Project Description

This section describes the proposed project, depicts the location of the project both regionally and locally, and describes the existing conditions of the project area and vicinity. Decisions associated with the project subject to the California Environmental Quality Act (CEQA) are listed and the implementation process is described in the order that it would occur, including both actions the City would take now and actions that may be taken in the future.

2.1 PROJECT LOCATION AND SETTING

The environmental setting consists of the all property within the city limits of the City of Wildomar, which is located in the southwestern portion of Riverside County **(Figure 2.0-1)**. The city is generally bounded by the mountains of the Cleveland National Forest and rural residential uses to the west, the Cities of Lake Elsinore and Canyon Lake to the north and northwest, the City of Murrieta to the south and southeast, and rural residential uses to the east in the City of Menifee. The city's topography is generally rolling, with steeper terrain on the west and east and valley areas in the central portion of the city. Interstate 15 (I-15) aligns northwest to southeast through the center of the city and is the main transportation arterial. Existing land uses in the city consist of a variety of primarily residential, commercial, office, and industrial uses, as well as recreational, open space, and institutional uses. **Table 2.0-1** depicts the General Plan land use designations for the City of Wildomar.

TABLE 2.0-1
GENERAL PLAN LAND USE DESIGNATIONS

Foundation Component	Land Use Designation		Allowed Density	General Uses
Agriculture	AG	Agriculture	10 ac min.	Agricultural land including row crops, groves, nurseries, dairies, poultry farms, processing plants, and other related uses One single-family residence allowed
Rural	RR	Rural Residential	5 ac min.	Single-family residences Allows limited animal-keeping and agricultural uses
	RM	Rural Mountainous	10 ac min.	Single-family residential uses Allows limited animal-keeping, agriculture, recreational uses
	RD	Rural Desert	10 ac min.	Single-family residential Allows limited animal-keeping, agriculture, recreational uses
Rural Community	EDR EDR-RC	Estate Density Residential	2 ac min.	Single-family detached residences Limited agriculture, intensive equestrian, and animal-keeping
	VLDR VLD-RC	Very Low Density Residential	1 ac min.	Single-family detached residences Limited agriculture, intensive equestrian, and animal-keeping
	LDR LDR-RC	Low Density Residential	½ ac min.	Single-family detached residences Limited agriculture, intensive equestrian, and animal-keeping

Foundation Component	Land Use Designation		Allowed Density	General Uses
Open Space	C	Conservation	N/A	The protection of open space for natural hazard protection, and natural and scenic resource preservation. Existing agriculture is permitted.
	CH	Conservation Habitat	N/A	Applies to public and private lands conserved and managed in accordance with adopted Multi-Species Habitat and other Conservation Plans.
	W	Water	N/A	Includes bodies of water and natural or artificial drainage corridors. Extraction of mineral resources subject to SMP may be permissible provided that flooding hazards are addressed and long term habitat and riparian values are maintained.
	R	Recreation	N/A	Recreational uses including parks, trails, athletic fields, and golf courses. Neighborhood parks are permitted within residential land uses.
	RUR	Rural	20 ac min.	One single-family residence allowed per 20 acres. Extraction of mineral resources subject to SMP may be permissible provided that scenic resources and views are protected.
	MR	Mineral Resource	N/A	Mineral extraction and processing facilities. Areas held in reserve for future mineral extraction and processing.
Community Development	EDR	Estate Density Residential	2 ac min.	Single-family detached residences on large parcels of 2 to 5 acres. Limited agriculture and animal keeping is permitted, however, intensive animal keeping is discouraged.
	VLDR	Very Low Density Residential	1 ac min.	Single-family detached residences on large parcels of 1 to 2 acres. Limited agriculture and animal keeping is permitted, however, intensive animal keeping is discouraged.
	LDR	Low Density Residential	½ ac min.	Single-family detached residences on large parcels of ½ to 1 acre. Limited agriculture and animal keeping is permitted, however, intensive animal keeping is discouraged.
	MDR	Medium Density Residential	2–5 du/ac	Single-family detached and attached residences Limited agriculture and animal-keeping is permitted
	MHDR	Medium High Density Residential	5–8 du/ac	Single-family attached and detached residences

Foundation Component	Land Use Designation		Allowed Density	General Uses
	HDR	High Density Residential	8–14 du/ac	Single-family attached and detached residences, including townhouses, stacked flats, courtyard homes, patio homes, and zero lot line homes
	VHDR	Very High Density Residential	14–20 du/ac	Single-family attached residences and multi-family dwellings
	HHDR	Highest Density Residential	20–40 du/ac	Multi-family dwellings, includes apartments and condominiums; multi-storied (3+) structures are allowed.
	CR	Commercial Retail	0.20–0.35 FAR	Local and regional serving retail and service uses. The amount of land designated for Commercial Retail exceeds that amount anticipated to be necessary to serve the County's population at build out. Once build out of Commercial Retail reaches the 40% level within any Area Plan, additional studies will be required before CR development beyond the 40 % will be permitted.
	CT	Commercial Tourist	0.20–0.35 FAR	Tourist related commercial including hotels, golf courses, and recreation/amusement activities.
	CO	Commercial Office	0.35–1.0 FAR	Variety of office related uses including financial, legal, insurance and other office services.
	LI	Light Industrial	0.25–0.60 FAR	Industrial and related uses including warehousing/distribution, assembly and light manufacturing, repair facilities, and supporting retail uses
	HI	Heavy Industrial	0.15–0.50 FAR	More intense industrial activities that generate significant impacts such as excessive noise, dust, and other nuisances.
	BP	Business Park	0.25–0.60 FAR	Employee intensive uses, including research & development, technology centers, corporate offices, "clean" industry and supporting retail uses.
	PF	Public Facilities	<0.60 FAR	Civic uses such as County administrative buildings and schools
	CC	Community Center	5–40 du/ac .010–0.30 FAR	Includes combination of small-lot single family residences, multi-family residences, commercial retail, office, business park uses, civic uses, transit facilities, and recreational open space within a unified planned development area. This also includes Community Centers in adopted specific plans.
	MUPA	Mixed Use Planning Area	No density range given	The intent of the designation is not to identify a particular mixture or intensity of land uses, but to designate areas where a mixture of residential, commercial, office, entertainment, educational, and/or recreational uses, or other uses is planned.

Source: City of Wildomar 2003

2.2 PROJECT BACKGROUND

California Government Code Section 65302(c) mandates that each city include a housing element in its general plan. The housing element is required to identify and analyze existing and projected housing needs, and include statements of the city's goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. State law (Government Code Sections 65580–65589.8) mandates the content of the housing element and requires an analysis of:

- Population and employment trends;
- The city's fair share of the regional housing needs;
- Household characteristics;
- An inventory of land suitable for residential development;
- Governmental and nongovernmental constraints on the improvement, maintenance, and development of housing;
- Special housing needs;
- Opportunities for energy conservation; and
- Publicly assisted housing developments that may convert to non-assisted housing developments.

The purpose of these requirements is to demonstrate adequate housing resources to meet the assigned Regional Housing Needs Allocation for all housing categories, but especially housing for very low-income and low-income households.

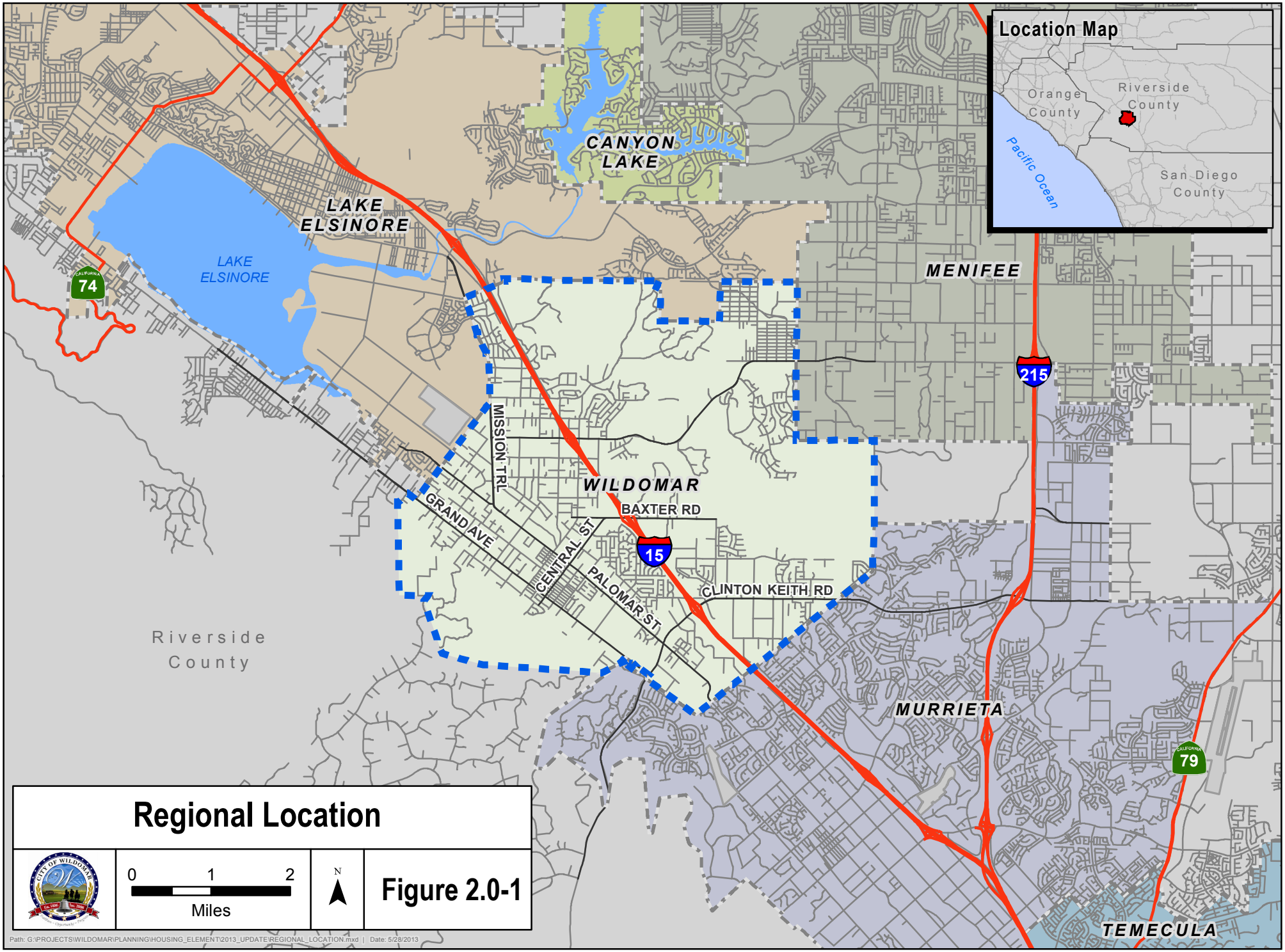
The California Department of Housing and Community Development (HCD) allocates regional housing needs numbers to the Southern California Association of Governments (SCAG), which in turn allocates to cities and the unincorporated county their "fair share" of the region's projected housing needs, also known as the Regional Housing Needs Allocation (RHNA). The housing needs are assigned based on household income groupings over the planning period for each specific jurisdiction's housing element.

The County of Riverside adopted a Housing Element for the 2006–2014 planning period (4th round Housing Element) covering the then unincorporated community of Wildomar. After the City incorporated on July 1, 2008, the City, County, Western Riverside Council of Governments (WRCOG), and SCAG entered into negotiations to determine the number of RHNA units that should be assigned to the City for the remainder of the planning period. In October 2011, it was agreed that the City would take 1,471 units, as shown in **Table 2.0-2**.

TABLE 2.0-2
2006-2013 REGIONAL HOUSING NEED

Income Category	Income Range*	2006–2013 RHNA
Extremely Low	$0–$20,000	174
Very Low	$20,001–$33,350	175
Low	$33,351–$53,350	241
Moderate	$53,351–$75,000	272
Above Moderate	$75,001 or more	609
Total	–	**1,471**

*Source: SCAG 2012, *Based on a four-person household.*


Location Map
Orange County
Riverside County
San Diego County
Pacific Ocean
CANYON LAKE
LAKE ELSINORE
LAKE ELSINORE
MENIFEE
74
215
MISSION TRL
WILDOMAR
BAXTER RD
GRAND AVE
CENTRAL ST
PALOMAR ST
15
CLINTON KEITH RD
Riverside County
MURRIETA
79
TEMECULA
Regional Location
0 1 2
Miles
N
Figure 2.0-1
Path: G:\PROJECTS\WILDOMAR\PLANNING\HOUSING_ELEMENT\2013_UPDATE\REGIONAL_LOCATION.mxd | Date: 5/28/2013

This page intentionally left blank.

The City of Wildomar drafted a new 4th round Housing Element, but the document was never adopted. In that draft document, the City completed a vacant land survey/analysis and determined that there is sufficient vacant land to satisfy the City's RHNA for moderate-income and above moderate-income households, but the City needed to change the General Plan land use designation and zoning for approximately 16 acres of land from Medium High Density Residential (MHDR) to Highest Density Residential (HHDR) to meet the City's RHNA for extremely low-, very low-, and low-income households. Because the redesignation and rezoning did not occur, the City has an unaccommodated need of 364 units for extremely low-, very low-, and low-income households from the 2006–2013 RHNA that is now added to the 2013–2021 RHNA.

TABLE 2.0-3
2013–2021 REGIONAL HOUSING NEEDS ALLOCATION (RHNA)

Income Category	Income Range*	2013–2021 RHNA
Extremely Low	$0–$20,100	310
Very Low	$20,101–$33,500	311
Low	$33,501–$53,600	415
Unaccommodated Need from 2006–2014 Housing Element		**364**
Subtotal Extremely Low, Very Low-, and Low-Income Units		***1,400***
Moderate	$53,601–$78,000	461
Above Moderate	$78,001 or more	1,038
Total		**2,899**

Source: SCAG 2012, *Based on a four-person household

To demonstrate housing resources for the extremely low-income, very low-income, and low-income housing categories, HCD requires that the City provide enough vacant land to accommodate at least 1,400 units. Further, the vacant land must have a permitted use at a density of at least 30 dwellings/housing units per acre. Currently, the City of Wildomar does not have sufficient vacant land zoned to meet the need for 1,400 housing units in the extremely low-income, very low-income, and low-income categories as shown in **Table 2.0-3**.

The Highest Density Residential (HHDR) land use designation (for 4 targeted sites) and the Mixed Use Planning Area (MUPA) land use designation (for 21 targeted sites) will both allow a density of 30 dwellings/housing units per acre. As stated in the General Plan, the HHDR designated land allows between 20 and 40 units per acre. The General Plan does not establish a density range for MUPA designated land, and MUPA land can be developed at any density. Thus, for the purposes of this DEIR, the highest density allowed in the General Plan (HHDR) is assumed to be the maximum density allowable in the MUPA. The City currently has approximately 122 acres of MUPA designated land but does not currently have any land designated HHDR.

PROJECT CHARACTERISTICS

The proposed project comprises the following actions by the City of Wildomar:

- General Plan Amendment to adopt the 2013–2021 Housing Element.
- Adoption of an implementing Mixed Use (MU) overlay zone district for the existing Mixed Use Planning Area (MUPA) land use designation.

- Land use designation change and rezoning of four parcels that total 25.96 acres from Medium High Density Residential (MHDR)/Business Park (BP) to Highest Density Residential (HHDR) and from Rural Residential (R-R) to Planned Residential (R-4), respectively.

- Other zoning text amendments to the City's Zoning Ordinance to comply with changes in state law and implementation of the Housing Element programs (see **Table 2.0-5** for a summary of the changes).

2013–2021 Housing Element Update

The implementation of the City's 2013–2021 Housing Element will address the projected housing needs of current and future city residents and comply with state law requiring amendment of the Housing Element (Sections 65580–65589.8 of the California Government Code). The 2013–2021 Housing Element is the City's policy document guiding the provision of housing to meet future needs for all economic segments of the city, including housing affordable to lower-income households.

An important component of the 2013–2021 Housing Element is the City's description of what it hopes to achieve during the current planning period. To accomplish this, the 2013–2021 Housing Element is based on six strategic goals:

Goal H-1: Assist in the development of adequate housing to meet the city's fair share of the region's housing needs for all economic segments of the population.

Goal H-2: Where appropriate, mitigate governmental constraints to the maintenance, improvement, and development of housing.

Goal H-3: Address the housing needs of special needs population groups.

Goal H-4: Conserve and improve the condition of the housing stock, particularly affordable housing.

Goal H-5: Promote equal housing opportunities for all persons regardless of race, age, sexual orientation, religion, or gender.

Goal H-6: Conserve energy in the development of new housing and the rehabilitation of existing housing.

Detailed descriptions of the policies and programs contained under each strategic goal, as well as responsibility for programs, specific time frames, and funding sources, are provided in **Appendix 2.0**, which contains the entire text of the City's 2013–2021 Housing Element. Quantified objectives related to the maintenance, preservation, improvement, and development of housing to meet the present and future needs of all economic segments of the population are also provided. Policies from the Housing Element that either address environmental impacts or have the potential to have environmental impacts will be discussed in the appropriate section of this Draft EIR.

Mixed Use Overlay Zone District for the Mixed Use Planning Area

Table 2.0-3 shows that Wildomar has approximately 122 acres of land designated Mixed Use Planning Area (MUPA) in the General Plan (Figure 2 and Table 2). As defined in the General Plan, the MUPA land use designation is intended to designate areas where a mixture of residential, commercial, office, entertainment, educational, and/or recreation uses or other uses are planned. However, it does not include a specific density range. The City does not have an implementing zone district, and thus, this EIR will evaluate the adoption of a Mixed Use (MU) overlay zone district that would establish density ranges and development parameters for property owners within the proposed district.

Overlay zone districts provide a method of incorporating development regulations across a specified area. Overlay districts are special zones that lie on top of existing zoning districts and are designed to supplement or supersede existing zoning regulations. Overlay zone districts usually provide a higher level of regulation than those required by the existing zoning classification, but can also allow for exceptions to the underlying zone district or require less restrictive standards. If the standards of an overlay district and the underlying zoning district conflict, the standards of the overlay district take priority. An overlay district is not limited by the underlying zone district or property lines and can contain numerous properties, each with different underlying zoning.

The proposed MU overlay zone district would allow for development of the 21 MUPA sites with a density of at least 30 units per acre and would also require that at least 30 percent of the total MUPA land designated in the General Plan be developed with high-density housing. For purposes of the Housing Element and this EIR, the City assumes that a maximum of 30 percent of the MUPA designated areas will be developed with 30 units per acre for a total of 1,085 units (**Table 2.0-4**). This assumption results in a shortfall of 315 units necessary to meet the RHNA allocation of 1,400 units. To address this deficiency, land use designations and zoning would be changed for the four additional parcels in the city (see discussion below and accompanying **Table 2.0-5**).

TABLE 2.0-4
MIXED USE PLANNING AREA DESIGNATED PARCELS

Site #	APN	Acreage	Existing Zoning	Existing General Plan Land Use	Unit Potential with Existing MUPA (40 du/acre)	Unit Potential with Existing Zoning (2 du/acre)	Unit Potential with MU Overlay Zone District (30 du/acre)	30 Percent Development Requirement with MU Overlay Zone District
1	376190001	2.99	R-R	MUPA	119	5	89	26
2	380160005	1.74	C-1/C-P	MUPA	69	0	52	15
3	380160009	3.48	C-1/C-P	MUPA	139	0	104	31
4	376410021	1.60	C-P-S	MUPA	64	0	48	14
5	380160006	1.54	C-1/C-P	MUPA	61	0	46	13
6	362250027	4.98	C-P-S	MUPA	199	0	149	44
7	380160004	3.73	C-1/C-P	MUPA	149	0	111	33
8	376410017	2.40	C-P-S	MUPA	96	0	72	21
9	362250001	5.84	R-R	MUPA	233	11	175	52
10	376190002	23.92	C-P-S	MUPA	956	0	717	215
11	380160007	4.46	C-1/C-P	MUPA	178	0	133	39
12	376180006	1.36	C-P-S	MUPA	54	0	40	12
13	367050068	6.48	R-R	MUPA	259	12	194	58
14	380160003	4.83	C-1/C-P	MUPA	193	0	144	43
15	367180015	19.40	C-P-S	MUPA	776	0	582	174
16	367180043	16.14	C-P-S	MUPA	645	0	484	145
17	376410016	2.51	C-P-S	MUPA	100	0	75	22
18	362250029	2.63	R-R	MUPA	105	5	78	23
19	380160008	3.65	C-1/C-P	MUPA	146	0	109	32
20	367050064	5.84	R-R	MUPA	233	0	175	52

Site #	APN	Acreage	Existing Zoning	Existing General Plan Land Use	Unit Potential with Existing MUPA (40 du/acre)	Unit Potential with Existing Zoning (2 du/acre)	Unit Potential with MU Overlay Zone District (30 du/acre)	30 Percent Development Requirement with MU Overlay Zone District
21	376410015	2.46	C-P-S	MUPA	98	0	73	21
Totals		**121.98**			**4,872**	**33**	**3,650**	**1,085**

Source: City of Wildomar 2013

General Plan Amendment and Change of Zone (MHDR Parcels)

In order to meet the RHNA unit deficiency resulting from the Mixed Use Overlay District discussed above, properties 22 through 25 (**Figure 2.0-2**) would be rezoned and their General Plan land use designation amended to allow for 30 dwelling units per acre, or a maximum of 623 total units on the properties (**Table 2.0-5**). This would be a net increase of 593 units over the total allowed under the existing zoning (30 total units).

Additionally, as shown in **Table 2.0-5**, there is currently an inconsistency between the land use designation and zoning with regard to allowable development potential for sites 22 through 25. While the existing zoning would allow a maximum of 30 total dwelling units on the properties, the existing land use designation would allow a total of 126 units on these same properties. The proposed zoning of R-4 and land use change to 30 units per acre on each of the properties would remedy the existing inconsistencies while also contributing the needed units to meet the RHNA for Wildomar.

The combination of the Mixed Use overlay District, which would result in the development of 1,085 multiple-family units (**Table 2.0-3**), and the rezoning of the sites shown in **Table 2.0-5**, which would result in a net increase of 593 total units on those properties, would yield a total of 1,678 potential multi-family units. This total exceeds the RHNA need of 1,400 units as shown in **Table 2.0-2**.

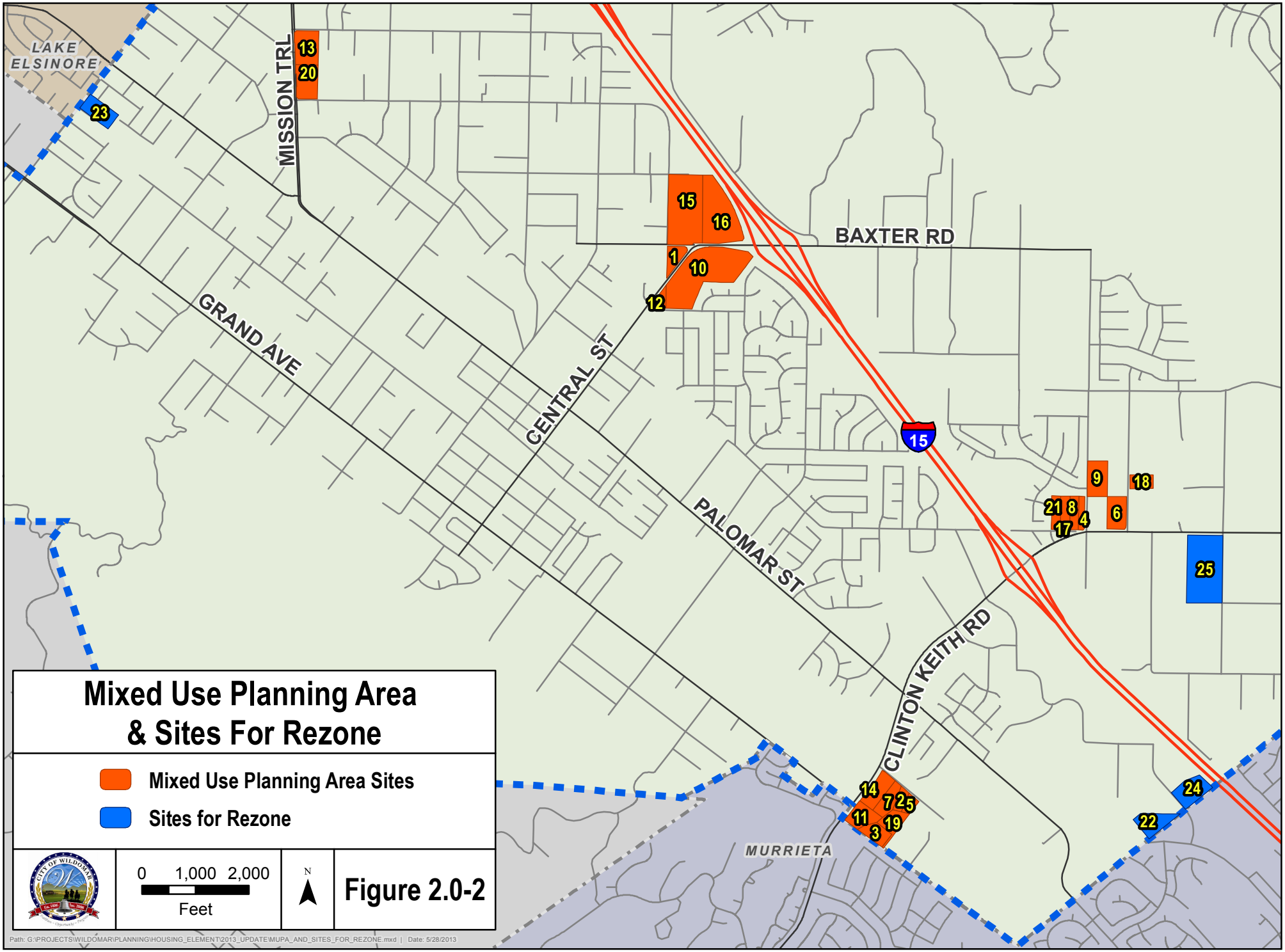
Additional details of the rezoning and land use amendments for sites 22 through 25 are discussed below.

Change of Zone for MHDR Parcels

Sites 22, 23, 24, and 25 are currently zoned Rural Residential (R-R), which is a zone district that does not allow high-density residential dwellings. The proposed zone district for the four parcels in **Table 2.0-5** is Planned Residential (R-4), which allows multiple-family dwellings as a permitted use (Zoning Ordinance Section 17.60.020). The R-4 zone district refers to the development standards of the General Residential (R-3) zone district that does not permit development up to 30 units to the acre. The proposed project would change the provisions of the Planned Residential (R-4) zone district to accommodate projects up to 30 units per acre on parcels greater than 1 acre in size. Additionally, only a portion of site 25 (10 acres of 19.35 acres) is currently considered vacant land available for housing stock. As such, only this vacant portion will be rezoned R-4 to meet the region's affordable housing needs (**Table 2.0-5**).

General Plan Amendment

The current General Plan land use designation for sites 22, 23, and 24 is Medium High Density Residential (MHDR), which allows development up to 8 dwelling units per acre. The proposed project would also amend the General Plan land use designation from MHDR to Highest Density Residential (HHDR) for sites 22, 23, and 24. The current land use designation for site 25 is Business Park (BP), which does not allow for residential development. The proposed General Plan land use designation of HHDR allows 20–40 units per acre, but will be limited to 30 units per acre in the Planned Residential (R-4) zone district as amended by the proposed project. A portion (10 acres of 19.35 acres) of site 25 will be redesignated HHDR to allow for high-density residential development. Additionally, only the portion of site 25 being redesignated HHDR is depicted in **Table 2.0-5**.


LAKE ELSINORE
MISSION TRL
GRAND AVE
CENTRAL ST
BAXTER RD
PALOMAR ST
CLINTON KEITH RD
MURRIETA
15
13
20
23
15
16
1
10
12
9
18
21
8
4
17
6
25
14
7
2
5
11
3
19
24
22
Mixed Use Planning Area & Sites For Rezone
Mixed Use Planning Area Sites
Sites for Rezone
0 1,000 2,000
Feet
N
Figure 2.0-2
Path: G:\PROJECTS\WILDOMAR\PLANNING\HOUSING_ELEMENT\2013_UPDATE\MUPA_AND_SITES_FOR_REZONE.mxd | Date: 5/28/2013

This page intentionally left blank.

TABLE 2.0-5
SITES FOR REZONE

Site #	APN	Acreage	Existing Zoning	Existing General Plan Land Use Designation	Unit Potential with Existing General Plan Land Use Designation (8 du/acre)	Unit Potential with Existing Zoning (2 du/acre)	Proposed Zoning	Proposed Land Use Designation	Unit Potential With Proposed Zoning & Land Use (30 du/acre)[1]
22	380220002	5.06	R-R	MHDR	40	10	R-4	HHDR	121
23	370400009	4.99	R-R	MHDR	39	9	R-4	HHDR	120
24	380270013	5.91	R-R	MHDR	47	11	R-4	HHDR	142
25	380250003	10	R-R	BP[2]	0	0	R-4	HHDR	240
Total Rezone		**25.96**			**126**	**30**			**623**

Source: City of Wildomar 2013

[1] Assumes 80 percent development capacity

[2] Business Park (BP) does not allow residential development

Zoning Ordinance Amendments

The proposed project includes nine zone text amendments to the City's existing Zoning Ordinance. A summary of the proposed Zoning Ordinance amendments is outlined in **Table 2.0-6.**

TABLE 2.0-6
ZONING ORDINANCE AMENDMENTS

Chapter	Section	Zone District	Proposed Section Amendment	Implementing Program (Housing Element)
17.72	17.72.010(C)	C-1/C-P	To allow single-room occupancy units (SROs) as a conditionally permitted use	The City will allow single-room occupancy units (SROs) to be permitted in the General Commercial Zone (C-1/C-P) with a conditional use permit. (Program H-13.1)
17.120	17.120.010(A)	A-1	To add farmworker housing as a permitted use	The allowance of farmworker housing in the Light Agricultural (A-1), Heavy Agricultural (A-2), and Residential Agricultural (R-A) zones by right. (Program H-13.2)
17.128	17.128.010(A)	A-2		
17.32	17.32.010(A)	R-A		
17.32	17.32.010(F)	R-A	To define transitional and supportive use	The amendment of the Zoning Ordinance to include separate definitions of transitional and supportive housing as defined in Health and Safety Code Sections 50675.2 and 50675.14, and to allow both transitional and supportive housing types as a permitted use in all residential zones. (Program H-16.2)
17.16	17.16.010(G)	R-R		
17.24	17.24.010(F)	R-1		
17.28	17.28.010(E)	R-1-A		
17.32	17.32.010(F)	R-A		
17.36	17.36.010(D)	R-2		
17.40	17.40.010(D)	R-2A		
17.44	17.44.010(A)	R-3		
17.48	17.48.020(A)	R-3		
17.52	17.52.010(C)	R-T		
17.56	17.56.010(E)	R-T-R		
17.60	17.60.020(E)	R-4		
17.68	17.68.020(C)	R-6		
17.16	17.16.010(A)	R-R	To add transitional and supportive housing as permitted uses	
17.24	17.24.010(A)	R-1		
17.28	17.28.010(A)	R-1-A		
17.32	17.32.010(A)	R-A		
17.36	17.36.010(A)	R-2		
17.40	17.40.010(A)	R-2A		
17.44	17.44.010(A)	R-3		
17.48	17.48.020(A)	R-3		
17.52	17.52.010(A)	R-T		

Chapter	Section	Zone District	Proposed Section Amendment	Implementing Program (Housing Element)
17.56	17.56.010(A)	R-T-R		
17.60	17.60.020(A)	R-4		
17.68	17.68.020(A)	R-6		
17.16	17.16.010(A)	R-R	To add secondary dwelling units and residential care facilities with six or fewer persons as a permitted use	The allowance of secondary dwelling units via a ministerial action (by right) in all single-family residential zones. (Program H-10.1) The amendment of the Zoning Ordinance to allow for residential care facilities with six or fewer persons by right in all residential zones. (Program H-13-4)
17.24	17.24.010(A)	R-1		
17.28	17.28.010(A)	R-1-A		
17.60	17.60.070(A)	R-4	To allow the development of 30 units per acre for properties larger than 1 acre in size	N/A
17.68	17.68.020(A)	R-6	To allow housing that qualifies under the state density bonus law as a permitted use	Grant density bonuses to encourage the development of affordable housing. (Program H-9.1)
17.68	17.68.020(C)		To define density bonus law	
17.36	17.36.010(C)	R-2	To add larger residential care facilities of seven or more persons as a conditionally permitted use	The City will amend the Zoning Ordinance to allow larger residential care facilities of seven or more persons in the R-2 and R-3 zones with a conditional use permit. (Program H-13.4)
17.44	17.44.010(B)	R-3		

Source: City of Wildomar 2013

2.3 GENERAL PLAN SETTING AND BACKGROUND

Much of the unincorporated portion of Riverside County is divided into 19 area plans in the County General Plan. The purpose of these area plans is to provide more detailed land use and policy direction regarding local issues such as land use, circulation, open space, and other topical areas. The unincorporated community of Wildomar was included in the Area Plan known as Elsinore. Upon incorporation, the City adopted the County General Plan, including the Elsinore Area Plan, as the City's General Plan. The Elsinore Area Plan reflects the proposed General Plan objectives for Wildomar and surrounding areas in several ways. It does so by intensifying and mixing uses at nodes adjacent to transportation corridors, by more accurately reflecting topography and natural resources in land use designations, by avoiding high-intensity development in natural hazard areas, and by considering compatibility with adjacent communities' land use plans as well as the desires of residents in the plan area. The land use designations maintain the predominantly rural character of the Meadowbrook and Warm Springs communities, the natural and recreational characteristics of the Cleveland National Forest, and the mix of rural and community development uses in Cleveland Ridge. It is recommended that multipurpose open space should be incorporated into the design of new and existing communities. In addition to providing habitat and recreational value, the conservation linkages within the Elsinore Area Plan help provide a separation between communities and provide additional definition for existing communities.

The City's General Plan is a blueprint for Wildomar's future. It describes anticipated future growth, development, and environmental management over the long term. It is intended to act as a "constitution" for both public and private development, and serve as the foundation for the city's growth and land use–related decision-making. The General Plan is meant to express the community's goals with respect to both the man-made and natural environments and to set forth the policies and implementation measures needed to achieve those goals for the welfare of those who live, work, and do business in the city.

2.4 PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires that the project description in an EIR include "a statement of the objectives sought by the proposed project," which should include "the underlying purpose of the project." The purpose of the 2013–2021 Housing Element is to identify housing solutions that solve local housing problems and to meet or exceed the Regional Housing Needs Allocation. The City recognizes that housing is a need that is met through many resources and interest groups. This Housing Element establishes the local goals, policies, and actions (programs) the City will implement and/or facilitate to solve identified housing issues. The following objectives have been identified for the 2013–2021 Housing Element:

- Meet the City of Wildomar's statutory obligations to address the need for low-income housing.
- Maintain the existing housing stock to serve housing needs.
- Ensure capacity for the development of new housing to meet the RHNA at all income levels.
- Encourage housing development where supported by existing or planned infrastructure, while maintaining existing neighborhood character.
- Encourage, develop, and maintain programs and policies to meet projected affordable housing needs.
- Develop a vision for Wildomar that supports sustainable local, regional, and state housing and environmental goals.
- Provide new housing communities with substantial amenities to provide a high quality of life for residents.
- Present the California Department of Housing and Community Development with a Housing Element that meets the requirements of the settlement agreement.
- Adopt a Housing Element that substantially complies with California housing element law.

2.5 PURPOSE AND LEGAL AUTHORITY

The proposed 2013–2021 Housing Element requires the discretionary approval of the City of Wildomar. Therefore, it is subject to the requirements of CEQA. In accordance with Section 15121 of the CEQA Guidelines, the purpose of this EIR is to serve as an informational document that:

> *...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.*

This document will serve as a program EIR for the 2013–2021 Housing Element update. Although the legally required contents of a program EIR are the same as those of a project EIR, program EIRs are typically more conceptual and may contain a more general discussion of impacts, alternatives, and mitigation measures than a project EIR. As provided in Section 15168 of the State CEQA Guidelines, a program EIR may be prepared on a series of actions that may be characterized as one large project. Use of a program EIR provides the City (as lead agency) with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the City with greater flexibility to address environmental issues and/or cumulative impacts on a comprehensive basis.

Agencies generally prepare program EIRs for programs or a series of related actions that are linked geographically, are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program, or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways. In practice, this program EIR could be utilized as a first tier of environmental review for subsequent activities that include site-specific environmental review of new development projects in accordance with the 2013–2021 Housing Element. However, due to the speculative nature and site specificity of future development associated with the implementation of the Housing Element update, if new effects could occur due to project discrepancies when compared to the program or due to a change in baseline conditions, an EIR or a negative declaration would be required for the specific future project. Prior to the issuance of any discretionary entitlements for future development, the City must either determine that the program EIR analysis is sufficiently specific and comprehensive to cover future projects or require additional environmental review and documentation.

2.6 JURISDICTION/PERMIT GRANTING AGENCIES

There are no other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement) for the proposed 2013–2021 Housing Element. The California Department of Housing and Community Development reviews and certifies housing elements; however, its approval is not required for adoption by the City.

REFERENCES

City of Wildomar. 2003. *General Plan*.

———. 2013. *Housing Element.*

SCAG (Southern California Association of Governments). 2012. *Regional Housing Needs Assessment.* Accessed May 9, 2013. http://rtpscs.scag.ca.gov/Pages/Regional-Housing-Needs-Assessment.aspx.

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

The following is an introduction to the environmental analysis for the proposed project, including a cumulative analysis and a discussion of general assumptions used in the environmental analysis. The reader is referred to the individual technical sections of the Draft Environmental Impact Report (Draft EIR or DEIR) (Sections 3.1 through 3.11) for further information on the specific assumptions and methodologies used in the analysis for each particular technical subject.

ANALYSIS ASSUMPTIONS USED TO EVALUATE THE PROPOSED PROJECT

BASELINE ENVIRONMENTAL CONDITIONS ASSUMED IN THE DRAFT EIR

Section 15125(a) of the California Environmental Quality Act (CEQA) Guidelines requires that an environmental impact report (EIR) include a description of the physical environmental conditions in the vicinity of a project as they exist at the time the Notice of Preparation (NOP) is published and the environmental analysis is begun. The CEQA Guidelines also specify that this description of the physical environmental conditions is to normally serve as the baseline physical conditions by which a lead agency determines whether impacts of a project are considered significant.

The environmental setting conditions of the proposed project are described in detail in the individual technical sections of the Draft EIR (see Sections 3.1 through 3.11). In general, these sections describe the setting in the City of Wildomar as it existed when the NOP for the proposed project was released on May 2, 2013. All the sites analyzed are generally flat, and with the exception of site 20, are currently vacant, with naturally vegetated, pervious ground cover. Part of site 20 is paved with a parking lot, while the rest is used for recreational sports and has vegetation for groundcover.

STRUCTURE OF THE ENVIRONMENTAL IMPACT ANALYSIS

The individual technical sections of the Draft EIR include the following information:

Existing Setting

This subsection includes a description of the physical setting associated with the technical area of discussion, consistent with CEQA Guidelines Section 15125. As previously identified, the existing setting is based on conditions as they existed when the NOP for the proposed project was released.

Regulatory Framework

This subsection identifies applicable federal, state, regional, and local plans, policies, laws, and regulations that apply to the technical area of discussion.

Impacts and Mitigation Measures

This subsection identifies direct and indirect environmental effects associated with implementation of the proposed project. Standards of significance are identified and used to determine whether the environmental effects are considered "significant" and require the application of mitigation measures. Each environmental impact analysis is identified numerically.

Mitigation measures were developed through a review of the environmental effects of the proposed project by consultants with technical expertise as well as by environmental professionals. When a precise mitigation measure was not possible, or if the extent of the

mitigation is dependent upon future action(s), the measure identifies "performance standards" that identify clear requirements which would avoid or minimize significant environmental effects.

APPROACH TO THE CUMULATIVE IMPACT ANALYSIS

CEQA Guidelines Section 15130 requires that EIRs include an analysis of the cumulative impacts of a project when the project's effect is considered cumulatively considerable. Each technical section in the Draft EIR considers whether the project's effect on anticipated cumulative setting conditions is cumulatively considerable (i.e., a significant effect). "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (CEQA Guidelines Section 15065(a)(3)).

The determination of whether the project's impact on cumulative conditions is considerable is based on a number of factors, including consideration of applicable public agency standards, consultation with public agencies, and expert opinion. The environmental effects of the proposed project are incorporated in the cumulative impact analysis contained in each technical section.

Definition of Cumulative Setting

The cumulative setting conditions considered in this Draft EIR are based on:

- **Local and Regional Adopted Plans**. The existing land use plans in the region consist of those of the Cities of Wildomar, Lake Elsinore, Menifee, Murrieta, and the County of Riverside. However, this list is not all-inclusive for each environmental issue area and not all of the general plans listed are used for cumulative analysis for each section. For example, Section 3.2, Biological and Natural Resources, uses the Western Riverside County Multiple Species Habitat Conservation Plan for its cumulative setting. Similarly, rather than using one of the plans listed above, Section 3.6, Hydrology and Water Quality, uses the Santa Ana and Santa Margarita watersheds to assess cumulative impacts. For a discussion of the cumulative setting and the applicable plan(s) used for a specific issue area, please refer to Draft EIR Sections 3.1 through 3.11.

- **Large-Scale Development Projects**. This includes current large-scale proposed and approved development projects within the region.

- **Effect of Regional Conditions**. The cumulative setting considers background traffic volumes and patterns on regional and state roadways. Additionally, physical conditions in the region pertinent to each environmental issue area are also considered in the cumulative setting. Those topics are discussed in Sections 3.1 through 3.11.

Each technical section of the Draft EIR includes a description of the cumulative setting's geographic extent based on the characteristics of the environmental issue under consideration as set forth in Section 15130(b) of the CEQA Guidelines.

IMPACT DETERMINATIONS USED IN THE DRAFT EIR

This Draft EIR uses the following terminology to describe the environmental effects of the proposed project:

Less Than Significant Impact: A less than significant impact would cause no substantial change in the physical condition of the environment (no mitigation would be required for project effects found to be less than significant).

Significant Impact and Potentially Significant Impact: A significant impact would cause (or would potentially cause) a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects using specified standards of significance provided in each technical section of the DEIR. Identified significant impacts are those where the project would result in an impact that can be measured or quantified, while identified potentially significant impacts are those impacts where an exact measurement of the project's effects cannot be made but substantial evidence indicates that the impact would exceed standards of significance. A potentially significant impact may also be an impact that may or may not occur and where a definite determination cannot be foreseen. Mitigation measures and/or project alternatives are identified to avoid or reduce project effects to the environment to a less than significant level.

Significant and Unavoidable Impact: A significant and unavoidable impact would result in a substantial negative change in the environment that cannot be avoided or mitigated to a less than significant level if the project is implemented.

Less Than Cumulatively Considerable Impact: A less than cumulatively considerable impact would cause no substantial change in the physical condition of the environment under cumulative conditions.

Cumulatively Considerable Impact: A cumulatively considerable impact would result when the incremental effects of an individual project result in a significant adverse physical impact on the environment under cumulative conditions.

3.1 Air Quality

This section examines the air quality in Wildomar, includes a summary of applicable air quality regulations, and analyzes potential air quality impacts associated with the proposed project.

3.1.1 EXISTING SETTING

SOUTH COAST AIR BASIN

South Coast Air Basin Characteristics

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. Wildomar is in the South Coast Air Basin (SoCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter (SCAQMD 1993).

Temperature and Precipitation

The air basin is part of a semi-permanent high pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to mid 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas (SCAQMD 1993). The Western Regional Climate Center (WRCC) maintains monitoring stations and historical climate information for the western United States. The closest meteorological monitoring station to Wildomar is in Lake Elsinore (ID No. 042805) approximately 5 miles to the north. The average low is reported at 36.4°F in January, and the average high is 98.1°F in July and August. All areas in the SoCAB have recorded temperatures above 100°F in recent years (WRCC 2011).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 12.01 inches per year in Wildomar (WRCC 2011).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 1993).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 1993).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in Wildomar (SCAQMD 1993).

AIR POLLUTANTS OF CONCERN

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_X), sulfur dioxide (SO_2), most particulate matter (PM_{10} and $PM_{2.5}$), lead, and fugitive dust are primary air pollutants. Of these, CO, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. ROG and NO_X are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary criteria pollutants. Presented below is a description of each of the primary and secondary criteria air pollutants and their known health effects.

Other pollutants, such as carbon dioxide, a natural byproduct of animal respiration that is also produced in the combustion process, have been linked to such phenomena as climate change. While there are no adopted thresholds for their release, Assembly Bill (AB) 32 requires the state to reduce emissions to 1990 levels by 2020, which is discussed further in Section 3.3, Climate Change and Greenhouse Gases, of this Draft EIR. These pollutants do not jeopardize the air quality attainment status of the SoCAB.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.

Reactive Organic Gases (ROG) are compounds comprising primarily atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of ROG include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer

products such as aerosols. Adverse effects on human health are not caused directly by ROG, but rather by reactions of ROG to form secondary pollutants such as ozone.

Nitrogen Oxides (NO_X) serve as integral participants in the process of photochemical smog production. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown irritating gas formed by the combination of NO and oxygen. NO_X acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens.

Nitrogen Dioxide (NO_2) is a byproduct of fuel combustion, produced by combustion of NO and oxygen. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in children has also been observed at concentrations below 0.3 parts per million (ppm). NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10} (particulates having an aerodynamic diameter of 10 microns—or 0.0004 inch—or less in diameter) and ozone.

Sulfur Dioxide (SO_2) belongs to the family of sulfur oxide gases (SO_x). SO_2 is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. Fuel combustion is the primary source of SO_2. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. A primary source of SO_2 emissions is high sulfur content coal. Gasoline and natural gas have very low sulfur content and hence do not release significant quantities of SO_2. SO_2 is a precursor to sulfate (SO_4), which is a component of particulate matter. In addition SO_2 and NO_2 can react with other substances in the air to form acids, which fall to the earth as rain, fog, snow, or dry particles.

Particulate Matter (PM) is a mixture of pollutants in liquid and solid forms. Particulate matter may be classified as primary or secondary. Primary particulates are emitted directly by emission sources, whereas secondary particulates are formed through atmospheric reaction of gases. Particulates are usually classified according to size. The particle diameter can vary from approximately 0.005 micron to 100 microns. Particulate matter less than 10 microns in diameter is referred to as PM_{10} (coarse particulates) and less than 2.5 microns is referred to as $PM_{2.5}$ (fine particulates).

Studies have found a statistical association between adverse health effects and PM_{10}. The US Environmental Protection Agency (EPA) has estimated that airborne particles cause over 15,000 premature deaths in the United States per year. Recent studies using $PM_{2.5}$ data have shown an even stronger association between health effects and particles in this size range. Evidence that smaller particles are more harmful is further supported by advanced research (World Bank 2003). Size determines how and where different particles are deposited in the respiratory tract. Ultrafine particles behave similar to gases and travel to lower regions of the lungs, whereas larger particles are deposited in the upper or middle region of the respiratory tract. Particles larger than 10 microns in diameter are deposited almost exclusively in the nose and throat. Combustion processes contribute the majority of fine particulate matter whereas non-combustion processes contribute the majority of the larger PM fraction (World Bank 2003). Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems.

Ozone (O_3), or smog, is one of a number of substances called photochemical oxidants that are formed when ROG and NO_X (both byproducts of the internal combustion engine) react with sunlight. O_3 is present in relatively high concentrations in the SoCAB, and the damaging effects of photochemical smog are generally related to the concentrations of O_3. O_3 poses a health threat, especially to those who already suffer from respiratory diseases. Additionally, O_3 has been tied to crop damage, typically in the form of stunted growth and premature death. O_3 can also act as a corrosive, resulting in property damage such as the degradation of rubber products.

AMBIENT AIR QUALITY

Ambient air quality in Wildomar can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. Existing levels of ambient air quality and historical trends and projections in the vicinity of Wildomar are documented by measurements made by the South Coast Air Quality Management District (SCAQMD), the air pollution regulatory agency in the SoCAB that maintains air quality monitoring stations processing ambient air quality measurements.

The West Flint Street–Lake Elsinore air quality monitoring station is the closest station to Wildomar at approximately 5 miles to the north. This station monitors ambient concentrations of ozone, PM_{10}, and $PM_{2.5}$. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations in Wildomar.

Table 3.1-1 summarizes the published data since 2010 from the West Flint Street–Lake Elsinore air quality monitoring station for each year that the monitoring data is provided.

TABLE 3.1-1
SUMMARY OF AMBIENT AIR QUALITY DATA

Pollutant Standards	2010	2011	2012
West Flint Street–Lake Elsinore Monitoring Station			
Ozone			
Max 1-hour concentration (ppm)	0.107	0.133	0.111
Max 8-hour concentration (ppm) (state/federal)	0.92/0.91	0.107/0.106	0.090/0.089
Number of days above state 1-hr standard	15	19	10
Number of days above state/federal 8-hour standard	40/24	45/28	32/17
Respirable Particulate Matter (PM_{10})			
Max 24-hour concentration (μg/m3) (state/federal)	*/54.4	*/99.8	*/64.8
Number of days above state/federal standard	*/0	*/0	*/0
Fine Particulate Matter ($PM_{2.5}$)			
Max 24-hour concentration (μg/m3) (state/federal)	29.8/*	40.7/*	24.9/*
Number of days above federal standard	*	*	*

Source: CARB 2013
Notes: Data measured at West Flint Street–Lake Elsinore air quality monitoring station located approximately 5 miles north of Wildomar
µg/m3 = micrograms per cubic meter; ppm = parts per million
** No data currently available to determine the value*

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

To date, CARB has designated nearly 200 compounds as toxic air contaminants. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds, one of the most important in Southern California being particulate matter from diesel-fueled engines. In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a toxic air contaminant. Previously, the individual chemical compounds in diesel exhaust were considered as TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

In 2008, the SCAQMD updated the study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for 84 percent of the air toxics risk (SCAQMD 2008a).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation.

3.1.2 REGULATORY FRAMEWORK

FEDERAL AND STATE

Subsequent development allowed with implementation of the proposed project has the ability to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, future development activities under the proposed project entitlements fall under the ambient air quality standards promulgated on the local, state, and federal levels. The federal Clean Air Act of 1971 and Clean Air Act Amendments (1977) established the national ambient air quality standards (NAAQS), which are promulgated by the EPA. The State of California has also adopted its own California ambient air quality standards (CAAQS), which are promulgated by CARB. The proposed project would occur in the SoCAB, which is under the air quality regulatory jurisdiction of the SCAQMD and is subject to the rules and regulations adopted by the SCAQMD to achieve attainment with the national and California ambient air quality standards. Federal, state, regional, and local laws, regulations, plans, and guidelines are summarized below.

Ambient Air Quality Standards

The Clean Air Act of 1971 established NAAQS, with states retaining the option to adopt more stringent standards or to include other pollution species. These standards are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both the State of California and the federal government have established health-based ambient air quality standards for six air pollutants. As shown in **Table 3.1-2**, these pollutants include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM_{10}, $PM_{2.5}$, and lead. In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

TABLE 3.1-2
AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	National Standards
Ozone	8 Hour	0.070 ppm (137$\mu g/m^3$)	0.075 ppm
	1 Hour	0.09 ppm (180 $\mu g/m^3$)	–
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)
Nitrogen Dioxide	1 Hour	0.18 ppm (339 $\mu g/m^3$)	100 ppb
	Annual Arithmetic Mean	0.030 ppm (57 $\mu g/m^3$)	53 ppb (100 $\mu g/m^3$)
Sulfur Dioxide	24 Hour	0.04 ppm (105 $\mu g/m^3$)	N/A
	3 Hour	–	N/A
	1 Hour	0.25 ppm (665 $\mu g/m^3$)	75 ppb
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 $\mu g/m^3$	N/A
	24 Hour	50 $\mu g/m^3$	150 $\mu g/m^3$
Particulate Matter – Fine ($PM_{2.5}$)	Annual Arithmetic Mean	12 $\mu g/m^3$	15 $\mu g/m^3$
	24 Hour	N/A	35 $\mu g/m^3$
Sulfates	24 Hour	25 $\mu g/m^3$	N/A
Lead	Calendar Quarter	N/A	1.5 $\mu g/m^3$
	30 Day Average	1.5 $\mu g/m^3$)	N/A
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu g/m^3$)	N/A
Vinyl Chloride (chloroethene)	24 Hour	0.01 ppm (26 $\mu g/m^3$)	N/A
Visibility-Reducing Particles	8 Hour (10:00 to 18:00 PST)	–	N/A

Source: CARB 2012a
Notes: mg/m^3 = milligrams per cubic meter; ppm = parts per million; ppb = parts per billion; $\mu g/m^3$ = micrograms per cubic meter

Air Quality Management Plan

The SCAQMD and the Southern California Association of Governments (SCAG) are the agencies responsible for preparing the Air Quality Management Plan (AQMP) for the South Coast Air Basin pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the basin is in nonattainment. Nonattainment designations are described in more detail below. The SCAQMD has drafted the 2012 Air Quality Management Plan in order to reduce emissions for which the SoCAB is in nonattainment. The 2012 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2012 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the EPA. The 2012 AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts (SCAQMD 2011). (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.)

The AQMP provides local guidance for the State Implementation Plan (SIP), which provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Severity classifications for ozone nonattainment range in magnitude: marginal, moderate, serious, severe, and extreme. The attainment status for the SoCAB is included in **Table 3.1-3**.

TABLE 3.1-3
ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN

Pollutant	State Designation	Federal Designation
Ozone	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Nonattainment	Unclassified/Attainment
SO_2	Attainment	Attainment
Lead	Nonattainment	Nonattainment

Source: CARB 2012b

As shown in **Table 3.1-3**, the SoCAB is designated as a nonattainment area for ozone, PM_{10}, $PM_{2.5}$, NO_2, and lead for state standards and for ozone, PM_{10}, $PM_{2.5}$, and lead for federal standards.

South Air Quality Management District Rules and Regulations

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. The agency's primary responsibility is ensuring that the federal and state ambient air quality standards are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The following is a list of noteworthy SCAQMD rules that are required of all subsequent construction activities allowed under the proposed project:

- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10}

emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

a. Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.

b. All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

c. All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d. The area disturbed by clearing, grading, earth moving, or excavation operations will be minimized at all times.

e. Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

Toxic Air Contaminant Regulations

In 1983, the California legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal Clean Air Act (42 United States Code Section 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as toxic air contaminants. Once a toxic air contaminant is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. The CARB has, to date, established formal control measures for eleven TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment

and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

Since the last update to the TAC list in December 1999, CARB has designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

3.1.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Per Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a lead agency must determine if implementation of the proposed project would:

1) Conflict with or obstruct implementation of an applicable air quality plan.

2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

3) Expose sensitive receptors to substantial pollutant concentrations.

4) Create objectionable odors affecting a substantial number of people.

5) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if a proposed project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of future, subsequent land use developments, which are applicable to the proposed project, as shown in **Table 3.1-4**.

TABLE 3.1-4
SCAQMD REGIONAL SIGNIFICANCE THRESHOLDS

Air Pollutant	Construction Activities	Operations
Reactive Organic Gases (ROG)	75 pounds/day	55 pounds/day
Carbon Monoxide (CO)	550 pounds/day	550 pounds/day
Nitrogen Oxides (NO_x)	100 pounds/day	55 pounds/day
Sulfur Oxides (SO_x)	150 pounds/day	150 pounds/day
Coarse Particulates (PM_{10})	150 pounds/day	150 pounds/day
Fine Particulates ($PM_{2.5}$)	55 pounds/day	55 pounds/day

Source: SCAQMD 1993 ($PM_{2.5}$ threshold adopted June 1, 2007)

CO Hotspot Analysis

In addition to the daily thresholds listed above, future development projects under the proposed project would also be subject to the ambient air quality standards. These are addressed though an analysis of localized CO impacts. The California 1-hour and 8-hour CO standards are:

- 1-hour = 20 parts per million
- 8-hour = 9 parts per million

The significance of localized impacts depends on whether ambient CO levels in the vicinity of a future development project are above state and federal CO standards. Carbon monoxide concentrations in Wildomar no longer exceed the CAAQS or NAAQS criteria, and the SoCAB has been designated as attainment under the 1-hour and 8-hour standards.

Localized Significance Thresholds

In addition to the CO hotspot analysis, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (off-site mobile source emissions are not included the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent national or state ambient air quality standard. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects disturbing 5 acres and less. Wildomar is located in SCAQMD SRA 25. **Table 3.1-5** shows the LSTs for a 1-acre, 2-acre, and 5-acre project site in SRA 25 with sensitive receptors located within 82 feet (25 meters) of a project site.

TABLE 3.1-5
LOCAL SIGNIFICANCE THRESHOLDS – POUNDS PER DAY
(CONSTRUCTION/OPERATIONS)

Project Size	Nitrogen Oxide (construction/operations)	Carbon Monoxide (construction/operations)	PM_{10} (construction/operations)	$PM_{2.5}$ (construction/operations)
1 Acre	162/162	750/750	4/1	3/1
2 Acres	234/234	1,100/1,100	7/2	4/1
5 Acres	371/371	1,965/1,965	13/4	8/2

Source: SCAQMD 2009

The actual construction phasing and specific configuration of future development allowed under the proposed project is not known at this time, as no specific development projects are proposed as part of the Housing Element update. Therefore, the comparison of the proposed project to LSTs would be overly speculative for the purposes of this analysis. Project-level analyses of air quality impacts, including the SCAQMD localized significance thresholds analysis, would be conducted on a case-by-case basis as future development allowed under the proposed project proceeds.

Toxic Air Contaminant Thresholds

The SCAQMD regulates levels of air toxics through a permitting process that covers both construction and operation. The SCAQMD has adopted Rule 1401 for both new and modified

sources that use materials classified as air toxics. The SCAQMD CEQA Guidelines for permit processing consider the following types of projects significant:

- Any project involving the emission of a carcinogenic or toxic air contaminant identified in SCAQMD Rule 1401 that exceeds the maximum individual cancer risk of one in one million or 10 in one million if the project is constructed with best available control strategy for toxics (T-BACT) using the procedures in SCAQMD Rule 1401.

- Any project that could accidentally release an acutely hazardous material or routinely release a toxic air contaminant posing an acute health hazard.

- Any project that could emit an air contaminant not currently regulated by SCAQMD rule, but that is on the federal or state air toxics list.

METHODOLOGY

Air quality impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects.

Projected emissions resulting from the maximum development anticipated under the proposed project (1,678 multi-family residential dwelling units) are compared with existing (2013) conditions. As stated in Section 3.0, all the sites analyzed are generally flat, and with one exception, are currently vacant, with naturally vegetated, pervious ground cover.

IMPACTS AND MITIGATION MEASURES

Conflict with the 2012 Air Quality Management Plan (Standard of Significance 1)

Impact 3.1.1 Subsequent land use activities associated with implementation of the proposed project would conflict with or obstruct implementation of the 2012 Air Quality Management Plan. This impact is considered to be **significant**.

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, Wildomar is located in the South Coast Air Basin, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2012 Air Quality Management Plan. The 2012 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2012 AQMP pollutant control strategies are based on the latest scientific and technical information and planning

assumptions, including the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts (SCAQMD 2011).

Criteria for determining consistency with the AQMP are defined by the following indicators:

- Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

- Consistency Criterion No. 2: The proposed project will not exceed the assumptions in the AQMP or increments based on the years of the project buildout phase.

The violations to which Consistency Criterion No. 1 refer are the California ambient air quality standards (CAAQS) and the national ambient air quality standards (NAAQS). As evaluated under Impact 3.1.3 below, the project would exceed the long-term operational standards and in so doing would violate air quality standards. Thus, a significant impact is expected.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed project would allow for high-density residential development in areas currently restricted to medium-high-density residential development. Thus, the proposed project would allow for an increase in population growth that was not considered in the AQMP.

The proposed project would conflict with Consistency Criterion No. 1 and Consistency Criterion No. 2; therefore, this impact is **significant and unavoidable**.

Mitigation Measures

None available.

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Short-Term Construction Emissions (Standard of Significance 2)

Impact 3.1.2 Subsequent land use activities associated with implementation of the proposed project could result in short-term construction emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter. This is considered a **significant and unavoidable** impact.

Implementation of the proposed Housing Element update will result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Demolition and renovation of buildings can also generate PM_{10} and $PM_{2.5}$ emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_X

emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions.

Since the actual phasing of future development allowed under the proposed project is not known at this time, construction-related emissions were modeled assuming an equal distribution of development over the plan period. For example, the proposed Housing Element projects a future growth potential of an additional 1,678 multi-family units. For the purposes of this analysis, this projected units are divided by 8 (the number of years accounted for in the proposed Housing Element) in order to roughly depict potential construction-related air pollutant emissions that may result in any given year over the span of the proposed project. However, it is important to note that the proposed project does not include any policy provisions requiring that its growth potential be attained. Not all of the identified land will be available for development at any given time based on landowner willingness to sell or develop, site readiness, environmental constraints, market changes, and other factors.

Construction-generated emissions associated the proposed project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Modeling was based primarily on the default settings in the computer program for Riverside County. Construction equipment requirements and usage rates used in the model were based on model default assumptions as shown in **Table 3.1-6**.

TABLE 3.1-6
CONSTRUCTION DETAILS[1]

Construction Phase	Duration	Worker Trips/Day	Equipment	Hours Used/Day
Site Preparation	10 days	18	3 rubber-tired dozers 4 tractors/loaders/backhoes	8 8
Grading	30 days	20	2 excavators 1 grader 1 rubber-tired dozer 2 scrapers 2 tractors/loaders/backhoes	8 8 8 8 8
Building Construction	300 days	151	1 crane 3 forklifts 1 generator set 3 tractors/loaders/backhoes 1 welder	7 8 8 7 8
Paving	20 days	15	2 pavers 2 paving equipments 2 rollers	8 8 8
Painting	20 days	30	1 air compressor	6

[1]*Source: CalEEMod Model*
Notes: Assumes 210 units are constructed per year. Cut and fill assumed to be balanced on site. Worker trips = 10.8 miles one way. Building construction phase includes the assumption of 22 vendor trips per day.

Predicted maximum daily construction-generated emissions for the proposed project are summarized in **Table 3.1-7**. This impact discussion assumes full growth potential under the

proposed project in order to present the maximum amount of pollutant emissions possible. Thus, the emissions identified in **Table 3.1-7** are considered conservative.

TABLE 3.1-7
CONSTRUCTION-RELATED CRITERIA POLLUTANT AND PRECURSOR EMISSIONS – UNMITIGATED
(MAXIMUM POUNDS PER DAY)

Construction Activities	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO_2)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Pounds per Day (Unmitigated)						
Project Construction (assuming 210 units are constructed per year)	66.23	65.68	36.94	0.08	20.97	12.61
SCAQMD Potentially Significant Impact Threshold	75 pounds/day	100 pounds/day	550 pounds/day	150 pounds/day	150 pounds/day	55 pounds/day
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

*Source: CalEEMod version 2011.1.1. Diesel-fueled construction equipment load factors reduced 33% to account for off-road emission overestimation (CARB 2010). SCAQMD Rule 1113 applied to architectural coating inputs. Refer to **Table 3.1-6** and **Appendix 3.1** for Model Data Outputs.*

As shown, all criteria pollutant emissions would remain below their respective thresholds under the assumption that 210 units are constructed each year over the time frame of the proposed Housing Element. However, since actual phasing of future development allowed under the proposed project is not known at this time, actual daily emissions would vary from day to day and would be dependent on the specific activities conducted. Therefore, although the development of 210 units (1,678 potential multi-family units divided by 8, the number of years accounted for in the proposed Housing Element) may not generate short-term emissions in an amount to exceed the SCAQMD significance threshold, it is possible that more than 210 units would be under construction simultaneously and would generate combined construction emissions that could surpass this threshold and impact air quality. As such, construction-generated emissions of air pollutants could potentially exceed the SCAQMD's significance threshold.

Project-level analyses of air quality impacts, in accordance with CEQA requirements, would be conducted on a case-by-case basis as future development allowed under the proposed project proceeds. Future development under the proposed project would be subject to SCAQMD Rules 402, 403, and 1113, described above, to reduce specific construction-related emissions further. However, these actions might not fully offset air pollutant emissions resulting from construction activities or even guarantee that SCAQMD construction-related thresholds are not surpassed by a future development project under the proposed project. Potential growth under the proposed Housing Element could add a significant amount of residential development and supporting infrastructure in Wildomar. Construction of these projects could result in construction emissions in excess of SCAQMD significance threshold levels, established by the district to determine the significance for short-term, construction-related emissions from a project**.** Thus, this impact is considered **significant and unavoidable**.

Mitigation Measures

None available.

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Long-Term Operational Emissions (Standard of Significance 2)

Impact 3.1.3 Subsequent land use activities associated with implementation of the proposed project could result in long-term operational emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter. This is considered a **significant and unavoidable** impact.

Implementation of the project would result in long-term operational emissions of criteria air pollutants and ozone precursors (i.e., ROG and NOx). Project-generated increases in emissions would be predominantly associated with motor vehicle use. To a lesser extent, area sources, such as the use of natural-gas-fired appliances, landscape maintenance equipment, architectural coatings, and hearth fuel combustion, would also contribute to overall increases in emissions.

Long-term operational emissions attributable to the proposed project are summarized in **Table 3.1-8**. At completion, the project would result in a maximum net increase of approximately 250.98 pounds per day (lbs/day) of ROG, 105.64 lbs/day of NOx, 978.97 lbs/day of CO, 208.31 lbs/day of PM_{10}, and 96.74 lbs/day of $PM_{2.5}$. It is important to note that these emissions estimates reflect combined emissions from all 1,678 multi-family units.

TABLE 3.1-8
LONG-TERM OPERATIONAL EMISSIONS FROM 1,678 MULTI-FAMILY UNITS

Source	Emissions (lbs/day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Proposed Project – Summer Emissions						
Area Source	219.59	9.80	694.98	1.35	89.50	88.48
Energy Use	1.28	10.94	4.66	0.07	0.88	0.88
Mobile Source	30.11	84.51	279.33	1.12	117.92	6.35
Total	**250.98**	**105.25**	**978.97**	**2.54**	**208.30**	**96.71**
Proposed Project – Winter Emissions						
Area Source	219.59	9.80	694.98	1.35	89.50	89.48
Energy Use	1.28	10.94	4.66	0.07	0.88	0.88
Mobile Source	29.68	105.64	960.64	2.43	117.93	6.38
Total	**250.55**	**105.64**	**960.64**	**2.43**	**208.31**	**96.74**
SCAQMD Potentially Significant Impact Threshold	55 pounds/day	55 pounds/day	550 pounds/day	150 pounds/day	150 pounds/day	55 pounds/day
Exceed SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Source: CalEEMod version 2011.1.1. Emissions projections account for 157.49 acres of development. 1,426 units assumed to use gas hearths and 84 assumed to use wood burning hearths consuming 1,019 pounds of wood per year. Emissions projections account for 11,058 daily vehicle trips per weekday, 12,014 daily vehicle trips per Saturday, and 10,185 daily vehicle trips per Sunday. Refer to ***Appendix 3.1*** *for Model Data Outputs.*

Potential growth under the proposed Housing Element would add a significant amount of residential development and supporting infrastructure in Wildomar, resulting in an increase of criteria air pollutants and precursors for which the air basin is in nonattainment. As shown in **Table 3.1-8**, long-term operational emissions would be in excess of SCAQMD significance threshold levels.

The 2013–2021 Housing Element proposes several energy conservation policy provisions that would further assist in achieving the goals of AB 32. For instance, Program H-24-1 requires the City to partner with the Southern California Gas Company (SoCalGas) in order to promote energy-saving programs such as the Residential Multifamily Energy Efficiency Rebate program, Heating and Cooling Rebate program, and incentives for energy saving of up to $4,000 available to SoCalGas residential customers. Proposed Program H-24.2 ensures that local building codes are consistent with state-mandated green building standards, and Program H-24.3 states that the City's Building Department will be responsible for implementing the state's energy conservation standards (e.g., Title 24 Energy Standards).

Project-level analyses of air quality impacts, in accordance with CEQA requirements, would be conducted on a case-by-case basis as future development allowed under the proposed project proceeds. However, long-term operational emissions associated with the full realization of development allowed under the proposed project would be in excess of SCAQMD significance threshold levels. Therefore, this impact is **significant and unavoidable.**

Mitigation Measures

None available.

Exposes Sensitive Receptors to Substantial Carbon Monoxide Pollutant Concentrations (Standard of Significance 3)

Impact 3.1.4 Implementation of the project would not contribute to localized concentrations of mobile-source CO that would exceed applicable ambient air quality standards. This is considered a **less than significant** impact.

The primary mobile-source criteria pollutant of local concern is carbon monoxide (CO). Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hotspots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours.[1] Modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

For the purpose of this CO hotspots analysis, the traffic impact analysis prepared for the project was reviewed in order to identify any project-affected intersection declines in level of service (LOS) to an unacceptable level. For instance, if the defined LOS at a project-affected

[1] Level of service (LOS) is a measure used by traffic engineers to determine the effectiveness of transportation infrastructure. LOS is most commonly used to analyze intersections by categorizing traffic flow with corresponding safe driving conditions. LOS A is considered the most efficient level of service and LOS F the least efficient.

intersection declines from LOS A, B, C, or D to LOS E or F, or if the volume-to-capacity (V/C) ratio increases by 2 percent or more as a result of a proposed project for intersections rated LOS E or worse, the project would pose a potentially significant impact in terms of CO hotspots; specific CO modeling would be required for an accurate significance determination. (The capacity of a transportation system is referred to as the level of service and is generally defined as a ratio of traffic volume to roadway capacity. While it is customary to refer to an LOS using an alphabetic reference A–F, the inevitable comparison to school grades is not accurate. From a purely transportation standpoint, a roadway with an LOS of D is a roadway used to its design capacity.) In other words, the proposed project would result in a less than significant impact to air quality for local CO if:

- Traffic generated by the proposed project would not result in deterioration of intersection level of service to LOS E or F; or

- The project would not contribute additional traffic to an intersection that already operates at LOS of E or F.

The traffic analysis conducted for this Draft EIR (see Section 3.10, Transportation and Circulation) projected that no traffic facilities would be reduced to LOS E or F as a result of the proposed project, and the project would not contribute additional traffic to an intersection that already operates at LOS E or F. Therefore, this impact meets the screening criteria listed above, and no additional CO analysis is needed**.** The proposed project would not be anticipated to result in or contribute to local CO concentrations that exceed the state 1-hour or 8-hour ambient air quality standards of 20 ppm or 9 ppm, respectively. This impact is considered to be **less than significant**.

Mitigation Measures

None required.

Exposes Sensitive Receptors to Substantial Toxic Air Contaminant Concentrations (Standard of Significance 3)

Impact 3.1.5 Implementation of the proposed project could result in increased exposure of existing or planned sensitive land uses to stationary or mobile-source TACs that would exceed applicable standards. This impact is considered **less than significant**.

Subsequent land use activities associated with implementation of the proposed project could potentially include short-term construction sources of TACs and long-term operational sources of TACs, including stationary and mobile sources.

Short-Term Construction Sources

Implementation of the proposed project would result in the potential construction of a variety of residential projects. This construction would result in short-term emissions of diesel PM, which CARB identified as a toxic air contaminant in 1998. Construction would result in the generation of diesel PM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The calculation of cancer risk

associated with exposure to TACs is typically based on a 70-year period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area. For these reasons, diesel PM generated by construction activities, in and of itself, would not be expected to create conditions where the probability of contracting cancer is greater than 10 in 1 million for nearby receptors.

Nevertheless, the construction emissions are regulated by the SCAQMD, which has developed localized significance thresholds (LSTs) for several emissions generated at construction sites, including $PM_{2.5}$, produced when diesel fuel is burned. LSTs represent the maximum emissions at a construction site that are not expected to cause or contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects of 5 acres and less.

The actual construction phasing and specific configuration of future development allowed under the proposed project is not known at this time, as no specific development projects are proposed as part of the Housing Element update. Therefore, the comparison of the proposed project to LSTs would be overly speculative for the purposes of this analysis. Future construction activities would be required to meet SCAQMD thresholds or to implement mitigation.

Long-Term Operational Sources

There are many different types of TACs, with varying degrees of toxicity. Stationary sources of TACs include industrial processes, such as petroleum refining and chrome plating operations, and commercial operations such as gasoline stations and dry cleaners. The proposed project would not be a source of TACs as it only implements policy changes with respect to residential development, and residential development does not generate TACs. In terms of potential future development allowed under the proposed project getting developed near an existing stationary source of TACs, the issuance of SCAQMD air quality permits and compliance with all SCAQMD, state, and federal regulations regarding stationary toxic air contaminants would reduce potential stationary sources of TAC emissions such that sensitive receptors would not be exposed to substantial air pollutant concentrations. The SCAQMD limits public exposure to TACs through a number of programs. The SCAQMD reviews the potential for TAC emissions from new and modified stationary sources through the SCAQMD permitting process for stationary sources. TAC emissions from existing stationary sources are limited by:

1) SCAQMD Rule 1401, which requires that construction or reconstruction of a major stationary source emitting hazardous air pollutants listed in Section 112 (b) of the Clean Air Act be constructed with Best Available Control Technology and comply with all other applicable requirements.

2) Implementation of the Air Toxics "Hot Spots" (AB 2588) Program as described under the Regulatory Framework subsection above.

3) Implementation of the federal Title III Toxics program.

Facilities and equipment that require permits from the SCAQMD are screened from risks from toxic emissions and can be required to install Toxic Best Available Control Technology (T-BACT) to reduce the risks to below significant if deemed necessary by the SCAQMD. T-BACTs are the most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for TACs. In addition, none of the identified sites are located

near existing stationary sources of TACs. Therefore, future residential development allowed under the proposed project would not be adversely affected by stationary sources of TACs.

Mobile sources of air toxics include freeways and major roadways. These roadways are sources of diesel particulate matter, which CARB has listed as a TAC. In April 2005, the California Air Resources Board released the *Land Use and Air Quality Handbook: A Community Health Perspective*, which offers guidance on siting sensitive land uses in proximity to sources of air toxics. Sensitive land uses identified in the handbook include residential communities, schools and schoolyards, day-care centers, parks and playgrounds, hospitals, and medical facilities. In terms of mobile source emissions of toxic air contaminants, CARB has provided guidelines to help determine appropriate land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway, urban road segments with 100,000 vehicle trips per day, or rural road segments with 50,000 vehicles trips per day should be avoided when possible.

For the purposes of this analysis, all roads in Wildomar are considered to be urban roads. As shown in the traffic assessment prepared for the project (Urban Crossroads 2013, pp. 29 and 52), there are no urban road segments in Wildomar that currently accommodate 100,000 vehicles trips per day or are projected to accommodate 100,000 vehicles trips per day in the future. However, as shown in **Figure 2.0-2**, site 16 of the proposed project is located adjacent to Interstate 15 and could therefore result in the placement of sensitive receptors near a source of mobile source TACs.

The SCAQMD's Multiple Air Toxics Exposure Study III (MATES III) identified an existing estimated carcinogenic risk range of 251–500 people per million in Wildomar. (This risk refers to the expected number of additional cancers in a population of one million individuals that are exposed over a 70-year lifetime.) However, as stated in the MATES III Final Report (2008), a network of 10 fixed sites was used to monitor toxic air contaminants in the South Coast Air Basin and none of these sites are specifically located in Wildomar. According to the MATES III Final Report, it is not feasible to conduct monitoring in all areas of the South Coast Air Basin so it is necessary to rely on *estimates* of toxic levels. As further explained in the MATES III Final Report, there are uncertainties in the risk potency values used to estimate lifetime risk of cancer. This uncertainty stems from the lack of data in many areas necessitating the use of assumptions. The assumptions in the MATES III Final Report are consistent with current scientific knowledge, but are often designed to be conservative and on the side of health protection in order to avoid underestimation of public health risks. Thus, as stated in the MATES III Final Report, the risk estimates should not be interpreted as actual rates of disease in the exposed population, but rather as estimates of potential risk, based on current knowledge and a number of assumptions.

In light of these facts identified in the MATES III Final Report, it is important to rely on site-specific analysis of proposed projects. As a refinement to the screening analysis provided by the SCAQMD's MATES III Model Estimated Carcinogenic Risk, which as previously stated identifies a risk range of 251–500 people per million in Wildomar based on a network of monitoring sites outside of Wildomar, a site-specific analysis was conducted for site 16. This site-specific analysis used peak-hour traffic volumes traversing the segment of Interstate 15 that parallels site 16 as identified by Caltrans, and evaluated the potential of the Caltrans-identified peak-hour traffic to negatively affect future receptors on site 16 using the Sacramento Metropolitan Air Quality Management District (SMAQMD) Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, which was updated in March 2011. This protocol sets a screening threshold (276 per million) under which potential health risk impacts are not anticipated. The screening threshold was selected by the SMAQMD as that level of increased individual risk corresponding to a 70 percent reduction from the highest risk

calculated at distances from the edge of the nearest travel lane to the nearest sensitive receptor for peak-hour traffic volumes. The Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways is intended to give local officials the information needed to assess health risk issues within the spectrum of other land use issues that must be considered in the land use planning process. Use of this screening threshold is recommended by both the EPA (2011) and CARB (2011) for analyzing potential risks to human health. Based on the location of site 16 (approximately 80 feet west of Interstate 15 at its nearest, per measurements obtained with Google Earth) and the peak-hour volumes (9,300) along the nearby Interstate 15 segment (Caltrans 2011), the location of site 16 would not exceed the thresholds identified in the refined protocol as shown in **Table 3.1-9**.

TABLE 3.1-9
SCREENING EVALUATION OF POTENTIAL CANCER RISK TO PROPOSED RECEPTORS ATTRIBUTABLE TO INTERSTATE 15

Interstate 15 Peak-Hour Traffic (vehicles/hour)	Receptor Distance from Edge of Nearest Travel Lane (feet)	Incremental Cancer Risk per Million: West	Distance Screening Threshold (276 per Million) Exceeded	Site 16 Distance from Interstate 15	Screening Threshold Surpassed?
9,300	10	280	Only exceeded at a distance of 10 feet	80 feet	**No**
	25	223			
	50	162			
	100	111			
	200	70			
	300	51			
	400	41			
	500	32			

Source: SMAQMD 2011; Peak-Hour Traffic Source: Caltrans 2011

Table 3.1-9 shows that the location of site 16, the only site of the proposed project located adjacent to a freeway (there are no urban road segments in Wildomar that accommodate 100,000 vehicles trips per day), would not exceed the thresholds identified in the refined protocol. Therefore, the proposed project would not result in a significant impact concerning diesel PM.

For the reasons identified above, the proposed project would not expose existing or planned sensitive land uses to stationary or mobile-source TACs and therefore would result in a **less than significant** impact.

Mitigation Measures

None required.

Creates Objectionable Odors Affecting a Substantial Number of People (Standard of Significance 4)

Impact 3.1.6 The proposed project would not include sources that could create objectionable odors affecting a substantial number of people or expose new residents to existing sources of odor. Thus, this impact is considered to have **no impact**.

The SCAQMD *CEQA Air Quality Handbook* (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed project involves residential land uses and will not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, there would be **no impacts** from the proposed project.

Mitigation Measures

None required.

3.1.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for air quality includes Wildomar and the South Coast Air Basin. The SoCAB is designated as a nonattainment area for ozone, PM_{10}, $PM_{2.5}$, NO_2, and lead for state standards and for ozone, PM_{10}, $PM_{2.5}$, and lead for federal standards. The basin is designated as being unclassified and/or attainment for all other pollutants. Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, the setting for this cumulative analysis consists of the SoCAB and associated growth and development anticipated in the entire air basin.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Result in a Cumulatively Considerable Net Increase in Nonattainment Criteria Pollutant (Standard of Significance 5)

Impact 3.1.7 Implementation of the proposed project, in combination with cumulative development in the SoCAB, would result in a cumulatively considerable net increase of criteria air pollutants for which the SoCAB is designated nonattainment. This is considered a **cumulatively considerable** impact.

The SCAQMD's approach to assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. As discussed earlier, the proposed project would be inconsistent with the Air Quality Management Plan, which is intended to bring the SoCAB into attainment for all criteria pollutants, since the operational emissions calculated for the proposed project (see **Table 3.1-7**) exceed the applicable SCAQMD daily significance thresholds that are designed to assist the region in attaining the applicable state and national ambient air quality standards. As such, cumulative impacts would be **significant and unavoidable**.

Mitigation Measures

None available.

REFERENCES

Caltrans (California Department of Transportation). 2011. *Traffic and Vehicle Data Systems Unit – 2010 All Traffic Volumes on California State Highway System.* http://traffic-counts.dot.ca.gov/2010all/index.html.

CARB (California Air Resources Board). 1999. *Final Staff Report: Update to the Toxic Air Contaminant List.*

———. 2005. *Land Use and Air Quality Handbook: A Community Health Perspective.*

———. 2010. *Staff Report: Proposed Amendments to the Regulation for In-Use Off Road Diesel-Fueled Fleets and the OFFROAD Large Spark-Ignition Fleet Requirements.*

———. 2011. *Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate.*

———. 2012a. *Ambient Air Quality Standards.* http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

———. 2012b. *State and Federal Area Designation Maps.* http://www.arb.ca.gov/desig/adm/adm.htm.

———. 2013. *Air Quality Data Statistics.* http://www.arb.ca.gov/adam/index.html.

EPA (US Environmental Protection Agency). 2011. "Resource Links by Topic." http://www.epa.gov/schools/siting/resources.html.

SCAQMD (South Coast Air Quality Management District). 1993. *CEQA Air Quality Handbook.*

———. 2007. *2007 Air Quality Management Plan*.

———. 2008a. *Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES-III*.

———. 2008b. *Final Localized Significance Threshold Methodology.* June 2003, revised July 2008. http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

———. 2009. *Localized Significance Threshold Appendix C – Mass Rate LST Look-Up Tables*. Revised October 21, 2009. http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

———. 2011. *2012 Air Quality Management Plan.* http://www.aqmd.gov/aqmp/2012aqmp/index.htm.

———. 2012. *2012 Air Quality Management Plan*.

SMAQMD (Sacramento Metropolitan Air Quality Management District). 2011. *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways*.

World Bank. 2003. *Urban Air Pollution: The Science of Health Impact of Particulate Matter. South Asia Urban Air Quality Management Briefing Note No. 13*. http://siteresources.worldbank.org/PAKISTANEXTN/Resources/UrbanAir/ScienceOfHealthImpact.pdf.

WRCC (Western Regional Climate Center. 2011. *Western U.S. Climate Historical Summaries: Elsinore Monitoring Station (ID No. 042805)*. http://www.wrcc.dri.edu/summary/Climsmsca.html.

3.2 Biological and Natural Resources

This section analyzes impacts that could occur to biological resources due to buildout per the proposed Housing Element and provides appropriate mitigation measures to reduce or avoid these impacts. The analysis of biological resources presented in this section is based on a review of the proposed Housing Element, previous biological investigations, and reports prepared for the proposed project, as well as maps and available literature from federal, state, and local agencies.

Note to the reader: As of January 1, 2013, the agency formerly known as the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW). For purposes of this discussion, the agency names and abbreviations are interchangeable.

3.2.1 EXISTING SETTING

The environmental setting consists of the all property within the city limits of the City of Wildomar, which is located in the southwestern portion of Riverside County. The city is generally bounded by the mountains of the Cleveland National Forest and rural residential uses to the west, the Cities of Lake Elsinore and Canyon Lake to the north and northwest, the City of Murrieta to the south and southeast, and the City of Menifee and rural residential uses to the east. The city's topography is generally rolling, with steeper terrain on the west and east and valley areas in the central portion of the city. Interstate 15 (I-15) aligns northwest to southeast through the center of the city and is the main transportation arterial. Existing land uses in Wildomar consist of a variety of primarily residential, commercial, and office uses, as well as recreational, open space, and institutional uses.

VEGETATION ASSOCIATIONS

Based on the Habitat Accounts in Volume 2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (Riverside County 2003), there are six vegetation associations represented on the subject sites identified for potential development: chaparral, non-native grassland, developed/disturbed land, coastal sage scrub, woodland/forest, and riparian forest/woodland/scrub. The locations of each vegetation type are summarized in **Table 3.2-1.** Refer to **Figure 2.0-2** in Section 2.0, Project Description, for a map of site locations.

TABLE 3.2-1
ACREAGE OF VEGETATION ASSOCIATIONS BY SITE NUMBER

Site #	Vegetation Type and Area in Acres*					
	Disturbed/ Developed	Grassland	Riparian Scrub/Woodland/Forest	Coastal Sage Scrub	Woodland/Forest	Chaparral
1	3.00	–	–	–	–	–
2	–	1.26	0.48	–	–	–
3	–	3.00	0.48	–	–	–
4	–	1.57	–	0.03	–	–
5	–	1.11	0.43	–	–	–
6	–	4.98	–	–	–	–
7	0.30	1.74	1.69	–	–	–
8	0.02	2.36	–	0.02	–	–

Site #	Vegetation Type and Area in Acres*					
	Disturbed/ Developed	Grassland	Riparian Scrub/Woodland/Forest	Coastal Sage Scrub	Woodland/Forest	Chaparral
9	0.07	5.67	–	0.11	–	–
10	23.92	–	–	–	–	–
11	3.67	–	0.79	–	–	–
12	1.36	–	–	–	–	–
13	6.50	–	–	–	–	–
14	1.36	2.69	0.79	–	–	–
15	18.85	–	0.55	–	–	–
16	14.82	–	1.32	–	–	–
17	2.47	0.04	–	–	–	–
18	–	2.62	–	0.02	–	–
19	–	2.01	1.39	0.25	–	–
20	5.92	–	–	–	–	–
21	2.44	0.01	–	–	–	–
22	4.80	–	–	0.18	–	0.07
23	0.07	4.93	–	–	–	–
24	–	–	–	5.91	–	–
25	2.51	4.90	–	10.44	1.57	–
Total Acres	**92.08**	**38.88**	**7.93**	**16.96**	**1.57**	**0.07**
Percentage of Total Area	**58.47%**	**24.69%**	**5.03%**	**10.77%**	**1.00%**	**0.04%**

Source: Riverside County 2003. Vegetation acreages are derived from data collected in 2003.

The vegetation communities described below were derived from the MSHCP. Although discussed here as distinct entities, the vegetation communities are not functionally discrete; there are frequently large areas of transition, or ecotones. The distribution of general vegetation community types in the city is closely associated with topography. Some vegetation communities may have a degree of shared vegetation. Animals also range between different communities and habitat types, and their movement patterns may vary daily or seasonally.

Chaparral

Chaparral is the most abundant and widespread vegetation type in western Riverside County. Chaparral is a native plant community that supports a high diversity of life and is widely distributed on dry slopes and ridges throughout the city. Chaparral is considered a sensitive upland community according to the MSHCP. Chaparral is found on one parcel and makes up 0.07 acres within the subject sites associated with the proposed project.

Chaparral is a shrub-dominated vegetation community that is composed largely of evergreen species that range from 3 to 12 feet in height. The most common and widespread species within chaparral is chamise (*Adenostoma fasciculatum*). Other common shrub species include

manzanita (*Arctostaphylos* spp.), wild lilac (*Ceanothus* spp.), oak (*Quercus* spp.), redberry (*Rhamnus* spp.), laurel sumac (*Malosma laurina*), mountain mahogany (*Cercocarpus betuloides*), toyon (*Heteromeles arbutifolia*), and mission manzanita (*Xylococcus bicolor*). Soft-leaved subshrubs are less common in chaparral than in coastal sage scrub (see below) but occur within canopy gaps of mature stands.

Grasslands

The grassland vegetation community in the Wildomar area comprises primarily non-native grassland. Grassland is widely distributed on flatter terrain throughout the city and encompasses approximately 38.88 acres of project land (24.69 acres of the subject sites identified for development), making it the second most abundant vegetation type.

Non-native grasslands primarily are composed of annual grass species introduced from the Mediterranean basin and other Mediterranean climate regions, with variable presence of non-native and native herbaceous species. Species composition of non-native grasslands may vary over time and place based on grazing or fire regimes, soil disturbance, and annual precipitation patterns. Non-native grasslands typically produce deep layers of organic matter, which is inversely related to the abundance of non-native and native forbs. Non-native grasslands also typically support an array of annual forbs from the Mediterranean climate regions. Low abundances of native species are sometimes present within non-native grasslands. These species usually include disturbance specialists with several different growth forms (i.e., subshrubs, succulents, and herbaceous annuals).

Non-native grasslands are likely to be dominated by several species of grasses that have evolved to persist in concert with human agricultural practices: slender oat (*Avena barbata*), wild oat (*Avena fatua*), foxtail chess (*Bromus madritensis*), soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), barley (*Hordeum* spp.), rye grass (*Lolium multiflorum*), English ryegrass (*Lolium perrene*), rat-tail fescue (*Vulpia myuros*), and Mediterranean schismus (*Schismus barbatus*).

Developed/Disturbed Land

Developed or disturbed lands consist of areas that have been disked, cleared, or otherwise altered. Developed lands may include roadways, existing buildings, and structures. Disturbed lands may include ornamental plantings for landscaping, escaped exotics, or ruderal vegetation dominated by non-native, weedy species such as mustard (*Brassica* sp.), fennel (*Foeniculum vulgare*), tocalote (*Centaurea melitensis*), and Russian thistle (*Salsola tragus*).

Developed/disturbed lands are the most abundant vegetation type, encompassing a total of 92.08 acres, or 58.47 percent of the subject sites associated with the proposed project.

Coastal Sage Scrub

Sage scrub often is distributed in patches throughout its range over a scale of several miles. It can be found in diverse vegetation community mosaics with other plant communities, particularly grassland and chaparral, and oak/riparian woodland in wetter areas. Coastal sage scrub is considered a sensitive upland community, according to the MSHCP, and is approximately 10.77 percent of the subject sites associated with the proposed project.

Coastal sage scrub is dominated by a characteristic suite of low-statured, aromatic, drought-deciduous shrubs and subshrub species. Composition varies substantially depending on physical circumstances and the successional status of the vegetation; however, characteristic species

include California sagebrush (*Artemisia californica*), chamise, California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), California encelia (*Encelia californica*), and several species of sage (e.g., *Salvia mellifera, S. apiana*). Other common species include brittlebush (*Encelia farinosa*), lemonadeberry (*Rhus integrifolia*), sugarbush (*Rhus ovata*), yellow bush penstemon (*Keckiella antirrhinoides*), Mexican elderberry (*Sambucus mexicana*), sweetbush (*Bebbia juncea*), boxthorn (*Lycium* spp.), shore cactus (*Opuntia littoralis*), coastal cholla (*Cylindropuntia prolifera*), tall prickly-pear (*Opuntia oricola*), and species of *Dudleya*.

Woodland and Forests

Woodland and forest vegetation communities are dominated by Englemann oak (*Quercus englemannii*), coast live oak (*Q. agrifolia*), canyon live oak (*Q. chrysolepis*), interior live oak (*Q. wislizenii*), and black oak (*Q. kelloggii*) in the canopy, which may be continuous to intermittent or savannah-like. Four-needle pinyon (*Pinus quadrifolia*), single-leaf pinyon pine (*Pinus monophylla*), and California juniper (*Juniperus californica*) are the canopy species of peninsular juniper woodland which most commonly occur in Southern California, forming a scattered canopy from 3 to 15 meters tall.

Many understory plants in oak woodlands are shade tolerant and include wild blackberry *(Rubus ursinus),* snowberry *(Symphoricarpos mollis),* California walnut *(Juglans californica)*, California lilac *(Ceanothus* spp.*), Rhus* spp.*,* currant *(Ribes* spp.), toyon, California bay *(Umbellularia californica),* Engelmann oak, manzanita *(Arctostaphylos* spp.), laurel sumac, poison oak *(Toxicodendron diversilobum),* and herbaceous plants, including bracken fern *(Pteridium aquilinum),* polypody fern *(Polypodium californicum)*, fiesta flower *(Pholistorma auritum)*, and miner's lettuce *(Claytonia perfoliata)*. This vegetation community can occur on all aspects, on stream sides, canyon bottoms, and flat to very steep topography. Woodland/forestland is found on 1.57 acres on one of the 25 sites identified for land use redesignation and zoning ordinance revisions.

Riparian Forest/Woodland/Scrub

Riparian forest/woodland/scrub is distributed along intermittent streams, in washes and valleys. Depending on community type, a riparian community may be dominated by any of several trees and shrubs, including box elder (*Acer negundo*), bigleaf maple (*Acer macrophyllum*), coast live oak, white alder (*Alnus rhombifolia*), sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), California walnut, Mexican elderberry, wild grape (*Vitis girdiana*), giant reed (*Arundo donax*), mulefat (*Baccharis salicifolia*), tamarisk (*Tamarix* spp.), or any of several species of willow (*Salix* spp.). In addition, various understory herbs may be present, such as saltgrass, wild cucumber (*Marah macrocarpus*), mugwort (*Artemisia douglasiana*), stinging nettle (*Urtica dioica*), and poison oak. Riparian vegetation makes up 7.93 acres of the subject sites (approximately 5 percent).

SENSITIVE HABITATS AND POTENTIAL JURISDICTIONAL FEATURES

Sensitive habitats include areas of special concern to resource agencies, areas protected under the California Environmental Quality Act (CEQA), areas designated as sensitive natural communities by the CDFW, areas outlined in Section 1600 of the California Fish and Game Code, areas regulated under Section 404 of the Clean Water Act (CWA), areas protected under Section 401 of the CWA, and areas protected under local regulations and policies, such as the MSHCP. The 25 subject sites contain potential jurisdictional water features, as well as sensitive upland habitats designated by the MSHCP, including chaparral and coastal sage scrub.

The US Fish and Wildlife Service (USFWS) defines critical habitat as a specific area that is essential for the conservation of a federally listed species and which may require special management considerations or protection. Mixed Use Planning Area Sites 4, 6, 8, 9, 17, 18, and 21 overlap with critical habitat for coastal California gnatcatcher (*Polioptila californica californica*) (USFWS 2013b).

Wildomar is also within the local management and fee areas of a small number of species of concern.

- Stephens's Kangaroo Rat Mitigation Fee Area (Riverside County Ordinance 663).
- The area provides suitable foraging and nesting habitat for various bird species afforded protection under the Migratory Bird Treaty Act of 1918.
- MSHCP Mitigation Fee Area (Riverside County Ordinance 810.2).
- The site is located within the Burrowing Owl Survey Area (Figure 6-4 of the MSHCP).

MSHCP CRITERIA AREA

The MSHCP Criteria Area represents the area within which conservation criteria will be applied and from which acreage of land will be set aside to contribute toward assembly of the overall Conservation Area. The Criteria Area has been divided into regional plan areas, subunits, cell groups, and cells. Conservation goals have been developed for individual cells. The 25 subject sites do not overlap with the MSHCP Criteria Area.

WILDLIFE CORRIDORS

Wildlife corridors are established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Corridors are present in a variety of habitats and link otherwise fragmented acres of undisturbed area. Maintaining the continuity of established wildlife corridors is important to sustain species with specific foraging requirements, preserve a species' distribution potential, and retain diversity among many wildlife populations. Therefore, resource agencies consider wildlife corridors to be a sensitive resource. There are no established wildlife corridors in any of the 25 subject sites.

LISTED AND SPECIAL-STATUS PLANT AND ANIMAL SPECIES

Special-status species are commonly characterized as species that are at potential risk or actual risk to their persistence in a given area or across their native habitat (locally, regionally, or nationally) and are identified by a state and/or federal resource agency as such. These agencies include governmental agencies such as the California Department of Fish and Wildlife and the US Fish and Wildlife Service, or private organizations such as the California Native Plant Society (CNPS). The degree to which a species is at risk of extinction is the limiting factor on a species' status designation. Risk factors to a species' persistence or population's persistence include habitat loss, increased mortality factors (take, electrocution, etc.), invasive species, and environmental toxins. In context of environmental review, special-status species are defined by the following codes:

- Species that are listed, proposed, or candidates for listing under the federal Endangered Species Act (ESA) (50 Code of Federal Regulations [CFR] 17.11 – listed; 61 Federal Register [FR] 7591, February 28, 1996, candidates);

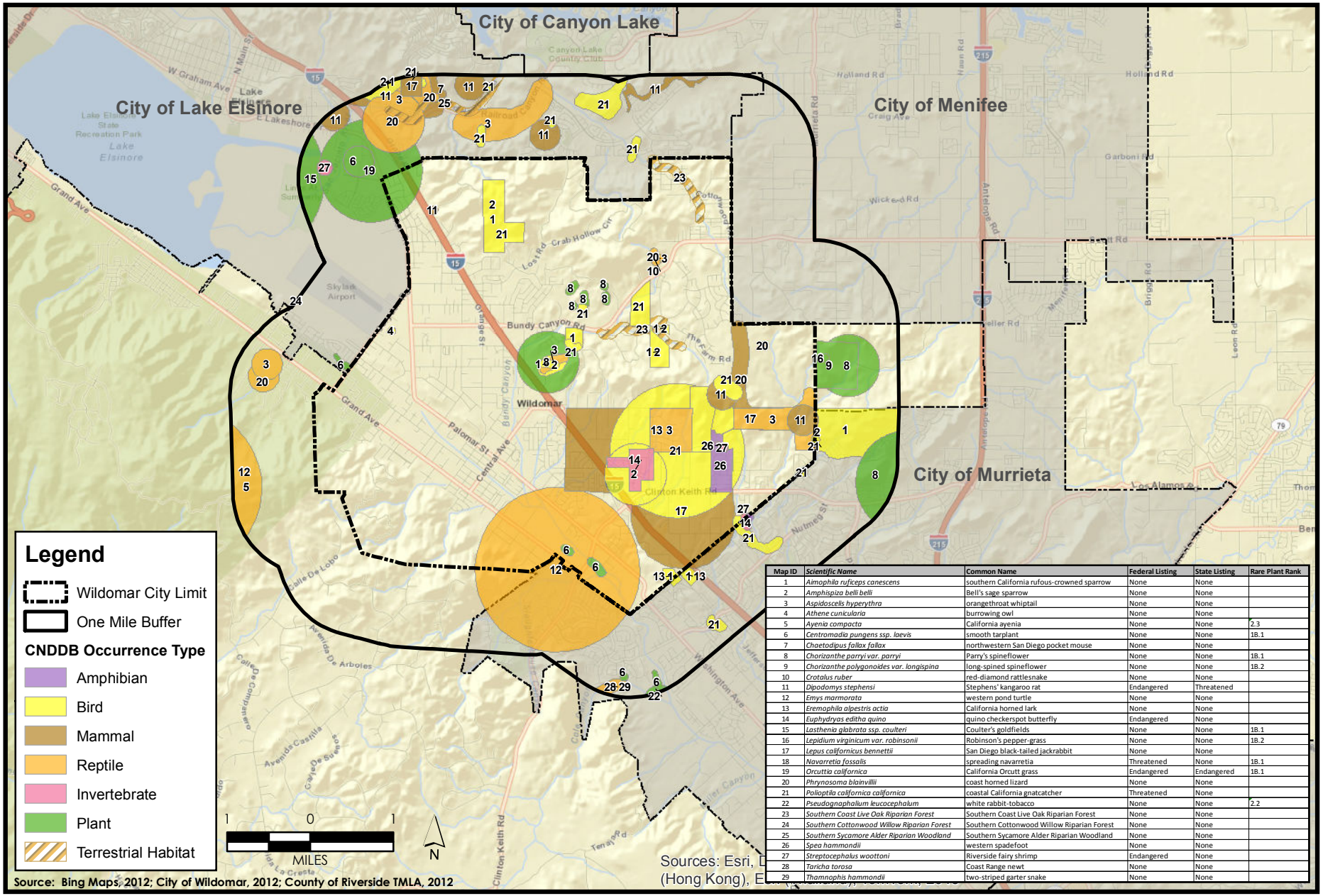
- Species that are listed or proposed for listing under the California Endangered Species Act (CESA) (Fish and Game Code [FGC] 1992 Section 2050 et seq.; 14 California Code of Regulations [CCR] Section 670.1 et seq.);

- Species that are designated as Species of Special Concern by the CDFW;
- Species that are designated as Fully Protected by the CDFW (FGC Sections 3511, 4700, 5050, 5515);
- Species that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) (14 CCR Section 15380); and
- Protected under other regulations (e.g., local policies); or
- Otherwise receive consideration during environmental review.

A special-status species is determined to have the potential to occur in the Wildomar area if its documented geographic range from literature and database searches includes the Wildomar vicinity and if suitable habitat for the species is identified within or near any of the 25 subject sites. The CDFW's California Natural Diversity Database (CNDDB); the USFWS Information, Planning and Conservation System (IPaC); and CNPS literature were queried for special-status species in the vicinity. Locations of special-status species occurrences as recorded in the CNDDB within a 1-mile radius are shown in **Figure 3.2-1**.

Table 3.2-2 provides a summary of all special-status species with the potential to occur within a 5-mile radius.

T:_GIS\RIVERSIDE_COUNTY\MXDS\WILDOMAR\HOUSING\FIGURE CNDDB.MXD - 6/14/2013 @ 3:05:21 PM



Map ID	Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank
1	*Aimophila ruficeps canescens*	southern California rufous-crowned sparrow	None	None	
2	*Amphispiza belli belli*	Bell's sage sparrow	None	None	
3	*Aspidoscelis hyperythra*	orangethroat whiptail	None	None	
4	*Athene cunicularia*	burrowing owl	None	None	
5	*Ayenia compacta*	California ayenia	None	None	2.3
6	*Centromadia pungens ssp. laevis*	smooth tarplant	None	None	1B.1
7	*Chaetodipus fallax fallax*	northwestern San Diego pocket mouse	None	None	
8	*Chorizanthe parryi var. parryi*	Parry's spineflower	None	None	1B.1
9	*Chorizanthe polygonoides var. longispina*	long-spined spineflower	None	None	1B.2
10	*Crotalus ruber*	red-diamond rattlesnake	None	None	
11	*Dipodomys stephensi*	Stephens' kangaroo rat	Endangered	Threatened	
12	*Emys marmorata*	western pond turtle	None	None	
13	*Eremophila alpestris actia*	California horned lark	None	None	
14	*Euphydryas editha quino*	quino checkerspot butterfly	Endangered	None	
15	*Lasthenia glabrata ssp. coulteri*	Coulter's goldfields	None	None	1B.1
16	*Lepidium virginicum var. robinsonii*	Robinson's pepper-grass	None	None	1B.2
17	*Lepus californicus bennettii*	San Diego black-tailed jackrabbit	None	None	
18	*Navarretia fossalis*	spreading navarretia	Threatened	None	1B.1
19	*Orcuttia californica*	California Orcutt grass	Endangered	Endangered	1B.1
20	*Phrynosoma blainvillii*	coast horned lizard	None	None	
21	*Polioptila californica californica*	coastal California gnatcatcher	Threatened	None	
22	*Pseudognaphalium leucocephalum*	white rabbit-tobacco	None	None	2.2
23	*Southern Coast Live Oak Riparian Forest*	Southern Coast Live Oak Riparian Forest	None	None	
24	*Southern Cottonwood Willow Riparian Forest*	Southern Cottonwood Willow Riparian Forest	None	None	
25	*Southern Sycamore Alder Riparian Woodland*	Southern Sycamore Alder Riparian Woodland	None	None	
26	*Spea hammondii*	western spadefoot	None	None	
27	*Streptocephalus woottoni*	Riverside fairy shrimp	Endangered	None	
28	*Taricha torosa*	Coast Range newt	None	None	
29	*Thamnophis hammondii*	two-striped garter snake	None	None	

This page intentionally left blank.

TABLE 3.2-2
SPECIAL-STATUS SPECIES WITH POTENTIAL TO OCCUR IN WILDOMAR VICINITY

Scientific Name	Common Name	Federal/State Listing Rare Plant Rank	MSHCP Covered Species
Plants			
Abronia villosa var. aurita	chaparral sand-verbena	--/--/1B.1	No
Allium munzii	Munz's onion	FE/ST/1B.1	Yes
Ambrosia pumila	San Diego ambrosia	FE/--/1B.1	Yes
Arcotostaphylos rainbowensis	rainbow manzanita	--/--/1B.1	Yes
Ayenia compacta	California ayenia	--/--/2.3	No
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Yes
Brodiaea orcutti	Orcutt's brodiaea	--/--/1B.1	Yes
California macrophylla	round-leaved filaree	--/--/1B.1	Yes
Calochortus weedii var. intermedius	intermediate mariposa-lily	--/--/1B.2	Yes
Centromadia pungens ssp. laevis	smooth tarplant	--/--/1B.1	Yes
Chorizanthe parryi var. parryi	Parry's spineflower	--/--/1B.1	Yes
Chorizanthe polygonoides var. longispina	long-spined spineflower	--/--/1B.2	Yes
Clinopodium chandleri	San Miguel savory	--/--/1B.2	Yes
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Yes
Eryngium aristulatum var. parishii	San Diego button-celery	FE/SE/1B.1	Yes
Geothallus tuberosus	Campbell's liverwort	--/--/1B.1	No
Harpagonella palmeri	Palmer's grapplinghook	--/--/4.2	Yes
Hesperocyparis forbesii	Tecate cypress	--/--/1B.1	No
Juncus luciensis	Santa Lucia dwarf rush	--/--/1B.2	No
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	--/--/1B.1	Yes
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	--/--/1B.2	No
Monardella hypoleuca ssp. intermedia	intermediate monardella	--/--/1B.3	No
Myosurus minimus ssp. apus	little mousetail	--/--/3.1	Yes
Navarretia fossalis	spreading navarretia	FT/--/1B.1	Yes
Navarretia prostrata	prostrate vernal pool navarretia	--/--/1B.1	Yes
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Yes
Pseudognaphalium leucocephalum	white rabbit-tobacco	--/--/2.2	No
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	--/--/1B.2	No
Sibaropsis hammittii	Hammit's clay-cress	--/--/1B.2	Yes
Sphaerocarpos drewei	bottle liverwort	--/--/1B.1	No
Symphyotrichum defoliatum	San Bernardino aster	--/--/1B.2	No

Scientific Name	Common Name	Federal/State Listing Rare Plant Rank	MSHCP Covered Species
Invertebrates			
Euphydryas editha quino	Quino checkerspot butterfly	FE/--	Yes
Streptocephalus woottoni	Riverside fairy shrimp	FE/--	Yes
Amphibians			
Rana draytonii	California red-legged frog	FT/SSC	Yes
Spea hammondii	western spadefoot	--/SSC	Yes
Taricha torosa	Coast Range newt	--/SSC	Yes
Reptiles			
Aspidoscelis hyperythra	orangethroat whiptail	--/SSC	Yes
Crotalus ruber	red-diamond rattlesnake	--/SSC	Yes
Emys marmorata	western pond turtle	--/SSC	Yes
Phrynosoma blainvillii	coast horned lizard	--/SSC	Yes
Thamnophis hammondii	two-striped garter snake	--/SSC	No
Birds			
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	--/SSC	Yes
Amphispiza belli belli	Bell's sage sparrow	--/SSC	Yes
Aquila chrysaetos	golden eagle	--/SSC	Yes
Athene cunicularia	burrowing owl	--/SSC	Yes
Buteo regalis	ferruginous hawk	--/SSC	Yes
Charadrius alexandrinus nivosus	western snowy plover	FT/SSC	No
Elanus leucurus	white-tailed kite	--/FP	No
Eremophila alpestris actia	California horned lark	--/SSC	Yes
Lanius ludovicianus	loggerhead shrike	--/SSC	Yes
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Yes
Vireo belli pusillus	least Bell's vireo	FE/SE	Yes
Mammals			
Chaetodipus californicus femoralis	Dulzura pocket mouse	--/SSC	No
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	--/SSC	Yes
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST	Yes
Eumops perotis californicus	western mastiff bat	--/SSC	No
Lasiurus xanthinus	western yellow bat	--/SSC	No
Lepus californicus bennettii	San Diego black-tailed jackrabbit	--/SSC	Yes

Source: CDFW 2013; CNPS 2013; USFWS 2013a

Code Designations

Federal	State	CNPS Rank
FT = Federally Threatened **FE** = Federally Endangered	**ST** = State Threatened **SE** = State Endangered **SSC** = Species of Special Concern **FP** = Fully Protected	**1B** = Plant species that are rare, threatened, or endangered throughout their range **2 =** Plants rare, threatened, or endangered in California, but more common elsewhere **0.1** = Seriously threatened in California (over 80% of occurrences threatened/high degree of immediacy of threat) **0.2** = Fairly threatened in California (moderate degree and immediacy of threat) **0.3** = Not very threatened in California (low degree and immediacy of threat or no current threats known)

3.2.2 REGULATORY FRAMEWORK

This subsection lists specific environmental review and consultation requirements and identifies permits and approvals that may be required from local, state, and federal agencies before project sites can be developed consistent with its new zoning.

FEDERAL

Endangered Species Act

The Endangered Species Act (ESA) protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process. Procedures for addressing impacts to federally listed species follow two principal pathways, both of which require consultation with the USFWS, which administers the Endangered Species Act for all terrestrial species. The first pathway, Section 10(a) incidental take permit, applies to situations where a non-federal government entity must resolve potential adverse impacts to species protected under the ESA. The second pathway, Section 7 consultation, applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval. Candidate species do not have the full protection of the ESA; however, the USFWS advises applicants that candidate species could be elevated to listed species at any time.

The MSHCP was prepared to provide for the take and mitigation of the 146 species covered under the MSHCP pursuant to the Endangered Species Act. The MSHCP allows for the issuance of take permits at the local level by MSHCP permittees, including the City of Wildomar, thereby streamlining the take authorization process on a project-by-project basis.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the Fish and Game Code (FGC).

All raptors and their nests are protected from take or disturbance under the MBTA (16 United States Code [USC] Section 703 et seq.) and California statute (FGC Section 3503.5). The golden

eagle and bald eagle are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC Section 669 et seq.). The MSHCP Section 10 Take Permit constitutes a Special Purpose Permit pursuant to the Migratory Bird Treaty Act (i.e., if a project is consistent with all provisions of the MSHCP, lawful take of MSHCP covered species or their habitat protected by the MTBA will not result in violation of the MBTA).

Clean Water Act

Section 401 of the federal Clean Water Act (CWA) requires any applicant for a federal license or permit that is conducting any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. The appropriate Regional Water Quality Control Board (RWQCB) regulates Section 401 requirements.

Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from the US Army Corps of Engineers (USACE). The USACE and the US Environmental Protection Agency (EPA) administer the act. In addition to streams with a defined bed and bank, the definition of waters of the United States includes wetland areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark [33 CFR Section 328.4(c)(1)].

If adjacent wetlands occur, the limits of jurisdiction extend beyond the ordinary high water mark to the outer edge of the wetlands. The presence and extent of wetland areas are normally determined by examination of the vegetation, soils, and hydrology of a site. The majority of jurisdictional wetlands exhibit three wetland criteria—hydrophytic vegetation, wetland hydrology, and hydric soils.

Substantial impacts to jurisdictional wetlands may require an individual permit. Small-scale projects may require a nationwide permit, which typically has an expedited process compared to the individual permit process. Mitigation of wetland impacts is required as a condition of the 404 permit and may include on-site preservation, restoration, or enhancement and/or off-site restoration or enhancement. The characteristics of the restored or enhanced wetlands must be equal to or better than those of the affected wetlands to achieve no net loss of wetlands.

Executive Order 11990 – Protection of Wetlands

Executive Order 11990 establishes a policy to avoid adverse impacts on wetlands whenever there is a practical alternative. On projects with federal actions or approvals, impacts on wetlands must be identified in the environmental document. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practical measures to minimize harm to those wetlands must be included.

Executive Order 13112 – Invasive Species

Executive Order 13112 directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. The order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species. As part of the proposed action, the USFWS and the USACE issue permits and

are responsible for ensuring that the proposed action complies with Executive Order 13112 and does not contribute to the spread of invasive species.

STATE

California Endangered Species Act

Under the California Endangered Species Act (CESA), the California Department of Fish and Wildlife has the responsibility for maintaining a list of endangered and threatened species (FGC Section 2070). Sections 2050 through 2098 of the FGC outline the protection provided to California's rare, endangered, and threatened species. Section 2080 of the Fish and Game Code prohibits the taking of plants and animals listed under the CESA. Section 2081 established an incidental take permit program for state-listed species. The CDFW maintains a list of "candidate species," which are species that the CDFW formally notices as being under review for addition to the list of endangered or threatened species.

Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of the CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under FGC Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

The MSHCP was prepared to provide for the take and mitigation of species covered under the MSHCP pursuant to the California Natural Community Conservation Planning Act. The MSHCP allows for the issuance of take permits at the local level by MSHCP permittees, including the City of Wildomar, thereby streamlining the take authorization process on a project-by-project basis.

Native Plant Protection Act

The Native Plant Protection Act of 1977 (FGC Section 1900 et seq.) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give that state agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed (FGC Section 1913 exempts from take prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way"). Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

California Department of Fish and Wildlife

The CDFW also maintains lists of "species of special concern," which serve as species "watch lists." The CDFW has also identified many species of special concern. Species with this status have limited distribution or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive

special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and thereby warrant specific protection measures.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society's Lists 1A, 1B, and 2 would typically be considered under CEQA.

Sections 3500 to 5500 of the FGC outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Section 3503.5 of the FGC, it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

State and local public agencies are subject to Section 1602 of the FGC, which governs construction activities that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the CDFW. Under Section 1602, a discretionary Streambed Alteration Agreement permit from the CDFW must be issued by the CDFW to the project developer prior to the initiation of construction activities within lands under CDFW jurisdiction. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

California Native Plant Society

The CNPS is a nongovernmental agency that classifies native plant species according to current population distribution and threat level in regard to extinction. The following description of the CNPS classification system is relevant to identifying potential impacts to biological resources due to implementation of the project. The CNPS maintains a list of plant species native to California that exist in low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Plants of California* (CNPS 2013). Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranking:

- Rare Plant Rank 1A: plants believed to be extinct
- Rare Plant Rank 1B: plants that are rare, threatened, or endangered in California and elsewhere
- Rare Plant Rank 2: plants that are rare, threatened, or endangered in California, but are more numerous elsewhere

All of the plant species in Rare Plant Ranks 1 and 2 meet the requirements of Section 1901, Chapter 10 (Native Plant Protection Act), or Sections 2062 and 2067 (CESA) of the California Fish and Game Code and are eligible for state listing. Plants in Rare Plant Rank 1 or 2 are considered to meet the criteria of CEQA Section 15380, and effects on these species are considered significant. Classifications for plants ranked under "Rare Plant Rank 3: plants about which we need more information (a review list)" and/or "Rare Plant Rank 4: plants of limited distribution (a

watch list)," as defined by the CNPS, are not currently protected under state or federal law. Therefore, no detailed description or impact analysis was performed for qualifying species under these classifications.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state lists of protected species may be considered rare or endangered in a CEQA analysis if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the Endangered Species Act and the section of the California Fish and Game Code dealing with rare or endangered plants and wildlife. Section 15380(d) allows a public agency to undertake a review to determine if discretionary approvals will result in a significant effect on species that have not yet been listed by either the USFWS or the CDFW (e.g., candidate species, species of concern). Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

Natural Community Conservation Planning Act (Fish and Game Code Sections 2800–2835)

The purpose of natural community conservation planning is to sustain and restore those species and their habitat identified by the department that are necessary to maintain the continued viability of those vegetation communities impacted by human changes to the landscape. It is also the policy of the State of California to conserve, protect, restore, and enhance natural communities. The State may acquire a fee interest or less than fee interest in lands consistent with approved natural community conservation plans and may provide assistance with the implementation of those plans. The MSHCP satisfies the requirements of the California Natural Community Conservation Planning Act.

California Wetlands Conservation Policy

California wetlands policy is more restrictive than federal wetlands policy. The goal of the California Wetlands Conservation Policy (1993) is to ensure no net loss of wetlands in the state. This policy, incorporated in an executive order by then-Governor Pete Wilson, also encourages a long-term net gain in the state's quantity, quality, and permanence of wetlands acreage and values. Interpretation of this order indicates that any developer wishing to fill in wetlands for construction for new development must perform mitigation in the form of constructed wetlands elsewhere at ratios ranging from 2:1 to 10:1. In addition to the USACE, state regulatory agencies claiming jurisdiction over wetlands include the CDFW and the State Water Resources Control Board.

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act charges the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB) statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the Army Corps of Engineers under Section 401 of the Clean Water Act in relation to permitting fill of federal jurisdiction of the USACE under Section 404 of the CWA. This action does not limit the state's regulatory jurisdiction over waters of the State. Waters of the State are defined in Section 13050(c) of the Porter-Cologne Water Quality Control Act as any surface water or groundwater, including saline waters, within the boundaries of the state. Currently, an applicant would delineate the wetlands on their property utilizing methodology presented in the *1987 Corps of Engineers Wetland Delineation Manual,* and the delineation would be verified by the USACE. In cases where an area

meets the criteria to be considered a wetland, but the USACE does not have jurisdiction, the applicant is referred to the appropriate Regional Water Quality Control Board. In these cases, the project must receive a permit for Waste Discharge Requirements or Waiver of Waste Discharge Requirements from the RWQCB. Projects that affect waters of the State are required by the RWQCB to incorporate mitigation. Mitigation ratios are determined on a project-specific basis during the permitting process and are based on the quality of the wetlands impacts by the project.

LOCAL

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The MSHCP serves as a comprehensive, multi-jurisdictional habitat conservation plan, pursuant to Section (a)(1)(B) of the federal Endangered Species Act, as well as a natural communities conservation plan under the California Natural Community Conservation Planning Act of 2001. The plan encompasses all of Riverside County west of the crest of the San Jacinto Mountains to the Orange County line. The overall biological goal of the MSHCP is to conserve covered species and their habitats, as well as to maintain biological diversity and ecological processes while allowing for future economic growth in a rapidly urbanizing region.

Federal and state wildlife agencies approved permits required to implement the MSHCP on June 22, 2004. Implementation of the plan will conserve approximately 500,000 acres of habitat, including 347,000 acres of land already in public or quasi-public ownership and about 153,000 acres of land that will be purchased or conserved through other means, such as land acquisition, conservation easements, or designated open space. The money for purchasing private land will come from numerous sources such as development mitigation fees as well as from state and federal funds. The MSHCP includes a program for the collection of development mitigation fees, policies for the review of projects in areas where habitat must be conserved, and policies for the protection of riparian areas, vernal pools, and narrow endemic plants. It also includes requirements to perform plant, bird, reptile, and mammal surveys in certain areas.

The primary intent of the MSHCP is to provide for the conservation of a range of plants and animals and in return, provide take coverage and mitigation for projects throughout western Riverside County to avoid the cost and delays of mitigating biological impacts on a project-by-project basis. It would allow the incidental take (for development purposes) of species and their habitat from development. The City of Wildomar is a permittee to the MSHCP.

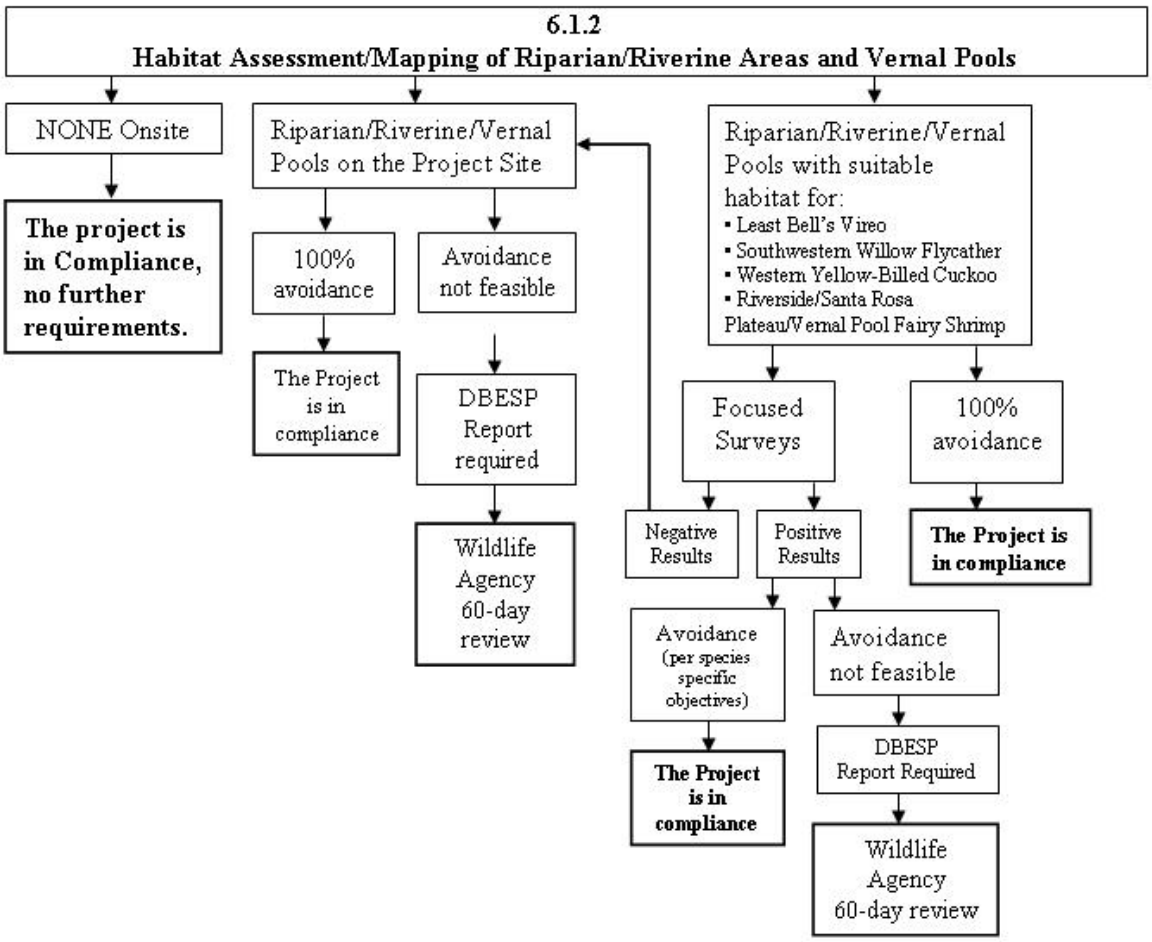
Stephens' Kangaroo Rat Habitat Conservation Plan

Wildomar is located within the boundary of the adopted Habitat Conservation Plan 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 Stephens' kangaroo rat 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 the Stephens' kangaroo rat in the habitat conservation plan area. This effort has resulted in the permanent conservation of approximately 50 percent of the SKR occupied habitat remaining in the habitat conservation plan 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 City of Wildomar is a member agency of the RCHCA. The city is located within the SKR HCP area and will be required to comply with applicable provisions of the habitat conservation plan.

MSHCP POLICIES

Riparian/Riverine Areas and Vernal Pools

As projects are proposed on any of the subject sites, an assessment of the potentially significant effects of those projects on riparian/riverine areas and vernal pools will be performed as currently required pursuant to Section 6.1.2 of the MSHCP, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools. 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 (DBESP) must be made. If the habitat assessment identifies suitable habitat for listed species in this section of the MSHCP and the project design does not incorporate avoidance, focused surveys must be conducted, and avoidance and minimization measures implemented in accordance with the species-specific objectives for the species occurring on-site. The flow chart below defines the process.



In addition, proposed projects may also be subject to the USACE 404 Permit Program or the CDFW's Streambed Alteration Agreement.

Riparian/riverine areas as defined in the MSHCP 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

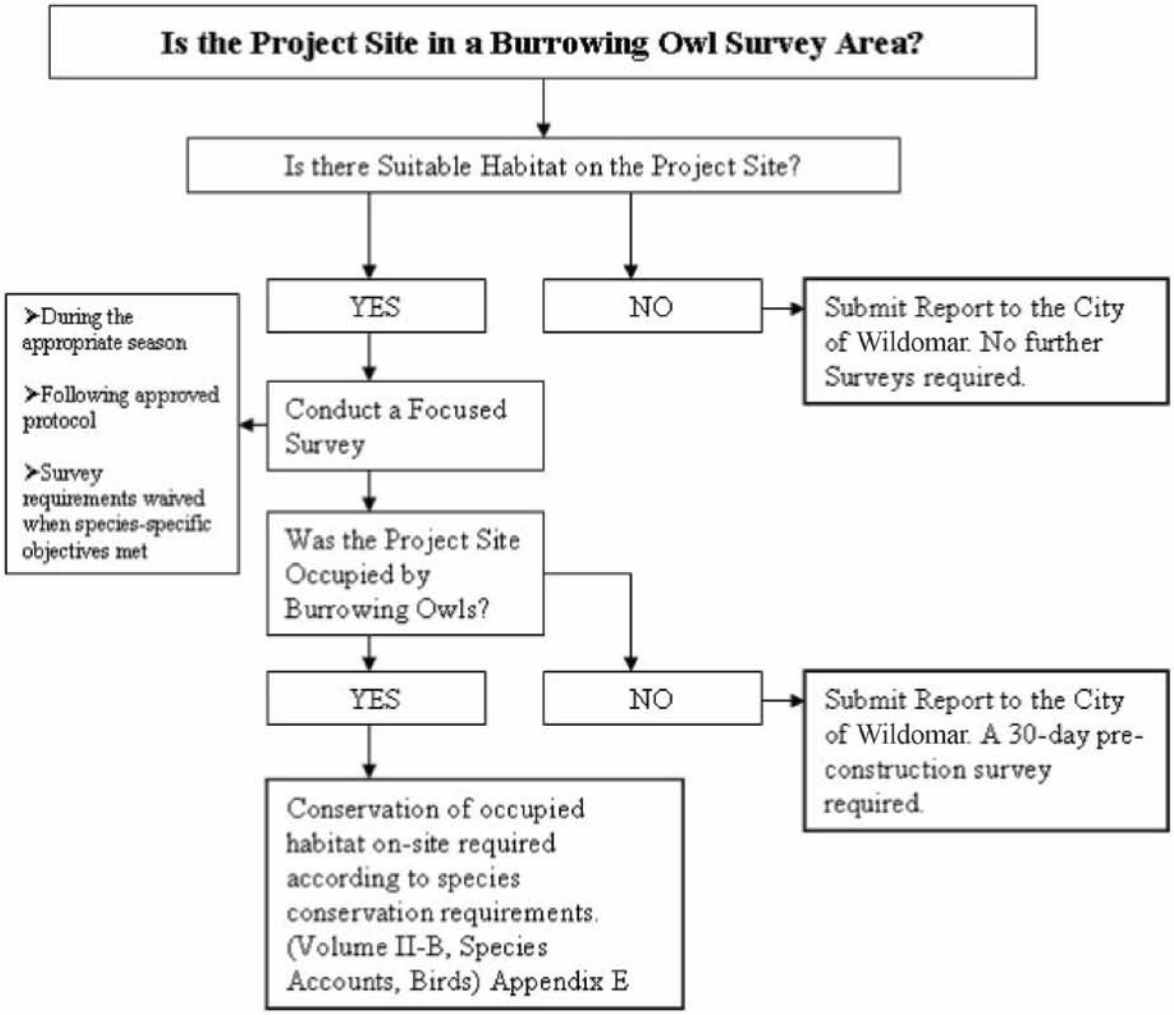
flow during all or portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soil, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portions of the growing season. There are no known vernal pools in Wildomar.

Additional Survey Needs and Procedures

As outlined in Section 6.3.2, Additional Survey Needs and Procedures, of the MSHCP, habitat assessments are required for proposed projects located in the survey areas. The 25 sites identified for land use designation and zoning ordinance revisions are located within the Burrowing Owl Survey Area; therefore, habitat assessments will be required for future development on the identified sites, which need to address potential habitat for this species. If potential habitat for this species is determined to be located within the sites identified for land use designation and zoning ordinance revisions, focused surveys are required during the appropriate season.

Section 6.1.4, Guidelines Pertaining to the Urban/Wildlife Interface, 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 must be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area and address drainage, toxics, lighting, noise, invasive species, barriers, and grading/land development.

The 25 subject sites do not overlap any of the other additional survey areas: Narrow Endemic Plant Species Survey Area, Mammal Species Survey Area, or Criteria Area Species Survey Area.



3.2.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the application of the State CEQA Guidelines Appendix G thresholds of significance. A project is considered to have significant impacts if implementation of the project will:

1) 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 CDFW or USFWS.

2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

3) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means.

4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

6) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

METHODOLOGY

The impact assessment was based on information available from various existing planning documents and database searches, as well as on the standards of significance described above. The assessment discusses potential impacts that could occur upon implementation of the proposed 2013–2021 Housing Element.

Although it is likely that some level of natural resources would be retained within future projects developed under new zoning, the location and extent of these resources cannot be determined. Therefore, a more conservative impact approach was taken to ensure that impacts are not underestimated. A basic assumption of this conservative approach is that all natural resources within the 25 sites identified for land use designation and zoning ordinance revisions could be removed or otherwise negatively modified by activities allowed under the proposed 2013–2021 Housing Element.

PROJECT IMPACTS AND MITIGATION MEASURES

Impacts to Special-Status Species (Standard of Significance 1)

Impact 3.2.1 Land uses and development consistent with the proposed 2013–2021 Housing Element could result in adverse effects, either directly or indirectly, on special-status plant and animal species and critical habitat. However, incorporation of a mitigation measure requiring project applicants to continue to follow the provisions of the MSHCP would address this impact. The impact is considered **potentially significant.**

Land use and development consistent with the proposed 2013–2021 Housing Element could result in adverse impacts on special-status species or on essential habitat for special-status species. Any future development in areas that are currently undeveloped could result in direct loss of sensitive plants or wildlife. Where there are direct impacts to special-status species, indirect impacts would occur as well. Indirect impacts may include habitat modification, increased human/wildlife interactions, habitat fragmentation, encroachment by exotic weeds, and area-wide changes in surface water flows and general hydrology due to development of previously undeveloped areas.

As indicated in **Table 3.2-2**, numerous special-status species occurrences are known to occur within or near the Planning Area. All federal and state-listed species with the potential to occur in the 25 subject sites are covered under the MSHCP. In addition, certain unlisted special-status

species, including burrowing owl, are adequately conserved under the MSHCP. Incorporation of the following mitigation measure will ensure that potential impacts to these species are **less than significant.**

Mitigation Measures

MM 3.2.1 For the development of any of the subject sites associated with the proposed project, the project applicant(s) shall follow measures to preserve sensitive species and their critical habitats consistent with the requirements of the MSHCP.

Timing/Implementation: *At all times*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Raptors and Migratory Birds

Impact 3.2.2 Implementation of the proposed project could result in the direct mortality or loss of habitat for raptors and other migratory birds. This is considered a **potentially significant** impact.

Habitats on and adjacent to any of the 25 sites identified for land use redesignation and zoning ordinance revisions may provide suitable nesting habitat for birds protected under the Migratory Bird and Treaty Act and Section 3503.5 of the California Fish and Game Code. Therefore, removal of trees and vegetation during construction activities could result in noise, dust, human disturbance, and other direct/indirect impacts to nesting raptors and migratory bird species in the vicinity. Potential nest abandonment and mortality to eggs and chicks would be considered potentially significant impacts. Incorporation of the following mitigation measure will ensure that potential impacts to these species are **less than significant.**

Mitigation Measures

MM 3.2.2 For any potential development of any of the subject sites associated with the proposed project, the project applicant(s) shall conduct construction and clearing activities outside of the avian nesting season (January 15–August 31), where feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors and migratory birds shall be conducted by a qualified biologist, no more than 14 days before initiation of clearing or construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine if active nests are present. If the qualified biologist determines that active nests are present, the applicant shall minimize the potential impacts to nesting birds by establishing avoidance buffers around the active nests. The avoidance buffer shall be no less than:

- 250 feet for active nests of state of federally listed migratory birds and all raptors
- 50 feet for active nests of all other bird species.

Avoidance within these buffers shall be maintained throughout the nesting season until the young of the nests have fledged or the nest is abandoned.

Timing/Implementation: *The project applicant(s) shall incorporate requirements into all rough and/or precise grading plan documents for any development on any of the 25 sites identified for potential development. The project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Burrowing Owl

Impact 3.2.3 Project implementation may result in the loss of western burrowing owls through destruction of active nesting sites, as well as incidental burial of adults, young, and eggs, which would be considered a **potentially significant** impact.

The sites identified for land use designation and zoning ordinance revisions are located within the Burrowing Owl Survey Area (Figure 6-4 of the MSHCP). Preconstruction nesting season surveys will need to be conducted following the guidelines provided in the MSHCP. Project implementation may result in potentially significant impacts to the species. Incorporation of the following mitigation measures and mitigation measure **MM 3.2.1** will reduce the impacts to **less than significant**.

Mitigation Measures

MM 3.2.3a Per MSHCP Species-Specific Objective 6, if any of the 25 subject sites are within the Burrowing Owl Survey Area and suitable habitat is present, preconstruction presence/absence surveys for burrowing owl will be conducted for all covered activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season.

The breeding period for burrowing owls is February 1 through August 31, with the peak being April 15 to July 15, the recommended survey window. Winter surveys may be conducted between December 1 and January 31. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed.

Surveys shall be completed for occupied burrowing owl burrows in all construction areas and within 150 meters (500 feet) of the project work areas (where possible and appropriate based on habitat). All occupied burrows will be mapped on an aerial photo.

Timing/Implementation: *Prior to any vegetation removal or ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

MM 3.2.3b Based on the burrowing owl survey results, the City shall require the project applicant(s) associated with potential development on any of the 25 subject sites to take the following actions to offset impacts prior to ground disturbance if owls are found to be present:

- If paired owls are nesting in areas scheduled for disturbance or degradation, nest(s) shall be avoided from February 1 through August 31 by a minimum of a 75-meter (250 feet) buffer or until fledging has occurred. Following fledging, owls may be passively relocated by a qualified biologist.

- If impacts on occupied burrows in the non-nesting period are unavoidable, on-site passive relocation techniques may be used if approved by the CDFW to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season unless a qualified biologist verifies through noninvasive methods that the burrow is no longer occupied. Foraging habitat for relocated pairs shall be provided in accordance with guidelines provided by the CDFW (2012).

- If relocation of the owls is approved for the site by the CDFW, the City shall require the developer to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include all of the following:

  – The location of the nest and owls proposed for relocation.

  – The location of the proposed relocation site.

  – The number of owls involved and the time of year when the relocation is proposed to take place.

  – The name and credentials of the biologist who will be retained to supervise the relocation.

  – The proposed method of capture and transport for the owls to the new site.

  – A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control).

  – A description of efforts and funding support proposed to monitor the relocation.

- If paired owls are present within 50 meters (160 feet) of a temporary project disturbance (i.e., parking areas), active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify losses from nest abandonment and/or loss of reproductive effort (e.g., killing of young).

Timing/Implementation: *Prior to any vegetation removal or ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Implementation of mitigation measures **MM 3.2.1, MM 3.2.2, MM 3.2.3a,** and **MM 3.2.3b** would ensure that sensitive habitat and candidate, sensitive, and/or special-status species identified in local or regional plans, policies, or regulations, or by the CDFW or the USFWS are identified, avoided, and mitigated for where necessary. With implementation of the above mitigation measures, these impacts would be **less than significant.**

Impacts to Sensitive Vegetation Communities, Including Riparian Habitat (Standard of Significance 2)

Impact 3.2.4 Implementation of the proposed project could result in disturbance and degradation of riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS. This impact is **potentially significant**.

Sensitive habitats include those that are of special concern to resource agencies and those that are protected under the MSHCP, CEQA, Section 1600 of the Fish and Game Code, and Section 404 of the Clean Water Act. Project activities may result in the loss of riparian habitat and other sensitive vegetation communities. However, the MSHCP has considered sensitive habitats and identified conservation goals for sensitive habitats in MSHCP Criteria Areas; they are therefore conserved under the MSHCP.

A 1602 Streambed Alteration Agreement for removal of or disturbance to riparian habitat and waters of the State (e.g., stream, lake, or river) from the CDFW may be required for development associated with any of the proposed subject sites. This agreement would include measures to minimize and restore riparian habitat. The 1602 Streambed Alteration Agreement would require the project applicant(s) associated with the development on any of the subject sites associated with the proposed project to prepare and implement riparian vegetation mitigation and monitoring plan.

Mitigation Measures

MM 3.2.4 As part of the 1602 Streambed Alteration Agreement from the CDFW, the project applicant(s) associated with the development on any of the subject sites associated with the proposed project shall prepare and implement a Vegetation Mitigation and Monitoring Plan for disturbed vegetation. Ratios for mitigation will be determined by the CDFW at a minimum of 1:1 to ensure no net loss of vegetation within CDFW jurisdiction.

Timing/Implementation: *Prior to project vegetation removal or ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Implementation of mitigation measures **MM 3.2.1** and **MM 3.2.4** will ensure that impacts to riparian and other sensitive communities would be **less than significant**.

Impacts to Jurisdictional Wetlands (Standard of Significance 3)

Impact 3.2.5 Implementation of the proposed project could result in the loss of jurisdictional waters of the United States and waters of the State. This impact would be considered **potentially significant**.

Although the jurisdictional delineations for the proposed project have not been completed, potentially jurisdictional water features have been described within the city. All water features mapped in the city are assumed to be considered jurisdictional by the USACE, Regional Water Quality Control Board (RWQCB), and CDFW.

Authorization to place fill in on-site jurisdictional features may be required by the USACE through the CWA Section 404 permitting process prior to project implementation. If a CWA Section 404 permit were to be required from the USACE, a CWA Section 401 permit would be also required from the RWQCB. If it is determined by a qualified wetland biologist through consultation with the RWQCB that on-site jurisdictional features qualify as waters of the State and would be affected by the proposed project, the applicant would be required to obtain an authorization from the RWQCB to fill/disturb these features prior to project implementation. Additionally, if on-site jurisdictional features qualify as waters of the State, authorization from the CDFW for impacts to these features would be required through the 1602 Streambed Alteration Agreement process. Furthermore, construction-related impacts to water quality would be mitigated through a National Pollutant Discharge Elimination System (NPDES) permit.

Mitigation Measures

MM 3.2.5 A formal jurisdictional delineation shall be conducted for areas that will be permanently or temporarily impacted by projects associated with potential development on any of the 25 subject sites. If waters of the United States and waters of the State cannot be avoided, the project applicant(s) associated with potential development on any of the 25 subject sites shall apply for a CWA Section 404 permit from the USACE, a Section 401 permit from the RWQCB, and a 1602 Streambed Alteration Agreement from the CDFW. These permits shall be obtained prior to issuance of grading permits and implementation of any proposed project.

The project applicant(s) associated with site-specific development on the 25 subject sites shall ensure that the project will result in no net loss of waters of the United States and waters of the State by providing mitigation through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the CWA Section 404/401 permits and the 1602 Streambed Alteration Agreement.

Compensatory mitigation may consist of (a) obtaining credits from a mitigation bank; (b) making a payment to an in-lieu fee program that will conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; these programs are generally administered by government agencies or nonprofit organizations that have established an agreement with the regulatory agencies to use in-lieu fee payments collected from permit applicants; and/or (c) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This last type of compensatory mitigation may be provided at or adjacent to the impact site

(i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). The project proponent/permit applicant retains responsibility for the implementation and success of the mitigation project.

Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities for the proposed project.

Timing/Implementation: *Prior to any vegetation removal or ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department and Public Works Department*

Implementation of the above mitigation measure and mitigation measures in Section 3.6, Hydrology and Water Quality, would reduce impacts to waters of the State and waters of the United States to a **less than significant** level.

Impacts to the Movement of Native Resident or Migratory Fish or Wildlife Species or Within Established Migratory Corridor (Standard of Significance 4)

Impact 3.2.6 Implementation of the proposed project would not interfere substantially with the movement of native resident or migratory fish or wildlife species. Therefore, there would be **no impact.**

No established migratory routes are identified within the city. Therefore, **no impact** to the movement of any native resident or migratory fish or wildlife species, or established native resident or migratory wildlife corridors, and no impediment to the use of native wildlife nursery sites will occur as a result of the proposed project.

Mitigation Measures

None required.

Conflict with Any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance (Standard of Significance 5)

Impact 3.2.7 Implementation of the proposed project will not result in a conflict with a local policy or ordinance protecting biological resources. Therefore, there is **no impact**.

The City of Wildomar has not adopted any policies or ordinances protecting biological resources. Therefore, there is **no impact**.

Mitigation Measures

None required.

Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan (Standard of Significance 6)

Impact 3.2.8 Implementation of the proposed project could result in disturbance and degradation of riparian/riverine habitat, as defined in Section 6.1.2 of the MSHCP. The project may result in impacts to riparian/riverine habitats, which could be considered **potentially significant**.

The sites identified for land use designation and zoning ordinance revisions are located within the Burrowing Owl Survey Area (Figure 6-4 of the MSHCP). Preconstruction nesting season surveys will need to be conducted following the guidelines provided in the MSHCP. Project implementation may result in potentially significant impacts to the species. Incorporation of mitigation measures **MM 3.2.1**, **MM 3.2.3a,** and **MM 3.2.3b** will reduce the impacts to less than significant.

A final component of the MSHCP is Mitigation Fee Areas, which are land areas that occur within the MSHCP and require a fee for development activities to occur. These fees are used to fund the minimization to certain endemic species. Portions of Wildomar are located within the MSHCP Mitigation Fee Area (Riverside County Ordinance 810.2) and the Stephens's Kangaroo Rat Mitigation Fee Area (Riverside County Ordinance 663). Mitigation measure **MM 3.2.1** includes the following measures to preserve sensitive species and their critical habitat consistent with the MSHCP. Given the proposed project's potential impacts to the overlying habitat conservation plan area, implementation of the following mitigation measures is required.

Mitigation Measures

MM 3.2.8 If riparian/riverine habitats covered under the MSHCP cannot be avoided, the project applicant(s) shall submit a Determination of Biological Equivalent or Superior Preservation (DBESP) for development on any of the subject sites associated with the proposed project, as outlined in Section 4.2 of the MSHCP Permittee Implementation Guidance Manual, to the City for approval.

For development on any of the subject sites associated with the proposed project, the project applicant(s) shall ensure that no net loss of riparian/riverine habitats will result by providing mitigation through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the DBESP. Mitigation accomplished under mitigation measure **MM 3.2.4** may apply to meet the standards where appropriate.

Timing/Implementation: *Prior to any vegetation removal or ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department and public Works Department*

With implementation of mitigation measures **MM 3.2.1** and **MM 3.2.8**, impacts will be **less than significant**.

3.2.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting associated with the proposed project includes approved, proposed, planned, and other reasonably foreseeable projects and development within the MSHCP. Developments and planned land uses, including the proposed project, would cumulatively contribute to impacts to biological resources in the area though the implementing partners in the MSHCP Plan Area will ensure each project is consistent with the MSHCP.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Biological Resources

Impact 3.2.9 Implementation of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development, will result in the conversion of habitat and impact biological resources. This impact is considered **less than cumulatively considerable.**

The proposed project permanently affects approximately 157 acres of habitat. As noted in the analysis and through the mitigation measures found in this section, the project will be subject to the provisions of the MSHCP. The MSHCP has been analyzed under CEQA. Project compliance with these plans fully mitigates for impacts to MSHCP covered species associated with the 25 subject sites. CEQA Guidelines Section 15130(a)(3) states that a project's contribution to a cumulative impact is not cumulatively considerable if the project is required to implement or fund its fair share of mitigation measures designed to alleviate the cumulative impact. Therefore, the mitigation measures contained in this section will reduce direct impacts associated with the development to **less than cumulatively considerable**.

Mitigation Measures

None required.

REFERENCES

CDFW (California Department of Fish and Wildlife). 2013. *California Natural Diversity Database (CNDDB) – Rarefind 3*. Accessed June 14. Sacramento: CDFW Biogeographic Data Branch.

City of Wildomar. 2003. *General Plan.*

CNPS (California Native Plant Society). 2013. *Inventory of Rare and Endangered Plants* (online edition, v8-01a). Accessed June 14. Sacramento: CNPS.

Riverside County. 2003. *Western Riverside County Multiple Species Habitat Conservation Plan.*

USFWS (United States Fish and Wildlife Service). 2013a. Information, Planning and Conservation System (IPaC). Accessed June 14.

———. 2013b. Critical Habitat Portal. Accessed June 14.

3.3 Climate Change and Greenhouse Gases

This section provides a discussion of the project's effect on greenhouse gas emissions and the associated effects of climate change. The reader is referred to Section 3.1, Air Quality, for a discussion of project impacts associated with air quality.

3.3.1 EXISTING SETTING

Since the early 1990s, scientific consensus holds that the world's population is releasing greenhouse gases (GHGs) faster than the earth's natural systems can absorb them. These gases are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of greenhouse gases beyond natural levels. The overabundance of greenhouse gases in the atmosphere has led to a warming of the earth and has the potential to severely impact the earth's climate system.

While often used interchangeably, there is a difference between the terms "climate change" and "global warming." According to the National Academy of Sciences, climate change refers to any significant, measurable change of climate lasting for an extended period of time that can be caused by both natural factors and human activities. Global warming, on the other hand, is an average increase in the temperature of the atmosphere caused by increased greenhouse gas emissions. The use of the term climate change is becoming more prevalent because it encompasses all changes to the climate, not just temperature.

To fully understand global climate change, it is important to recognize the naturally occurring greenhouse effect and to define the greenhouse gases that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Table 3.3-1 provides descriptions of the primary greenhouse gases attributed to global climate change, including a description of their physical properties, primary sources, and contribution to the greenhouse effect.

TABLE 3.3-1
GREENHOUSE GASES

Greenhouse Gas	Description
Carbon Dioxide (CO_2)	Carbon dioxide is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[1]
Methane (CH_4)	Methane is a colorless, odorless gas that is not flammable under most circumstances. CH_4 is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. Methane's atmospheric lifetime is about 12 years.[2]
Nitrous oxide (N_2O)	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[3]
Hydrofluorocarbons (HFCs)	Hydrofluorocarbons are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 260 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years).[4]
Perfluorocarbons (PFCs)	Perfluorocarbons are colorless, highly dense, chemically inert, and nontoxic. There are seven PFC gases: perfluoromethane (CF_4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F1_4). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF_4 and C_2F_6 as byproducts. The estimated atmospheric lifetimes for CF_4 and C_2F_6 are 50,000 and 10,000 years, respectively.[4,5]
Sulfur Hexafluoride (SF_6)	Sulfur hexafluoride is an inorganic compound that is colorless, odorless, nontoxic, and generally nonflammable. SF_6 is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF_6 produced worldwide. Significant leaks occur from aging equipment and during equipment maintenance and servicing. SF_6 has an atmospheric life of 3,200 years.[4]

Sources: [1]EPA 2011a, [2]EPA 2011b, [3]EPA 2010a, [4]EPA 2010b, [5]EFCTC 2003

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Gases with high global warming potential, such as HFCs, PFCs, and SF_6, are the most heat-absorbent. Methane traps over 21 times more

heat per molecule than CO_2, and N_2O absorbs 310 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weighs each gas by its global warming potential (GWP). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. **Table 3.3-2** shows the GWPs for different greenhouse gases for a 100-year time horizon.

TABLE 3.3-2
GLOBAL WARMING POTENTIAL FOR GREENHOUSE GASES

Greenhouse Gas	Global Warming Potential
Carbon Dioxide (CO_2)	1
Methane (CH_4)	21
Nitrous oxide (N_2O)	310
Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs)	6,500
Sulfur Hexafluoride (SF_6)	23,900

Source: California Climate Action Registry 2009

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California is a significant emitter of CO_2 in the world and produced 477 million gross metric tons of carbon dioxide equivalent in 2008 (CARB 2010a). Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2008, accounting for 36.4 percent of total GHG emissions in the state (CARB 2010a). This category was followed by the electric power sector (including both in-state and out-of-state sources) (24.3 percent) and the industrial sector (19.3 percent) (CARB 2010a).

CITY OF WILDOMAR GREENHOUSE GAS EMISSION INVENTORY

The City of Wildomar is participating in a regional initiative led by the Western Riverside Council of Governments (WRCOG) to evaluate GHG emissions and develop a Climate Action Plan (CAP) for reducing those emissions. In addition to contributing to collective efforts to mitigate the impacts of climate change, Wildomar has multiple opportunities to benefit from addressing community GHG emissions, such as reducing energy and transportation costs for the City, residents, and businesses; creating green jobs; improving the health of residents; and making the community a more attractive place to live and locate a business. According to the WRCOG GHG inventory, 176,180 metric tons of CO_2e in were emitted within the boundaries of the city in 2010.

EFFECTS OF GLOBAL CLIMATE CHANGE

California can draw on substantial scientific research conducted by experts at various state universities and research institutions. With more than a decade of concerted research, scientists have established that the early signs of climate change are already evident in the state—as shown, for example, in increased average temperatures, changes in temperature extremes, reduced snowpack in the Sierra Nevada, sea level rise, and ecological shifts.

Many of these changes are accelerating—locally, across the country, and around the globe. As a result of emissions already released into the atmosphere, California will face intensifying climate changes in coming decades (CNRA 2009a). Generally, research indicates that

California should expect overall hotter and drier conditions with a continued reduction in winter snow (with concurrent increases in winter rains), as well as increased average temperatures and accelerating sea-level rise. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing (CNRA 2009a).

Climate change temperature projections identified in the 2009 California Climate Adaptation Strategy suggest the following (CNRA 2009a):

- Average temperature increase is expected to be more pronounced in the summer than in the winter season.
- Inland areas are likely to experience more pronounced warming than coastal regions.
- Heat waves are expected to increase in frequency, with individual heat waves also showing a tendency toward becoming longer and extending over a larger area, thus more likely to encompass multiple population centers in California at the same time.
- As GHGs remain in the atmosphere for decades, temperature changes over the next 30 to 40 years are already largely determined by past emissions. By 2050, temperatures are projected to increase by an additional 1.8 to 5.4°F (an increase one to three times as large as that which occurred over the entire twentieth century).
- By 2100, the models project temperature increases between 3.6 and 9°F.

According to the 2009 California Climate Adaptation Strategy, the impacts of climate change in California have the potential to include, but are not limited to, the areas discussed in **Table 3.3-3**.

TABLE 3.3-3
POTENTIAL STATEWIDE IMPACTS FROM CLIMATE CHANGE

Potential Statewide Impact	Description
Public Health	Climate change is expected to lead to an increase in ambient (i.e., outdoor) average air temperature, with greater increases expected in summer than in winter months. Larger temperature increases are anticipated in inland communities as compared to the California coast. The potential health impacts from sustained and significantly higher than average temperatures include heat stroke, heat exhaustion, and the exacerbation of existing medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Numerous studies have indicated that there are generally more deaths during periods of sustained higher temperatures, and these are due to cardiovascular causes and other chronic diseases. The elderly, infants, and socially isolated people with pre-existing illnesses who lack access to air conditioning or cooling spaces are among the most at risk during heat waves.
Floods and Droughts	The impacts of flooding can be significant. Results may include population displacement, severe psychosocial stress with resulting mental health impacts, exacerbation of pre-existing chronic conditions, and infectious disease. Additionally, impacts can range from a loss of personal belongings, and the emotional ramifications from such loss, to direct injury and/or mortality. Drinking water contamination outbreaks in the United States are associated with extreme precipitation events. Runoff from rainfall is also associated with coastal contamination that can lead to contamination of shellfish and contribute to food-borne illness. Floodwaters may contain household, industrial, and agricultural chemicals as well as sewage and animal waste. Flooding and heavy rainfall events can wash pathogens and chemicals from

Potential Statewide Impact	Description
	contaminated soils, farms, and streets into drinking water supplies. Flooding may also overload storm and wastewater systems, or flood septic systems, also leading to possible contamination of drinking water systems. Drought impacts develop more slowly over time. Risks to public health that Californians may face from drought include impacts on water supply and quality, food production (both agricultural and commercial fisheries), and risks of waterborne illness. As surface water supplies are reduced as a result of drought conditions, the amount of groundwater pumping is expected to increase to make up for the water shortfall. The increase in groundwater pumping has the potential to lower the water tables and cause land subsidence. Communities that utilize well water will be adversely affected by drops in water tables or through changes in water quality. Groundwater supplies have higher levels of total dissolved solids compared to surface waters. This introduces a set of effects for consumers, such as repair and maintenance costs associated with mineral deposits in water heaters and other plumbing fixtures, and on public water system infrastructure designed for lower salinity surface water supplies. Drought may also lead to increased concentration of contaminants in drinking water supplies.
Water Resources	The state's water supply system already faces challenges to provide water for California's growing population. Climate change is expected to exacerbate these challenges through increased temperatures and possible changes in precipitation patterns. The trends of the last century—especially increases in hydrologic variability—will likely intensify in this century. The state can expect to experience more frequent and larger floods and deeper droughts. Rising sea level will threaten the Delta water conveyance system and increase salinity in near-coastal groundwater supplies. Planning for and adapting to these simultaneous changes, particularly their impacts on public safety and long-term water supply reliability, will be among the most significant challenges facing water and flood managers this century.
Forests and Landscapes	Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, wildfire occurrence statewide could increase from 57 percent to 169 percent by 2085. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state.

Source: CNRA 2009a

3.3.2 REGULATORY FRAMEWORK

The adoption of recent legislation has provided a clear mandate that climate change must be included in an environmental review for a project subject to the California Environmental Quality Act (CEQA). Several GHG emission–related laws and regulations are provided as follows.

FEDERAL REGULATION AND THE CLEAN AIR ACT

In the past, the US Environmental Protection Agency (EPA) has not regulated greenhouse gases under the Clean Air Act (CAA) because it asserted that the act did not authorize the EPA to issue mandatory regulations to address global climate change and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. However, the US Supreme Court held that the EPA must consider regulation of motor vehicle GHG emissions. In *Massachusetts v. Environmental Protection Agency et al.*, twelve states and cities, including California, together with several environmental organizations, sued to require the EPA to regulate GHGs as pollutants under the Clean Air Act (127 S. Ct. 1438 [2007]). The US Supreme Court held that the EPA was authorized by

the Clean Air Act to regulate CO_2 emissions from new motor vehicles. The Court did not mandate that the EPA enact regulations to reduce GHG emissions, but found that the only instances in which the EPA could avoid taking action were if it found that GHG emissions do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHG emissions contribute to climate change.

On December 7, 2009, the EPA issued an "endangerment finding" under the Clean Air Act, concluding that GHG emissions threaten the public health and welfare of current and future generations and that motor vehicles contribute to GHG pollution (EPA 2009). These findings provide the basis for adopting new national regulations to mandate GHG emission reductions under the federal Clean Air Act. The EPA's endangerment finding paves the way for federal regulation of GHG emissions.

It was expected that Congress would enact GHG legislation, primarily for a cap-and-trade system. However, proposals circulated in both the House of Representative and the Senate were controversial, and it may be some time before Congress adopts major climate change legislation. Under the Consolidated Appropriations Act of 2008 (HR 2764), Congress has established mandatory GHG reporting requirements for some emitters of greenhouse gases. In addition, on September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires annual reporting to the EPA of GHG emissions from large sources and suppliers of greenhouse gases, including facilities that emit 25,000 metric tons or more a year of GHGs.

The following discussion summarizes the EPA's recent regulatory activities with respect to various types of GHG sources.

EPA and National Highway Traffic Safety Administration Joint Rulemaking for Vehicle Standards

In response to the *Massachusetts v. EPA* ruling discussed above, the Bush Administration issued an Executive Order on May 14, 2007, directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008.

On October 10, 2008, the National Highway Traffic Safety Administration (NHTSA) released a final environmental impact statement analyzing proposed interim standards for passenger cars and light trucks in model years 2011 through 2015. The NHTSA issued a final rule for model year 2011 on March 30, 2009 (NHSTA 2009).

On May 7, 2010, the EPA and the NHTSA issued a final rule regulating fuel efficiency and GHG pollution from motor vehicles for cars and light-duty trucks for model years 2012–2016 (EPA 2010c). On May 21, 2010, President Obama issued a memorandum to the Secretaries of Transportation and Energy, and to the Administrators of the EPA and the NHTSA, calling for the establishment of additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and the NHTSA issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal greenhouse gas and fuel economy standards for model year 2017–2025 light-duty vehicles. The agencies proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. California has announced its support of this national program. The final rule was adopted in October 2012, and the NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

Fuel Efficiency Standards for Heavy-Duty Engines and Vehicles

In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the EPA and the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks, which apply to vehicles from model years 2014–2018. Both the EPA and the NHTSA have adopted standards for CO_2 emissions and fuel consumption, respectively, tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this program will reduce GHG emissions and fuel consumption for affected vehicles by 6 percent to 23 percent.

Energy Independence and Security Act

On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law. Among other key measures, the act would do the following, which would aid in the reduction of national GHG emissions, both mobile and non-mobile:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.

- Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

- While superseded by the NHTSA and EPA actions described above, the act also set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

Additional provisions of the act 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."

Voluntary Programs

The EPA administers a variety of voluntary programs and partnerships with GHG emitters in which the Environmental Protection Agency partners with industries that produce and utilize synthetic gases to reduce emissions of particularly potent GHG emissions. For example, the EPA's National Clean Diesel Campaign (NCDC) promotes diesel emission reduction strategies. The NCDC works to reduce the pollution emitted from diesel engines across the country through the implementation of varied control strategies by working with manufacturers, fleet operators, air quality professionals, environmental and community organizations, and state and local officials to reduce diesel emissions. NCDC activities include developing new emissions standards for locomotive and marine diesel engines, and promoting the reduction of emissions for existing diesel engines, including use of cleaner fuels, retrofitting and repairing existing fleets, and idling reduction, among others. The EPA also administers the State and Local Climate and Energy Program, which provides technical assistance, analytical tools, and outreach support to state, local, and tribal governments.

Other Applicable Regulations and Policies

In addition to the federal regulations and programs described above, there are still more policies and programs to address climate change. A database compiled by the International Energy Agency lists more than 300 policies and measures addressing climate change in the United States.

STATE REGULATION

California has adopted various administrative initiatives and also enacted a variety of legislation relating to climate change, much of which sets aggressive goals for GHG emissions reductions within the state. However, none of this legislation provides definitive direction regarding the treatment of climate change in the environmental review documents prepared under CEQA. In particular, the amendments to the CEQA Guidelines do not require or suggest specific methodologies for performing an assessment or thresholds of significance and do not specify greenhouse gas reduction mitigation measures. Instead, the CEQA amendments continue to rely on lead agencies to choose methodologies and make significance determinations based on substantial evidence, as discussed in further detail below. In addition, no state agency has promulgated binding regulations for analyzing GHG emissions, determining their significance, or mitigating any significant effects in CEQA documents. Thus, lead agencies exercise their discretion determining how to analyze greenhouse gases.

The discussion below provides a brief overview of California Air Resources Board (CARB) and Office of Planning and Research (OPR) documents and of the primary legislation relating to climate change that may affect the emissions associated with the proposed project. It begins with an overview of the primary regulatory acts that have driven GHG regulation and analysis in California.

Executive Order S-3-05 (Statewide GHG Targets)

California Executive Order S-03-05 (June 1, 2005) mandates a reduction of GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. Although the 2020 target has been incorporated into legislation (AB 32), the 2050 target remains only a goal of the Executive Order.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

The California Global Warming Solutions Act of 2006 (AB 32) 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599) was signed into law in September 2006 after considerable study and expert testimony before the legislature. The law instructs CARB to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The act directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020 (1990 levels have been estimated to equate to 15 percent below 2005 emission levels). Based on CARB's calculation of 1990 baseline emissions levels, California must reduce GHG emissions by approximately 29 percent below "business-as-usual" predictions of year 2020 GHG emissions to achieve this goal.

The bill required CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. CARB accomplished the key milestones set forth in AB 32, including the following:

- June 30, 2007. Identification of discrete early action GHG emissions reduction measures. On June 21, 2007, CARB satisfied this requirement by approving three early action measures. These were later supplemented by adding six other discrete early action measures.

- January 1, 2008. Identification of the 1990 baseline GHG emissions level, approval of a statewide limit equivalent to that level, and adoption of reporting and verification requirements concerning GHG emissions. On December 6, 2007, CARB approved a statewide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 baseline.

- January 1, 2009. Adoption of a scoping plan for achieving GHG emission reductions. On December 11, 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan), discussed in more detail below.

- January 1, 2010. Adoption and enforcement of regulations to implement the "discrete" actions. Several early action measures have been adopted and became effective on January 1, 2010.

- January 1, 2011. Adoption of GHG emissions limits and reduction measures by regulation. On October 28, 2010, CARB released its proposed cap-and-trade regulations, which would cover sources of approximately 85 percent of California's GHG emissions (CARB 2010b). CARB's board ordered CARB's executive director to prepare a final regulatory package for cap and trade on December 16, 2010.

- January 1, 2012. GHG emissions limits and reduction measures adopted in 2011 become enforceable.

AB 32 Scoping Plan

As noted above, on December 11, 2008, CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emission level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business as usual"). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations will occur through the end of year 2013. The key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.

- Achieving a statewide renewables energy mix of 33 percent.

- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions.

- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.

- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, heavy-duty truck measures, and the Low Carbon Fuel Standard.

- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation (CARB 2008).

In 2009, a coalition of special interest groups brought a challenge to the Scoping Plan alleging that it violated AB 32 and that the environmental review document (called a "Functional Equivalent Document") violated CEQA by failing to appropriately analyze alternatives to the proposed cap-and-trade program. On May 20, 2011, the San Francisco Superior Court entered a final judgment ordering that CARB take no further action with respect to cap-and-trade rulemaking until it complies with CEQA. While CARB disagrees with the trial court finding and appealed the decision on May 23, 2011, in order to remove any doubt about the matter and in keeping with CARB's interest in public participation and informed decision-making, CARB revisited the alternatives. The revised analysis includes the five alternatives included in the original environmental analysis: a "no project" alternative (that is, taking no action at all); a plan relying on a cap-and-trade program for the sectors included in a cap; a plan relying more on source-specific regulatory requirements with no cap-and-trade component; a plan relying on a carbon fee or tax; and a plan relying on a variety of proposed strategies and measures. The public hearing to consider approval of the AB 32 Scoping Plan Functional Equivalent Document and the AB 32 Scoping Plan was held on August 24, 2011. On this date, CARB re-approved the Scoping Plan.

In August 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relies on emissions projections updated in light of current economic forecasts which account for the economic downturn since 2008 as well as reduction measures already approved and put in place. This reduced the projected 2020 emissions from 596 million metric tons (MMT) CO_2e to 545 MMTCO_2e. The reduction in projected 2020 emissions means that the revised business-as-usual (BAU) reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now only 21 percent.

Assembly Bill 1493

Assembly Bill 1493 ("the Pavley Standard" or AB 1493) (Health and Safety Code Sections 42823 and 43018.5) required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009–2016. The bill also required the California Climate Action Registry to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emissions reduction credits. The bill authorizes CARB to grant emissions reduction credits for reductions in GHG emissions prior to the date of enforcement of regulations, using model year 2000 as the baseline for reduction.

In 2004, CARB applied to the EPA for a waiver under the federal Clean Air Act to authorize implementation of these regulations. The waiver request was formally denied by the EPA in December 2007 after California filed suit to prompt federal action. In January 2008, the California Attorney General filed a new lawsuit against the EPA for denying California's request for a waiver to regulate and limit GHG emissions from these vehicles. In January 2009, President

Barack Obama issued a directive to the EPA to reconsider California's request for a waiver. On June 30, 2009, the EPA granted the waiver to California for its GHG emission standards for motor vehicles. As part of this waiver, the EPA specified the provision that CARB may not hold a manufacturer liable or responsible for any noncompliance caused by emission debits generated by a manufacturer for the 2009 model year. CARB has adopted a new approach to passenger vehicles—cars and light trucks—by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. These standards will apply to all passenger and light-duty trucks used by the residents of Wildomar.

Low Carbon Fuel Standard

Executive Order S-01-07 (January 18, 2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. CARB identified the Low Carbon Fuel Standard (LCFS) as a discrete early action item under AB 32, and the final resolution (09-31) was issued on April 23, 2009. In 2009, CARB approved for adoption of the LCFS regulation, which became fully effective in April 2010 and is codified at Title 17, California Code of Regulations, Sections 95480–95490. The Low Carbon Fuel Standard will reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the "life cycle" of a transportation fuel.

On December 29, 2011, the US District Court for the Eastern District of California issued several rulings in the federal lawsuits challenging the LCFS. One of the district court's rulings preliminarily enjoined CARB from enforcing the regulation. In January 2012, CARB appealed that decision to the Ninth Circuit Court of Appeals and then moved to stay the injunction pending resolution of the appeal. On April 23, 2012, the Ninth Circuit granted CARB's motion for a stay of the injunction while it continues to consider CARB's appeal of the lower court's decision.

Clean Cars

In January 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model years 2017–2025. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Renewables Portfolio Standard (Senate Bill 1078, Senate Bill 107, and Senate Bill X1-2)

Established in 2002 under Senate Bill (SB) 1078, and accelerated in 2006 under SB 107 and again in 2011 under SBX1-2, California's Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan. As interim measures, the RPS requires 20 percent of retail sales to be sourced from renewable energy by 2013, and 25 percent by 2016. Initially, the RPS provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly owned utilities to the entities subject to the RPS. The expected growth in the RPS to meet the standards in effect in 2008 is not reflected in the BAU calculation in the AB 32 Scoping Plan. In other words, the Scoping Plan's 2020 business as usual does not take credit for implementation of the RPS that occurred after its adoption.

Senate Bill 375

SB 375 (codified at Government Code and Public Resources Code[1]), signed in September 2008, provides for a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 will be implemented over the next several years and includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. SB 375 also requires Metropolitan Planning Organizations (MPOs) (such as the Southern California Association of Governments) to incorporate a "sustainable communities strategy" (SCS) in their regional transportation plans (RTPs) that will achieve GHG emission reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

SB 375 is similar to the Regional Blueprint Planning Program, established by the California Department of Transportation (Caltrans), which provides discretionary grants to fund regional transportation and land use plans voluntarily developed by MPOs working in cooperation with councils of governments. The Scoping Plan relies on the requirements of SB 375 to implement the carbon emissions reductions anticipated from land use decisions.

On September 23, 2010, CARB adopted regional targets for the reduction of greenhouse gases applying to the years 2020 and 2035 (CARB 2011a). For the area under the Western Riverside Council of Government's jurisdiction, including the City of Wildomar, CARB adopted regional targets for reduction of GHG emissions by 8 percent for 2020 and by 13 percent for 2035. On February 15, 2011, CARB's executive officer approved the final targets (CARB 2011b).

California Building Energy Efficiency Standards

Energy conservation standards for new residential and commercial buildings were originally adopted by the California Energy Resources Conservation and Development Commission in June 1977 and most recently revised in 2008 (Title 24, Part 6 of the California Code of Regulations (CCR)). In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (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 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. Some of these standards have become mandatory in the 2010 edition of the Part 11 code. Current mandatory standards include:

- Twenty (20) percent mandatory reduction in indoor water use, with voluntary goal standards for 30, 35, and 40 percent reductions
- Separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects

[1] Senate Bill 375 is codified at Government Code Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588, 14522.1, 14522.2, and 65080.01 as well as Public Resources Code Sections 21061.3 and 21159.28 and Chapter 4.2.

- Diversion of 50 percent of construction waste from landfills, increasing voluntarily to 65 and 75 percent for new homes and 80 percent for commercial projects

- Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies

- Low-pollutant-emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard

The California Energy Commission has opened a public process and rulemaking proceeding for the adoption of changes to the 2013 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Part 1 (collectively referred to here as the standards). The proposed amended standards will be adopted in 2014. The 2013 Building Energy Efficiency Standards are 25 percent more efficient than previous standards for residential construction and 30 percent better for nonresidential construction. The standards, which take effect on January 1, 2014, will offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

South Coast Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, South Coast Air Management District (SCAQMD) staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance Thresholds. These thresholds have not been finalized and continue to be developed through the working group.

On September 28, 2010, SCAQMD Working Group Meeting #15 considered use of the 6.6 metric tons per service population metric as a threshold for plan-level analysis, though it has not adopted any thresholds for the land use sector to date. Thus, it is only a concept that has been discussed at the staff level and is not a SCAQMD recommendation at this time. Furthermore, SCAQMD's staff concept (as indicated in the September 28, 2010, working group presentation) is that the service population metric is only employed for significance determination after considering whether a CEQA plan or project is consistent with a climate action plan.

As of SCAQMD staff's meeting on September 28, 2010, the draft tiered threshold provides the following guidance:

- **Tier 1:** Is the project exempt from CEQA? If yes, the project is not significant and no further analysis is required.

- **Tier 2:** Is the project consistent with an approved regional climate action plan? If yes, the project is not significant and no further analysis is required.

- **Tier 3:** Would the project result in emissions below the screening level criteria? If yes, the project is not significant and no further analysis is required.

  – Propose 3,000 metric tons per year (MT/year) CO_2e for all land use types.

  - Threshold value by land use type acceptable if used consistently.
  - Residential: 3,500 MT/year CO_2e
  - Commercial: 1,400 MT/year CO_2e
  - Mixed use: 3,000 MT/year CO_2e
  - Both options based on review of the Office of Planning and Research database (711 CEQA projects) using the 90 percent capture rate approach

- **Tier 4:** Would the project comply with certain performance-based standards? If yes, the project is not significant and no further analysis is required.
  - **Option #1: Percent Emission Reduction Target**
    - No recommendation at this time
  - **Option #2: Early Implementation of Applicable AB 32 Scoping Plan Measures**
    - Incorporated in Option #3
  - **Option #3: SCAQMD Efficiency Target**
    - 2020 Targets
      - 4.8 MT/year CO_2e per service population (residents plus employees) for project-level threshold (land use employment only)
      - 6.6 MT/year CO_2e per service population for plan-level threshold
    - 2035 targets
      - 3.0 MT/year CO_2e per service population for project-level threshold
      - 4.1 MT/year CO_2e per service population for plan-level threshold

- **Tier 5:** Would the project secure sufficient carbon offsets or credits, offset alone or in combination with above tiers to achieve target significance threshold? If yes, the project is not significant and no further analysis is required.
  - 30-year project life
  - Real, quantifiable, verifiable, and surplus
  - Project design feature/on-site reduction measures
  - Off-site within neighborhood
  - Off-site within district
  - Off-site within state

- Off-site out of state
- Substitution allowed via enforceable commitment

The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the governing board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable only to boilers and process heaters, forestry, and manure management projects.

3.3.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the application of the following State CEQA Guidelines Appendix G thresholds of significance. Climate change impacts are considered significant if implementation of the proposed project would:

1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Subsequent development allowed under the proposed Housing Element would result in the generation of GHG emissions associated with future construction activities, consisting primarily of emissions from equipment exhaust, as well as long-term operations, consisting primarily of new vehicular trips, stationary source emissions such as natural gas used for heating, and indirect source emissions such as electricity usage for lighting.

Addressing GHG generation impacts requires an agency to make a determination as to what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine if a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions (14 CCR Section 15064.4(a)).

In its Final Statement of Reasons for Regulatory Action accompanying the CEQA Amendments (FSOR), the California Natural Resources Agency (2009b) explains that quantification of GHG emissions "is reasonably necessary to ensure an adequate analysis of GHG emissions using available data and tools" and that "quantification will, in many cases, assist in the determination of significance." However, as explained in the FSOR, the revised Section 15064.4(b) assigns lead agencies the discretion to determine the methodology to quantify GHG emissions. The FSOR also notes that CEQA case law has long stated that "there is no iron-clad definition of 'significance.' Accordingly, lead agencies must use their best efforts to investigate and disclose all that they reasonably can concerning a project's potential adverse impacts."

Determining a threshold of significance for a project's climate change impacts poses a special difficulty for lead agencies. Much of the science in this area is new and is evolving constantly. At the same time, neither the state nor local agencies are specialized in this area, and there are currently no local, regional, or state thresholds for determining whether a proposed project has a

significant impact on climate change. The CEQA Amendments do not prescribe specific significance thresholds but instead leave considerable discretion to lead agencies to develop appropriate thresholds to apply to projects within their jurisdiction.

As noted earlier, AB 32 is a legal mandate requiring that statewide GHG emissions be reduced to 1990 levels by 2020. In adopting AB 32, the legislature determined the necessary GHG reductions for the state to make in order to sufficiently offset its contribution to the cumulative climate change problem to reach 1990 levels. AB 32 is the only legally mandated requirement for the reduction of greenhouse gases. As such, compliance with AB 32 is the adopted basis upon which the agency can base its significance threshold for evaluating the project's GHG impacts.

As previously stated, the SCAQMD has not announced when staff is expecting to present a finalized version of GHG thresholds to the governing board. On September 28, 2010, the SCAQMD recommended a plan-level threshold of 6.6 metric tons of CO_2e per service population (residents plus employees) per year in 2020 and 4.1 metric tons of CO_2e per service population per year in 2035. For the purposes of this evaluation, these SCAQMD-recommended thresholds are used to assess the significance of GHGs since the thresholds were prepared with the purpose of complying with the requirements of AB 32 and achieving the goals of the AB 32 Scoping Plan.

METHODOLOGY

The resultant GHG emissions of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod), version 2011.1.1, computer program (see **Appendix 3.3**). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for the use of government agencies, land use planners, and environmental professionals. This model was developed in coordination with the SCAQMD and is the most current emissions model approved for use in California by various other air districts.

The California Natural Resources Agency CNRA has noted that impacts of GHG emissions should focus on the cumulative impact on climate change. The public notice states (CNRA 2009c):

> *While the Proposed Amendments do not foreclose the possibility that a single project may result in greenhouse gas emissions with a direct impact on the environment, the evidence before [CNRA] indicates that in most cases, the impact will be cumulative. Therefore, the Proposed Amendments emphasize that the analysis of greenhouse gas emissions should center on whether a project's incremental contribution of greenhouse gas emissions is cumulatively considerable.*

Thus, the CEQA Amendments continue to make clear that the significance of GHG emissions is most appropriately considered on a cumulative level.

Projected emissions resulting from the maximum development anticipated under the proposed project (1,678 multi-family residential dwelling units) are compared with existing (2013) conditions. As stated in Section 3.0, all the sites analyzed are generally flat, and with one exception, are currently vacant, with naturally vegetated, pervious ground cover.

IMPACTS AND MITIGATION MEASURES

Generate Greenhouse Gas Emissions That May Have a Significant Impact on the Environment (Standard of Significance 1)

Impact 3.3.1 Implementation of the proposed project will result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This is considered a **less than significant** and **less than cumulatively considerable** impact.

GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single land use project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

Construction GHG Emissions

Subsequent development proposed under the proposed project would result in direct emissions of GHGs from construction.

Since the actual phasing of future development allowed under the proposed project is not known at this time, construction-related emissions were modeled assuming an equal distribution of development over the plan period. For example, the proposed Housing Element update projects a future growth potential of an additional 1,678 potential multi-family units. For the purposes of this analysis, this projected units are divided by eight (the number of years accounted for in the proposed Housing Element) in order to roughly depict potential construction-related GHG emissions which may result in any given year over the span of the proposed project. However, it is important to note that the proposed project does not include any policy provisions requiring that its growth potential be attained. Not all of the identified land will be available for development at any given time based on landowner willingness to sell or develop, site readiness, environmental constraints, market changes, and other factors. This impact discussion assumes full growth potential under the Housing Element update in order to present the maximum amount of pollutant emissions possible.

The approximate quantity of annual GHG emissions generated by construction equipment utilized to build the development associated with the proposed project is depicted in **Table 3.3-4.**

TABLE 3.3-4
CONSTRUCTION-RELATED GREENHOUSE GAS EMISSIONS – METRIC TONS PER YEAR

Construction	Carbon Dioxide (CO_2)	Methane (CH_4)	Nitrous Oxide (N_2O)	CO_2e
One Year of Construction	870	0.08	0.00	872
Eight Years of Construction Total	6,960	0.64	0.00	6,976

*Source: CalEEMod version 2011.1.1. Diesel-fueled construction equipment load factors reduced 33% to account for off-road emission overestimation (CARB 2010c). See **Table 3.1-6** in Section 3.1 and **Appendix 3.3** for emission model outputs.*

As shown, project construction would result in the generation of approximately 6,976 metric tons of CO_2e over the course of eight years of construction. Once construction is complete, the

generation of these GHG emissions would cease. All future construction projects in Wildomar will be subject to SCAQMD rules and regulations in effect at the time of construction, which require the support of local, regional, and statewide efforts to reduce GHG emissions. Construction-related mitigation could include various measures such as an enforced limitation of off-road diesel equipment idling times below the state-mandated maximum of 5 minutes and/or an off-road construction equipment emissions reduction plan demonstrating that all off-road equipment (portable and mobile) meets or is cleaner than Tier 2 engine emission specifications. In addition, per Senate Bill 97, all future development projects under the proposed Housing Element would be required to analyze and mitigate GHG emissions during development project review, pursuant to CEQA. Adherence to SCAQMD guidance as well as to Senate Bill 97 would reduce construction-generated GHG emissions.

SCAQMD Tier 3 recommends that construction emissions be amortized for a "project lifetime" of 30 years to ensure that GHG reduction measures address construction-generated GHG emissions as part of the operational reduction strategies. The amortized construction emissions identified in **Table 3.3-4** are added to the annual average operational emissions (see **Table 3.3-5**).

Operational GHG Emissions

As shown in **Table 3.3-5**, the unmitigated long-term operations of full realization of the proposed project would produce 20,034 metric tons of CO_2e annually.

TABLE 3.3-5
UNMITIGATED PROJECT GREENHOUSE GAS EMISSIONS – PROJECT OPERATION (METRIC TONS PER YEAR)

Emissions Source	Carbon Dioxide (CO_2)	Methane (CH_4)	Nitrous Oxide (N_2O)	CO_2e
Construction Amortized over 30 Years	232	0.02	0.00	233
Area Source (landscaping, hearth)	1,248	0.58	0.02	1,267
Energy	4,723	0.15	0.08	4,752
Mobile	12,686	0.35	0.00	12,693
Waste	157	9.26	0.00	351
Water	638	3.37	0.09	738
Total	**19,684**	**13.73**	**0.19**	**20,034**

Source: CalEEMod version 2011.1.1. Diesel-fueled construction equipment load factors reduced 33% to account for off-road emission overestimation (CARB 2010c). Emissions projections account for 157.49 acres of development. 1,426 units assumed to use gas hearths and 84 assumed to use wood burning hearths consuming 1,019 pounds of wood per year. Emissions projections account for 11,058 daily vehicle trips per weekday, 12,014 daily vehicle trips per Saturday, and 10,185 daily vehicle trips per Sunday. See ***Appendix 3.3*** *for emission model outputs.*

As noted in the Standards of Significance discussion above, the SCAQMD's GHG emission threshold is 6.6 metric tons of CO_2e per service population (residents plus employees) per year by the year 2020 and 4.1 metric tons of CO_2e per service population (residents plus employees) per year by the year 2035. The SCAQMD's approach is to identify the emissions level for which a plan would not be expected to substantially conflict with existing California legislation (AB 32) adopted to reduce statewide GHG emissions. As stated in Section 3.8, Population and Housing, the proposed project is expected to accommodate 5,537 people. Therefore, the project service population would be 5,537.

As shown in **Table 3.3-6**, dividing the GHG emissions yields a metric ton per service population ratio of 3.6 for full realization of the proposed project.

TABLE 3.3-6
HOUSING ELEMENT UPDATE GHG EMISSIONS PER SERVICE POPULATION

Per Capita Emissions	Emissions	Jobs	Population	Service Population (SP)	$MTCO_2e$/SP/Year
1,678 Multi-Family Units	20,034	0	5,537	5,537	**3.6**
2020 Service Population Threshold					6.6
2035 Service Population Threshold					4.1
Threshold Surpassed?					**No**

The 3.6 ratio is less than the 2020 6.6 metric tons per service population threshold and the 2035 4.1 metric tons per service population threshold. As previously stated, the contribution of GHG emissions is considered only as a cumulative impact. Therefore, GHG calculations predict emissions less than the SCAQMD cumulative significance threshold, and this impact is considered to be **less than significant** and **less than cumulatively considerable.**

Mitigation Measures

None required.

Conflict with Applicable Greenhouse Gas Reduction Plan (Standard of Significance 2)

Impact 3.3.2 Implementation of the proposed project would be consistent with the goals of AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, etc.), as interim SCAQMD thresholds would not be surpassed. This is considered a **less than significant** and **less than cumulatively considerable** impact.

The core mandate of AB 32 is that statewide GHG emissions in 2020 equal 1990 levels. AB 32 is anticipated to secure emissions reductions through a variety of mechanisms, such as increasing energy efficiency and introducing more renewable energy sources. CARB has already begun to adopt strategies to reduce GHG emissions under AB 32. Strategies included in the Climate Change Scoping Plan, described in detail above, such as the California Light-Duty Vehicle GHG Standard, Renewables Portfolio Standard, and Low Carbon Fuel Standard, while applicable to land use projects, are generally not under the control of local agencies like the City of Wildomar. Nonetheless, emission reductions from these strategies are anticipated to occur as CARB adopts and implements regulations under AB 32. For instance, reductions are already taking place due to the newly adopted vehicle emission standards and the Low Carbon Fuel Standard.

It is the intent of AB 32 to reduce statewide GHG emissions to 1990 levels by the year 2020, which is considered by CARB to be 15 percent below 2005 levels by 2020. As noted under Impact 3.4.1, full realization of all the residential development allowed under the proposed project would not result in a net increase in cumulative GHG emissions beyond SCAQMD significance thresholds. In addition, the Housing Element proposes several energy conservation policy provisions that would further assist in achieving the goals of AB 32. For instance, Program H-24-1 requires the City to partner with Southern California Edison (SCE) and the Southern California Gas Company (SoCalGas) in order to promote energy-saving programs such as the Residential Multifamily Energy Efficiency Rebate program, Heating and Cooling Rebate program, and incentives for energy saving of up to $4,000 available to SCE and SoCalGas residential customers.

Proposed Program H-24.2 ensures that local building codes are consistent with state-mandated green building standards, and Program H-24.3 states that the City's Building Department will be responsible for implementing the state's energy conservation standards (e.g., Title 24 Energy Standards). This includes checking building plans and other written documentation showing compliance and inspecting construction to ensure that the dwelling units are constructed according to those plans. Applicants for building permits must show compliance with the state's energy conservation requirements at the time building plans are submitted.

The proposed project would not result in a net increase in cumulative GHG emissions beyond SCAQMD significance thresholds, and therefore is consistent with AB 32. As the contribution of GHG emissions is considered only as a cumulative impact this impact is considered to be **less than significant** and **less than cumulatively considerable.**

Mitigation Measures

None required.

REFERENCES

California Climate Action Registry. 2009. *California Climate Action Registry General Reporting Protocol Version 3.1.*

CARB (California Air Resources Board). 2008. *Climate Change Scoping Plan Appendices* (Appendix F).

———. 2010a. "California Greenhouse Gas Inventory for 2000–2008." http://www.arb.ca.gov/cc/inventory/data/data.htm.

———. 2010b. *Proposed Regulation to Implement the California Cap-and-Trade Program.*

———. 2010c. *Staff Report: Proposed Amendments to the Regulation for In-Use Off Road Diesel-Fueled Fleets and the OFFROAD Large Spark-Ignition Fleet Requirements.*

———. 2011a. *Notice of Decision, Regional Greenhouse Gas Emissions Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.* http://www.arb.ca.gov/cc/sb375/notice%20of%20decision.pdf.

———. 2011b. *Executive Order No. G-11-024, Relating to Adoption of Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.* http://www.arb.ca.gov/cc/sb375/executive_order_g11024.pdf.

CNRA (California Natural Resources Agency). 2009a. *2009 California Climate Adaptation Strategy*.

———. 2009b. *Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97*. http://ceres.ca.gov/ceqa/docs /Final_Statement_of_Reasons.pdf.

———. 2009c. *Notice of Public Hearings and Notice of Proposed Amendment of Regulations Implementing the California Environmental Quality Act*, 2009. http://ceres.ca.gov/ceqa/docs/Notice_of_Proposed_Action.pdf

EFCTC (European Fluorocarbons Technical Committee). 2003. *Fluorocarbons and Sulphur Hexafluoride: Perfluorocarbons (PFCs) Fact Sheet*.

EPA (US Environmental Protection Agency). 2009. *Endangerment and Cause or Contribute Finding for Greenhouse Gases under the Clean Air Act.* Last revised December 18, 2009.

———. 2010a. "Nitrous Oxide." http://www.epa.gov/nitrousoxide/scientific.html.

———. 2010b. "High Global Warming Potential Gases." http://epa.gov/highgwp/.

———. 2010c. *Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, Final Rule.*

———. 2011a. "Climate Change – Greenhouse Gas Emissions: Carbon Dioxide." http://www.epa.gov/climatechange/emissions/co2.html.

———. 2011b. "Methane." http://www.epa.gov/methane/scientific.html.

NHSTA (National Highway Safety Traffic Administration). 2009. *Average Fuel Economy Standards Passenger Cars and Light Trucks Model Year 2011, Final Rule*.

OPR (Office of Planning and Research). 2008. *Technical Advisory: CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review.*

WRCOG (Western Riverside Council of Governments). 2011. *2010 Wildomar WRCOG CAP Greenhouse Gas Emissions Inventory*.

3.4 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section considers and evaluates the potential impacts of the proposed 2013–2021 Housing Element on cultural resources. *Cultural resources*, as that term is used in this section, include historical resources and archaeological resources, as those terms are defined by Public Resources Code Sections 21084.1 and 21083.2, and California Environmental Quality Act (CEQA) Guidelines Section 15064.5.

For the purposes of this section, cultural resource impacts are categorized into four groups: impacts to archaeological resources; impacts to historical resources; impacts to human remains; and impacts to paleontological resources.

3.4.1 EXISTING SETTING

The following summary of the history and ethnographic setting of the project area is taken from the *Phase I Cultural Resources Assessment of Tentative Tract Map 36388* (Keller 2012) that was prepared for the nearby Wildomar Oak Creek Canyon Development (City of Wildomar 2012). Text citations to this source document are not included in individual paragraphs. The report may be viewed at Wildomar City Hall, 23873 Clinton Keith Road, Suite 201, during normal business hours.

PREHISTORY

On the basis of currently available archeological research, occupation of Southern California by human populations is believed to have begun at least 10,000 years ago. The earliest established tradition in Southern California is accepted to be the San Dieguito Tradition. The San Dieguito people were nomadic large-game hunters whose tool assemblage included large domed scrapers, leaf sharpened knives and projectile points, stemmed projectile points, chipped stone crescentics, and hammerstones.

Throughout southwestern California, the La Jolla Complex followed the San Dieguito Tradition. The La Jolla Complex is recognized primarily by the presence of millingstone assemblages within shell middens. Characteristic cultural resources of the La Jolla Complex include basined millingstones, unshaped manos, flaked stone tools, shell middens, and a few Pinto-like projectile points. Flexed inhumations under stone cairns, with heads pointing north, are also present. The La Jolla Complex existed from 5500 to 1000 BC.

The Pauma Tradition may be an inland variant of the La Jolla Complex, exhibiting a shift to a hunting and gathering economy, rather than one based on shellfish gathering. Implications of this shift are an increase in number and variety of stone tools and a decrease in the amount of shell.

The late period is represented by the San Luis Rey Complex, divided into two periods: San Luis Rey I (AD 1400–1750) and San Luis Rey II (AD 1750–1850). The San Luis Rey I type component includes cremations, bedrock mortars, millingstones, small triangular projectile points with concave bases, bone awls, stone pendants, *Olivella* shell beads, and quartz crystals. The San Luis Rey II assemblage is the same as San Luis Rey I, but with the addition of pottery vessels, cremation urns, tubular pipes, stone knives, steatite arrow straighteners, red and black pictographs, and such non-aboriginal items as metal knives and glass beads. Inferred San Luis Rey subsistence activities include hunting and gathering with an emphasis on acorn harvesting.

ETHNOGRAPHY

The project area was included in the known territory of the Shoshonean-speaking Luiseño Indians during both prehistoric and historic times. The name Luiseño is Spanish in origin and was used in

reference to those aboriginal inhabitants of Southern California associated with the Mission San Luis Rey.

The territory of the Luiseño was extensive, encompassing over 1,500 square miles of coastal and inland Southern California. Known territorial boundaries extended on the coast from Aliso Creek on the north to Agua Hedionda Creek on the south, then inland to Santiago Peak, across to the eastern side of the Elsinore Fault Valley, southward to the east of Palomar Mountain, and finally, around the southern slope of the Valley of San Jose. Their habitat included every ecological zone from sea level to 6,000 mean feet above sea level.

Territorial boundaries of the Luiseño were shared with the Gabrieliño and Serrano to the north, the Cahuilla to the east, and the Cupeño and Ipai to the south. With the exception of the Ipai, these tribes shared similar cultural and language traditions. Although the social structure and philosophy of the Luiseño were similar to that of the neighboring tribes, they had a greater population density and correspondingly, a more rigid social structure.

HISTORIC CONTEXT

In the general project area, the Colonial Spanish-Mission Period (AD 1769–1830) first represents historical occupation. Although earlier European explorers had traveled throughout Southern California, it was not until the 1769 "Sacred Expedition" of Captain Gaspar dé Portola and Franciscan Father Junipero Serra that there was actual contact with aboriginal inhabitants of the region ("Indians"). The intent of the expedition, which began in San Blas, Baja California, was to establish missions and presidios along the California coast, thereby serving the dual purpose of converting Indians to Christianity and expanding Spain's military presence in the "New World."

In addition, historian Phillip Rush credits Captain Juan Pablo Grijalva and his party with the first European discovery of the region in 1795. The first Europeans of record to enter the region were Father Juan Norberto de Santiago and Captain Pedro Lisalde. In 1797 their expedition party, comprising seven soldiers and five Indians (probably Juaneños from the Mission San Juan Capistrano) stopped briefly near Temecula on their journey to find another mission site. Upon leaving the valley, Fr. Santiago remarked in his journal that the expedition had encountered an Indian village called "Temecula."

In 1798 on the site Santiago had selected, the Mission San Luis Rey de Francia was founded and all aboriginals living within the mission's realm of influence became known as the "Luiseño." Within a 20-year period, under the guidance of Fr. Antonio Peyro, the mission prospered to a degree that it was often referred to as the "King of the Missions." During this period, the Mission San Luis Rey de Francia claimed the entire region that is now western Riverside County and northern San Diego County as a cattle ranch, although records of the Mission San Juan Capistrano show this region as part of their holdings.

By 1818, the greater Temecula Valley had become the Mission San Luis Rey's principle producer of grain and was considered one of the mission's most important holdings. It was at approximately this time that a granary, chapel, and majordomo's home were built in Temecula. These were the first structures built by Europeans within the boundaries of Riverside County. The buildings were constructed at the original Indian village of Temecula on a high bluff at the southern side of Temecula Creek where it joins Murrieta Creek to form the Santa Margarita River. This entire area continued to be an abundant producer of grain, as well as horses and cattle, for the thriving Mission San Luis Rey until the region became part of Mexico on April 11, 1822. Following this event, the Spanish missions and mission ranches began a slow decline.

During the Mexican Ranch-Pastoral/Landless Indian period (AD 1830–1860), the first of the Mexican ranchos were established following the enactment of the Secularization Act of 1833 by the Mexican government. Mexican governors were empowered to grant vacant land to "contractors (*empresarios*), families, or private citizens, whether Mexicans or foreigners, who may ask for them for the purpose of cultivating or inhabiting them." Mexican governors granted approximately 500 ranchos during this period.

Throughout the 1840s and 1850s, thousands of settlers and prospectors traveled through the project area on the Emigrant Trail en route to various destinations in the West. The southern portion of the trail ran from the Colorado River to Warner's Ranch and then westward to Aguanga, where it split into two roads. The main road continued westward past Aguanga and into the valley north of the Santa Ana Mountains. This road was alternately called the Colorado Road, Old Temescal Road, or Fort Yuma Road, and what is now State Route 79 generally follows its alignment. The second road, known as the San Bernardino Road, split off northward from Aguanga and ran along the base of the San Jacinto Mountains.

In the final period of historic occupation, the American Developmental/Indian Reservation Era (AD 1860–current), the first major changes in the project area took place as a result of the land issues addressed in the previous decade. Settlement of the region began in earnest as a direct result of the Homestead Act of 1862, although many of the settlers actually obtained their land through other avenues. This region was considered especially desirable by settlers due to the abundance of flat land with good soil, relatively dependable sources of water, and the proximity to major transportation corridors.

On March 17, 1882, the California Southern Railroad (San Bernardino and Temecula Line) was opened, extending from National City near the Mexican border in San Diego County, northerly through Temecula and Murrieta, across the Perris valley, down Box Springs Grade, and on to the City of San Bernardino. As a result, the entire region anticipated a boom in industry and population. L. Menifee Wilson, a 20-year-old man from Kentucky, came to this area and located what appears to be the first gold quartz mine in this part of Southern California.

As news of his find spread, miners flocked to the region to try their luck. Hundreds of gold mining claims were subsequently filed in the region around Menifee's mine, and this area became known as Menifee and the Menifee Valley. Gold quartz discoveries in the Wildomar, Winchester, Perris, Lakeview, and Murrieta areas further fueled the belief that the entire region was one of unsurpassed mineral wealth.

Wilson was one the major proponents of this belief and in addition to his original mine, he claimed several others in the general area. From the time of Wilson's first gold discovery in the early 1880s, gold production through hard rock mining in western Riverside County increased considerably, reaching its peak in 1895. At that time the value of gold produced was reported in the *Mining and Scientific Press* (Vol. 85) as being $285,106. Although the gold value was still relatively high in 1896 ($262,800), from that point on production decreased substantially every year, until in 1917, the value of gold produced was reported as being zero.

On September 24, 1883, approximately 18 months after the opening of the California Southern Railroad, Franklin H. Herald, Donald M. Graham, and William Collier purchased the 12,832-acre La Laguna Rancho for $12,000. It was renamed Elsinore and subdivided into town lots and small acreages for sale. However, in 1885 the partnership was dissolved and the unsold land within the rancho was divided. Collier and Graham took as their share the land that lay southeasterly of Corydon Street and platted a town site with the name "Wildon" on the land. In November of 1886, a second plat for the new town was recorded with the name "Wildomar." This final name

comprised letters of each partner's first name, plus letters from the first name of Margaret Collier, who was Graham's sister and Collier's wife.

On April 16, 1886 Wildomar's first post office was established, and when Riverside County incorporated in 1893, Wildomar was designated as one of the original 40 election precincts and the Wildomar school district as one of the original 52 accepted school districts. As the aforementioned gold boom began to subside in the late 1890s, the local economy's emphasis on mining began to give way to a far greater emphasis on the agricultural potential of the region. This shift in industry led to a less dramatic population growth for the region and allowed for the rural setting of western Riverside County to persist until the late twentieth century.

CULTURAL RESOURCES IN THE PROJECT AREA

State law requires that, prior to the adoption or amendment of a general plan, a city or county must consult with Native American tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects located within that jurisdiction.

The City of Wildomar, in fulfilling this obligation, contacted the Pechanga Band of Luiseño Indians and met with their cultural analyst, Anna Hoover, on May 14, 2013. Ms. Hoover submitted a follow-up letter, dated June 3, 2013, included as **Appendix 1.0** to this Draft EIR. Information contained in the letter and relayed at the meeting regarding the cultural significance of the project area is summarized below. Additionally, mitigation measures recommended by the tribal representative are included under the Impacts and Mitigation Measures subsection that follows later in this section.

The Pechanga Tribe's knowledge of ancestral boundaries is based on information passed down from elders, published academic works in the areas of anthropology, history, and ethno-history, and through recorded ethnographic and linguistic accounts. Of the many anthropologists and historians who have presented boundaries of the Luiseño traditional territory, none have excluded the Wildomar area from their descriptions (Sparkman 1908; Kroeber 1925; White 1963; Harvey 1974; Oxendine 1983; Smith and Freers 1994). The project area is located in the south central area of the Pechanga territory.

Cultural resources common to the area include cupules, often identified by archaeologists as rock art or petroglyphs. Cupules consist of numerous small pecked and ground indentations in large boulders that take the shape of mushrooms or waves. Many of these cupule boulders have been identified within a few miles of the project area.

PALEONTOLOGICAL RESOURCES IN THE PROJECT AREA

Paleontology is defined as a science dealing with the life of past geological periods as known from fossil remains. Paleontological resources include fossil remains, as well as fossil localities and formations that have produced fossil material. Such locations and specimens are important nonrenewable resources. The California Environmental Quality Act (CEQA) offers protection for these sensitive resources and requires that they be addressed during the environmental impact report process. There are no known paleontological resources on the designated sites or in the immediate vicinity that could be affected by the proposed project.

3.4.2 REGULATORY FRAMEWORK

FEDERAL

National Historic Preservation Act

The National Historic Preservation Act (NHPA) requires that the federal government list significant historic resources on the National Register of Historic Places (NRHP), which is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

Structures, sites, buildings, districts, and objects over 50 years of age can be listed in the NRHP as significant historic resources. However, properties under 50 years of age that are of exceptional importance or are contributors to a historic district can also be included in the NRHP.[1] The criteria for listing in the NRHP include resources that:

a) Are associated with events that have made a significant contribution to the broad patterns of history;

b) Are associated with the lives of persons significant in our past;

c) Embody the distinctive characteristics of a type, period, or 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 individual distinction; or

d) Have yielded or may likely yield information important in prehistory or history.

STATE

California Register of Historical Resources

The State Historical Resources Commission has designed the California Register of Historic Resources (CRHR) for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The CRHR is the authoritative guide to the state's significant historical and archeological resources. This program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding, and affords certain protections under CEQA.

California Environmental Quality Act

Under CEQA, public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to Public Resources Code (PRC)

[1] A [historic] district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development (National Park Service [NPS] 2013).

Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources.

Historical resource is a term with a defined statutory meaning (PRC Section 21084.1; determining significant impacts to historical and archaeological resources is described in CEQA Guidelines Section 15064.5[a], [b]). Under CEQA Guidelines Section 15064.5(a), historical resources include the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Public Resources Code Section 5024.1).

2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources (Public Resources Code Section 5024.1), including the following:

    a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

    b) Is associated with the lives of persons important in our past;

    c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

    d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

Historic resources are usually 45 years old or older and must meet at least one of the criteria for listing in the California Register, described above (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity (California State Parks, Office of Historic Preservation [OHP] 2013.)

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be historical resources for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC, Section 5024.1 and California Code of Regulations (CCR), Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

For historic structures, CEQA Guidelines Section 15064.5(b)(3) indicates that a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995) shall be considered as mitigating impacts to a less than significant level.

As noted above, CEQA also requires lead agencies to consider whether projects will impact unique archaeological resources. Public Resources Code Section 21083.2(g) states:

> *"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:*
>
> - *Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.*
> - *Has a special and particular quality such as being the oldest of its type or the best available example of its type.*
> - *Is directly associated with a scientifically recognized important prehistoric or historic event or person.*

Treatment options under Section 21083.2 include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation or study in place without excavation and curation (if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource).

Section 7050.5(b) of the California Health and Safety Code (CHSC) specifies protocol when human remains are discovered, as follows:

> *In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.*

CEQA Guidelines Section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the Native American Heritage Commission. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

In addition to the mitigation provisions pertaining to accidental discovery of human remains, the CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally. Pursuant to Section 15064.5(f), these provisions should include "an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place."

Paleontological resources are classified as non-renewable scientific resources. California Public Resources Code Section 5097.5 et seq. makes it a misdemeanor for anyone to knowingly disturb any archaeological, paleontological, or historical features situated on public lands. No state or local agencies have specific jurisdiction over paleontological resources. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earth-moving on public or private land in a project site.

3.4.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Following Public Resources Code Sections 21083.2 and 21084.1, and Section 15064.5 and Appendix G of the CEQA Guidelines, cultural resource impacts are considered to be significant if implementation of the project considered would result in any of the following:

1) Cause a substantial adverse change in the significance of a historical resource as defined in Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5.

2) Cause a substantial adverse change in the significance of an unique archaeological resource as defined in Public Resources Code Sections 21083.2 and 21084.1, and CEQA Guidelines Section 15064.5.

3) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

4) Disturb any human remains, including those interred outside of formal cemeteries.

Regarding historical resource impacts, State CEQA Guidelines Section 15064.5 defines "substantial adverse change" as physical demolition, destruction, relocation, or alteration of the historical resource or its immediate surroundings such that the significance of an historical resource is materially impaired.

CEQA Guidelines Section 15064.5(b)(2) defines "materially impaired" for purposes of the definition of substantial adverse change to historical resources as follows:

The significance of an historical resource is materially impaired when a project:

(A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

(B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

METHODOLOGY

The City of Wildomar contacted the Pechanga Band of Luiseño Indians and met with their cultural analyst, Anna Hoover, on May 14, 2013. Ms. Hoover submitted a follow-up letter, dated June 3, 2013, included as **Appendix 3.4-1**. Information contained in the letter and relayed at the meeting regarding the cultural significance of the project area forms the basis for the cultural resources analysis and findings. Additionally, mitigation measures recommended by the tribal representative are included below in order to mitigate potentially significant impacts to less than significant levels.

The impact analysis provided below utilizes the proposed Housing Element policies and action items to determine whether implementation of the proposed project would result in significant impacts. The analyses identify and describe how specific policies and actions as well as other City regulations and standards provide enforceable requirements and/or performance standards that address cultural and paleontological resources and avoid or minimize significant impacts.

PROJECT IMPACTS AND MITIGATION MEASURES

Impacts to Historical Resources (Standard of Significance 1)

Impact 3.4.1 Implementation of the proposed project would not cause a substantial adverse change in the significance of a known historical resource. Therefore, **no impact** would occur.

There are currently no known historical resources on the proposed sites identified in the Housing Element for rezoning to R4 or for the new Mixed Use overlay zone, nor any known historical resources that would be potentially affected by residential and mixed-use buildout of the properties. Therefore, the proposed project will have **no impact** on historical resources.

Mitigation Measures

None required.

Impacts to Archeological Resources (Standard of Significance 2)

Impact 3.4.2 Implementation of the proposed project could result in a substantial adverse change in the significance of an unique archaeological resource, as well as the potential disturbance of currently undiscovered cultural resources (i.e., prehistoric archaeological sites, historical archaeological sites, and isolated artifacts and features) and human remains. This impact is considered **potentially significant**.

As discussed in the Existing Setting subsection above, Wildomar is located within the ancestral boundaries of the Pechanga Band of Luiseño Indians. Resources of significance to the Pechanga Tribe are known to be present within the general vicinity of the project area. Potential exists for disturbance of undiscovered unique archaeological resources on these properties should housing or mixed-use development occur. Disturbance of such resources would be **potentially significant**.

Mitigation Measures

MM 3.4.2a Prior to beginning construction of any project contemplated in the Housing Element, the project applicant shall retain an archaeologist listed on the Riverside County qualified consultant list to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Any newly discovered cultural resource deposits shall be subject to a cultural resources evaluation in consultation with the Pechanga Tribe.

Timing/Implementation: *As a condition of project approval, and implemented during grading permit and during ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

MM 3.4.2b At least 30 days prior to beginning construction of any project contemplated in the Housing Element, the project applicant shall contact the Pechanga Tribe to notify the Tribe of grading, excavation, and the monitoring program, and to coordinate with the City and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall address the treatment of known cultural resources; the designation, responsibilities, and participation of professional Native American Tribal monitors during grading, excavation, and ground-disturbing activities; project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Section 15064.5.

Timing/Implementation: *As a condition of project approval, and implemented during grading permit and during ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

MM 3.4.2c Prior to beginning construction of any project contemplated in the Housing Element, the project archaeologist shall file a pre-grading report with the City

(if grading is to be done) to document the proposed methodology for grading activity observation, which will be determined in consultation with the Pechanga Tribe. Said methodology shall include the requirement for a qualified archaeological monitor to be present and to have the authority to stop and redirect grading activities. In accordance with the agreement required in mitigation measure MM 3.4.2b, the archaeological monitor's authority to stop and redirect grading will be exercised in consultation with the Pechanga Tribe in order to evaluate the significance of any archaeological resources discovered on the property. Tribal and archaeological monitors shall be allowed to monitor all grading, excavation, and groundbreaking activities and shall also have the authority to stop and redirect grading activities.

Timing/Implementation: *As a condition of project approval, and implemented during grading permit and during ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

MM 3.4.2d If inadvertent discoveries of subsurface archaeological resources are discovered during the grading for any project contemplated in the Housing Element, the developer, the project archaeologist, and the Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. Pursuant to California Public Resources Code Section 21083.2(b), avoidance shall be the preferred method of preservation for archaeological resources, including but not limited to sacred sites.

If the parties above cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director for decision. The Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the Planning Commission and the Planning Commission's decision shall be appealable to the City Council.

The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found in the project area, to the Pechanga Tribe for proper treatment and disposition, which may include curation at the Pechanga Cultural Resources Curation Facility, which meets the standards required by 36 CFR Part 79.

Timing/Implementation: *As a condition of project approval, and implemented during grading permit and during ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Following implementation of mitigation measures **MM 3.4.2a** through **MM 3.4.2d**, impacts to archaeological resources will be **less than significant**.

Impacts to Paleontological Resources (Standard of Significance 3)

Impact 3.4.3 Implementation of the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. This impact is considered **potentially significant**.

The sites identified in the Housing Element for rezoning to R-4 and the Mixed Use overlay zone have not been investigated by a professional paleontologist. Excavations could occur in association with development of these sites that could affect paleontological resources. Therefore, it is possible that project-related ground-disturbing activities could uncover previously unknown paleontological resources within project boundaries. Unanticipated and accidental paleontological discoveries during project implementation have the potential to affect significant paleontological resources.

Mitigation Measures

MM 3.4.3 Prior to issuance of a grading permit for a project contemplated in the Housing Element, the project applicant shall retain a qualified professional to assess the potential for presence of paleontological resources and the potential for project construction to affect such resources if present. If it is determined, to the satisfaction of the City, that there is low potential for discovery or disturbance of paleontological resources, no further action shall be required.

If potential for discovery is deemed moderate to high, the project applicant shall retain a qualified paleontologist to monitor all initial ground-disturbing activities in native soils or sediments. If the paleontologist, upon observing initial earthwork, determines there is low potential for discovery, no further action shall be required and the paleontologist shall submit a memo to the City confirming findings of low potential.

Should any paleontological resources (i.e., fossils) be uncovered during project construction activities, all work within a 100-foot radius of the discovery site shall be halted or diverted to other areas on the site and the City shall be immediately notified. A qualified paleontologist shall evaluate the finds and recommend appropriate next steps to ensure that the resource is not substantially adversely impacted, including but not limited to avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Further ground disturbance shall not resume within a 100-foot radius of the discovery site until an agreement has been reached between the project applicant, a qualified paleontologist, and the City as to the appropriate preservation or mitigation measures to ensure that the resource is not substantially adversely impacted.

Timing/Implementation: *As a condition of project approval, and implemented during grading permit and during ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Following implementation of mitigation measure **MM 3.4.3**, impacts to paleontological resources will be **less than significant**.

Impacts to Human Remains (Standard of Significance 4)

Impact 3.4.4 Implementation of the proposed project could result in the inadvertent disturbance of undiscovered human remains. Any discovery of human remains would be **potentially significant**.

Although the potential for discovery of unknown burials is low, the potential, however small, does exist that earthwork associated with housing and mixed-use development on the sites identified in the Housing Element for rezoning to R-4 and the Mixed Use overlay zone could impact unmapped and unknown burials. Discovery of human remains would be **potentially significant**.

Mitigation Measures

MM 3.4.4 If human remains are encountered, no further ground disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin as required by California Health and Safety Code Section 7050.5. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. The decision as to the treatment and disposition of the remains shall be made consistent with the procedures and standards contained in Health and Safety Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) and the Treatment Agreement described in mitigation measure **MM 3.4.2b**.

Timing/Implementation: *As a condition of project approval, and implemented during grading permit and during ground-disturbing activities*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Implementation of mitigation measure **MM 3.4.4** would ensure that any human remains discovered during project construction activities would be treated in accordance with state laws. Impacts would be reduced to a **less than significant** level.

3.4.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting associated with the proposed project includes approved, proposed, planned, and other reasonably foreseeable projects and development in Wildomar. Developments and planned land uses, including the proposed project, would cumulatively contribute to impacts to known and unknown cultural resources and paleontological resources in the area. The Existing Setting subsection provides an overview of cultural resources and the history of the region.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Cultural and Paleontological Resources

Impact 3.4.5 Implementation of the proposed project, along with any foreseeable development in the vicinity, could result in cumulative impacts to cultural resources, i.e., unique archeological resources, historical resources,

paleontological resources, and human remains. This contribution would be considered **less than cumulatively considerable.**

As mitigated, the direct impacts associated with the proposed project will be reduced to a less than significant level. While it is possible that grading and development will result in the accidental discovery of paleontological and cultural resources, mitigation measures and state and federal laws already in place will set in motion actions designed to mitigate these potential impacts. The proposed project covers the entire City of Wildomar, which contains existing development that has disturbed the soil and no new impacts to cultural resources on these properties is likely. As a result of existing development, mitigation proposed in this section, and existing federal and state laws, this impact is considered **less than cumulatively considerable**.

Mitigation Measures

None required.

REFERENCES

City of Wildomar. 2012. *Oak Creek Canyon Development Administrative Draft Environmental Impact Report.*

Keller, Jean A. 2012. *A Phase I Cultural Resources Assessment of Tentative Tract Map 36388.*

NPS (National Park Service). 2013. National Register Bulletin: How to Define Categories of Historic Properties. Accessed July 2013. http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_4.htm

OHP (Office of Historic Preservation – California State Parks). 2013. California Register. Accessed July 2013. http://ohp.parks.ca.gov/?page_id=21238.

3.5 Geology, Soils, and Mineral Resources

This section describes the current geologic and soil conditions in Wildomar and in the general vicinity and analyzes issues such as potential exposure of people and property to seismic and geologic hazards such as ground rupture, settlement, and landslides. The types of soils that have been identified and their properties are also discussed. Impacts associated with erosion are discussed in Section 3.6, Hydrology and Water Quality, of this Draft EIR.

3.5.1 EXISTING SETTING

REGIONAL GEOLOGY

Wildomar is located regionally within the Peninsular Ranges Geomorphic Province of California. Characterized by steep, elongated valleys that trend west to northwest, the topography of the northwest-trending Peninsular Ranges is controlled by the Elsinore fault zone, which extends from the San Gabriel River Valley southeasterly to the United States/Mexico border.

The mountainous regions of the Peninsular Ranges Geomorphic Province are underlain by Pre-Cretaceous, metasedimentary and metavolcanic rocks, and Cretaceous plutonic rocks of the Southern California Batholith. Tertiary and Quaternary rocks generally comprise non-marine sediments consisting of sandstone, mudstones, conglomerates, and occasionally volcanic units.

Geologic Formations

Wildomar is in the United States Geologic Survey (USGS) Wildomar and Murrieta 7.5-Minute Quadrangles. According to the California Geologic Survey (CGS), about 50 percent (31 square miles) of the Murrieta Quadrangle is covered by Quaternary and Quaternary-Tertiary sediments, of which just under 10 square miles are composed of latest Pleistocene (2.6 million to 11,700 years ago) to Holocene (11,700 years to present) (CGS 2007b).

Exposed over the remaining area of the quadrangle are pre-Quaternary crystalline rocks that are divided into two distinct assemblages separated by the northwest-trending Elsinore fault zone. Bedrock exposed within the quadrangle northeast of the Elsinore Trough consists mainly of Cretaceous batholithic rocks dominated by gabbro, tonalite, granodiorite, pegmatite, and ring dikes (CGS 2007b).

Undifferentiated metasedimentary rock of Mesozoic age also occurs, but exposure is limited to the very northeast corner of the quadrangle. Miocene basalt also is present, but only as small, isolated exposures capping the Hogbacks, a linear ridge situated a few miles northeast of Murrieta. In contrast, the predominant rock cropping out in the quadrangle southwest of the Elsinore fault zone is Mesozoic undifferentiated metasedimentary rock composed of thick-layered quartzite and fissile phyllitic rock. A small exposure of Cretaceous tonalite is present in the southwest corner (CGS 2007b).

Substrate underlying Wildomar is primarily sedimentary deposition, which can be categorized in the following ages within the Quaternary period: early to middle Pleistocene (very old), middle to late Pleistocene (old), and Pleistocene to Holocene (youngest). Early to middle Pleistocene alluvial deposits are located in the western portion and eastern portion of the city. These older fluvial and valley deposits consist of sand and gravel with varying amounts of silt and clay (CGS 2007b).

Middle to late Pleistocene deposition occurs in isolated outcrops near younger valley sediments. These deposits consist of gravel, sand, silt, and clay-bearing stream sediments deposited on canyon floors (CGS 2007b). Young (latest Pleistocene and Holocene) alluvial valley deposits

consist mainly of fluvial sediments deposited along the valley floor adjacent to Murrieta Creek. These deposits consist of unconsolidated sand, silt, and clay-bearing alluvium (CGS 2007b).

Topography

Regional topography varies dramatically from low-lying valleys to rolling hills and steep mountainous terrain with large rock outcroppings (City of Wildomar 2003). The variation in topography is controlled by the Elsinore fault zone, which extends from the San Gabriel Valley southeasterly to the United States-Mexico border. Wildomar is located within a down-dropped structural valley, known geologically as the Elsinore Trough (CGS 2007b). Based on the Murrieta 7.5-Minute USGS Quadrangle, Wildomar is located on relatively flat terrain within the Elsinore Trough at approximately 1,400 feet in elevation with very little topographical variation.

SOILS

The United States Department of Agriculture, Natural Resources Conservation Service's (NRCS) characterizes the soils throughout Riverside County and in Wildomar. Specific soil types for Mixed Use Planning Area (MUPA) parcels (sites 1 through 21) and the parcels that will be rezoned (sites 22 through 25) are listed in **Table 3.5-1**. **Table 3.5-2** defines the different soil types and their expansion potential for the 25 sites. **Table 3.5-3** illustrates permeability rates with corresponding soil texture and is the basis for determining expansion potential for the soils listed in **Table 3.5-2**.

TABLE 3.5-1
SOIL TYPES FOR SITES 1–25

Site #	APN	Acreage	Soil Type
1	376190001	2.99	GyC2, GyD2, RaB2
2	380160005	1.74	MmD2, ReC2, RsC
3	380160009	3.48	HcC, MnD2, RsC, TeG
4	376410021	1.60	HcC, MnD2, PlD
5	380160006	1.54	MmD2, ReC2, RsC
6	362250027	4.98	MnD2, PlD
7	380160004	3.73	GtA, MmD2, ReC2, RsC
8	376410017	2.40	HcC, MnD2, PlD
9	362250001	5.84	HcC, MnD2, PlD, TeG
10	376190002	23.92	GyC2, GyD2, HcC, MnD2, MnE3, RaB2
11	380160007	4.46	GtA, GyC2, MmD2, RsC
12	376180006	1.36	GyC2, GyD2
13	367050068	6.48	MmD2, RaD2, ReC2
14	380160003	4.83	GtA, MmD2, ReC2, RsC
15	367180015	19.40	GyC2, GyD2, HcC, MnD2, MnD2, RaB2
16	367180043	16.14	GyC2, GyD2, HcC, MnD2, MnD2, RaB2, RaD2
17	376410016	2.51	PlD
18	362250029	2.63	PlD, TeG

Site #	APN	Acreage	Soil Type
19	380160008	3.65	HcC, MnD2, RsC, TeG
20	367050064	5.84	PlB, RaD2, ReD2
21	376410015	2.46	PlD
22	380220002	5.06	AtD2, RuF
23	370400009	4.99	EnC2, EwB, GyC2, PaC2, ReC2
24	380270013	5.91	AtD2, PlB, SmE2
25	380250003	10	HfD, MmD2, MnE3, PlD, RmE3, RnD2

TABLE 3.5-2
SOILS PROPERTIES SUMMARY AND EXPANSION POTENTIAL

Soil Name	Surface Texture	Expansion Potential[1]
Arlington and Greenfield (AtD2)	Fine sandy loams; 8 to 15 percent slopes; eroded	Low
Exeter (EnC2)	Sandy loam; 2 to 8 percent slopes; eroded	Low
Exeter (EwB)	Very fine sandy loam; 0 to 5 percent slopes	Low
Grangeville (GtA)	Fine sandy loam; 0 to 2 percent slopes	Low
Greenfield (GyC2)	Sandy loam; 2 to 8 percent slopes; eroded	Low
Greenfield (GyD2)	Sandy loam; 8 to 15 percent slopes; eroded	Low
Hanford (HcC)	Coarse sandy loam; 2 to 8 percent slopes; eroded	Low
Hanford (HfD)	Sandy loam; 2 to 15 percent slopes	Low
Monserate (MmD2)	Sandy loam; 8 to 15 percent slopes; eroded	Low
Monserate (MnD2)	Sandy loam; 5 to 15 percent slopes; eroded	Low
Monserate (MnE3)	Sandy loam; 15 to 25 percent slopes; severely eroded	Low
Pachappa (PaC2)	Fine sandy loam; 2 to 8 percent slopes; eroded	Low
Placentia (PlB)	Fine sandy loam; o to 5 percent slopes	Low
Placentia (PlD)	Fine sandy loam; 5 to 15 percent slopes	Low
Ramona (RaB2)	Sandy loam, 2 to 5 percent slopes; eroded	Low
Ramona (RaD2)	Sandy loam; 8 to 15 percent slopes; eroded	Low
Ramona (ReC2)	Very fine sandy loam; 0 to 8 percent slopes; eroded	Low
Ramona and Buren (RmE3)	Sandy loams; 15 to 25 percent slopes; severely eroded	Low
Ramona and Buren (RnD2)	Loams; 5 to 15 percent slopes; eroded	Low
Riverwash (RsC)	Riverwash	Low
Rough broken land (RuF)	Rough broken land	Low
San Timoteo (SmE2)	Loam; 8 to 25 percent slopes; eroded	**Moderate**
Terrace escarpments (TeG)[2]	Terrace escarpments	Low

1 Estimated potential based on soil texture and associated permeability rates in Table 3.5-3. Soils containing high clay content will be less permeable and as a result will have higher shrink-swell potential.

[2] *This land type consists of steep faces that separate the terraces from the lower-lying land. The faces are composed of soft coastal sandstone, hard shale, or hard, weather-resistant, fine-grained sandstone. Vegetation is sparse and is made up of dwarfed shrubs, a few patches of grass, lichens, and moss. In seepage areas water grasses, a few cypress and oaks, and various weathered conifers also grow.*

TABLE 3.5-3
SOIL PERMEABILITY BASED ON SOIL TEXTURE

Soil Texture	Permeability Rates (centimeters/hour)[1]	Permeability
Sand	5.0	From very rapid (sand) to very slow (clay)
Sandy loam	2.5	
Loam	1.3	
Clay loam	0.8	
Silty clay	0.25	
Clay	0.05	

Source: FAO 2013

Subsidence and Collapsible and Expansive Soils

Soil permeability is the property of the soil to transmit water and air. The more permeable the soil, the greater the seepage (FAO 2013), resulting in higher rates of infiltration. Pore size and number of pores closely relate to soil texture and structure, and also influence permeability (FAO 2013). Soils that transmit water faster (such as sandy soils) and have higher permeability will have less shrink-swell potential because less water retention occurs with these types of soils.

Conversely, soils that transmit water at a slower rate (such as soils with high clay content) have lower permeability and therefore higher shrink-swell potential and the potential for significant expansion. Expansive clay minerals include smectite, bentonite, montmorillonite, beidellite, vermiculite, attapulgite, nontronite, illite, and chlorite. When structures are located on expansive soils, foundations have the tendency to rise during the wet season and shrink during the dry season. This movement can create new stresses on various sections of the foundation and connected utilities and can lead to structural failure and damage to infrastructure. Cracked foundations, floors, and basement walls are typical types of damage done by swelling soils. Damage to the upper floors of the building can occur when motion in the structure is significant.

Existing literature and mapping indicate that soils in Wildomar generally have low shrink-swell potential because they are generally sandy. However, soils developed on older alluvium have varying amounts of silt and clay. Due to higher clay content and density, these soils could have more shrink-swell potential.

Subsidence refers to the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. It may be caused by a variety of human and natural activities, including earthquakes. According to the City of Wildomar General Plan (2003), the city is located in a susceptible subsidence zone.

MINERAL RESOURCES

Mineral extraction is an important component of Riverside County's economy. The county has extensive deposits of clay, limestone, iron, sand, and aggregates. The classification of land in California takes place according to a priority list that was established by the State Mining and

Geology Board (SMGB) in 1982 or when the SMGB is petitioned to classify a specific area. The SMGB has also established Mineral Resource Zones (MRZ) to designate lands that contain mineral deposits. The State of California has also designated aggregate mineral resource areas in the county. The following classifications are used by the state to define MRZs:

- MRZ-1: Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.
- MRZ-2a: Areas where the available geologic information indicates that there are significant mineral deposits.
- MRZ-2b: Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.
- MRZ-3a: Areas where the available geologic information indicates that mineral deposits are likely to exist; however, the significance of the deposit is undetermined. Additional exploratory work is needed to determine specific categorization. MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral resources.
- MRZ-3b: Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined. This class denotes areas where presence of the mineral is inferred and/or not visible from the surface geology. Further exploration is needed to ascertain full potential of the area.
- MRZ-4: Areas where there is not enough information available to determine the presence or absence of mineral deposits.

Once a Mineral Resource Zone classification is applied, the SMGB determines if the mineral resource deposit is appropriate for designation as "regional" (multi-community) or "statewide economic significance." The MRZ classification inventories mineral deposits without consideration for existing land use; however, the purpose of designation is to identify those resources considered to be of prime importance in allowing a particular region to meet its future needs and that remain available with regard to land use. Once a designation is made, such information is provided at the local level for mandated incorporation into county and city land use planning processes. Based on the City of Wildomar General Plan (2003), the city is located within an area designated MRZ-3a.

FAULTING AND SEISMICITY

Earthquakes are the result of an abrupt release of energy stored in the earth. This energy is generated from the forces that cause the continents to change their relative position on the earth's surface, a process called "continental drift." The earth's outer shell is composed of a number of relatively rigid plates that move slowly over the comparatively fluid molten layer below. The boundaries between plates are where the more active geologic processes take place. Earthquakes are an incidental product of these processes.

Ground Shaking

In populated areas, the greatest potential for loss of life and property damage could come as a result of ground shaking from a nearby earthquake. The degree of damage depends on many interrelated factors. Among these are the Richter magnitude, focal depth, distance from the causative fault, source mechanism, duration of shaking, high rock accelerations, type of surficial

deposits or bedrock, degree of consolidation of surficial deposits, presence of high groundwater, topography, and design, type, and quality of building construction.

Ground shaking is the byproduct of an earthquake and is the energy created as rocks break and slip along a fault (Christenson 1994). The amount of ground shaking that an area may be subject to during an earthquake is related to the proximity of the area to the fault, the depth of the hypocenter (focal depth), location of the epicenter, and the size (magnitude) of the earthquake. Soil type also plays a role in the intensity of shaking. Bedrock or other dense or consolidated materials are less prone to intense ground shaking than soils formed from alluvial deposition.

The strength of an earthquake is generally expressed in two ways: magnitude and intensity. The magnitude is a measure that depends on the seismic energy radiated by the earthquake as recorded on seismographs. The intensity at a specific location is a measure that depends on the effects of the earthquake on people or buildings and is used to express the severity of ground shaking. Although there is only one magnitude for a specific earthquake, there may be many values of intensity (damage) for that earthquake at different sites.

The most commonly used magnitude scale today is the moment magnitude (Mw) scale. Moment magnitude is related to the physical size of fault rupture and the movement (displacement) across the fault, and it is therefore a more uniform measure of the strength of an earthquake. The seismic moment of an earthquake is determined by the resistance of rocks to faulting multiplied by the area of the fault that ruptures and by the average displacement that occurs across the fault during the earthquake. The seismic moment determines the energy that can be radiated by an earthquake and hence the seismogram recorded by a modern seismograph (CGS 2002).

The most commonly used scale to measure earthquake intensities (ground shaking and damage) is the Modified Mercalli Intensity (MMI) Scale, which measures the intensity of an earthquake's effects in a given locality and is based on observations of earthquake effects at specific places. On the Modified Mercalli Intensity Scale, values range from I to XII (see **Table 3.5-4**). While an earthquake has only one magnitude, it can have various intensities, which decrease with distance from the epicenter (CGS 2002).

Table 3.5-4 provides descriptions of the effects of ground shaking intensities along with a general range of moment magnitudes that are often associated with those intensities. Additionally, corresponding averages for peak ground velocity and peak acceleration are also provided.

TABLE 3.5-4
MODIFIED MERCALLI INTENSITY SCALE FOR EARTHQUAKES

Richter Magnitude Scale	Modified Mercalli Scale	Effects of Intensity	Average Peak Ground Velocity (centimeters/second)	Average Peak Acceleration [a]
0.1–0.9	I	Not felt except by a very few under especially favorable circumstances.	–	–
1.0–2.9	II	Felt by only a few persons at rest, especially on upper floors of buildings.	–	–
3.0–3.9	III	Felt quite noticeably in doors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing cars may rock slightly. Vibration like passing a truck.	–	0.0035–0.007 g

Richter Magnitude Scale	Modified Mercalli Scale	Effects of Intensity	Average Peak Ground Velocity (centimeters/second)	Average Peak Acceleration [a]
4.0–4.5	IV	During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make creaking sound. Sensation like heavy truck striking building. Standing cars rocked noticeably.	1–3	0.015–0.035 g
4.6–4.9	V	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.	3–7	0.035–0.07 g
5.0–5.5	VI	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.	7–20	0.07–0.15 g
5.6–6.4	VII	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.	20–60	0.15–0.35 g
6.5–6.9	VIII	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.	60–200	0.35–0.7 g
7.0–7.4	IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.	200–500	0.7–1.2 g
7.5–7.9	X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.	≥ 500	>1.2 g
8.0–8.4	XI	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.	—	—
8.5+	XII	Damage total. Lines of sight and level are distorted. Objects thrown into the air.	—	—

Source: USGS 2012

[a] *Peak acceleration is expressed in "g" (the acceleration due to earth's gravity, equivalent to g-force).*

An "active" fault is one that shows displacement within the last 11,000 years and therefore is considered more likely to generate a future earthquake. The 1994 Alquist-Priolo Earthquake Fault Zoning Act requires the California State Geologist to establish regulatory zones (now known as Earthquake Fault Zones; prior to January 1, 1994, these zones were known as Special Studies Zones) around the surface traces of active faults that pose a risk of surface ground rupture and to issue appropriate maps in order to mitigate the hazard of surface faulting to structures for human occupancy.

According to the Geologic Map of California (2010a), the Fault Activity Map of California (2010b), and Fault Evaluation Reports FER-72 and FER-76 (1978a and 1978b), all prepared by the California Geological Survey, the following four active faults traverse Wildomar: Elsinore Fault, Glen Ivy North Fault, Wildomar Fault, and Willard Fault. All the faults are within the Elsinore fault zone; however, not all of the faults, or segments, of the Elsinore fault zone are Alquist-Priolo faults. The Elsinore Fault and the Wildomar Fault are Alquist-Priolo faults, meaning that they pose a risk

of surface ground rupture as evidenced by previous visible and documented surface fault ruptures along portions of the faults (CGS 1978a, 1978b, 1979a). The Glen Ivy North Fault and the Willard Fault are not designated Alquist-Priolo faults. However, because these two latter faults are active, there is a potential for future earthquake activity. **Table 3.5-5** lists the active faults in the city, while **Figure 3.5-1** illustrates active faults in Wildomar. As illustrated in **Figure 3.5-1**, segments of the Wildomar Fault traverse the city in these locations: sites 13, 20, 22, and 24 (APNs 367050068, 367050064, 380220002, and 380270013, respectively).

TABLE 3.5-5
EARTHQUAKE FAULTS IN THE CITY OF WILDOMAR

Fault Name	Distance from Project Site	Maximum Credible Earthquake [a]	Peak Ground Acceleration [b]
Elsinore Fault	Traverses the City of Wildomar	6.8	.48
Glen Ivy North Fault			
Willard Fault			
Wildomar Fault	Traverses sites 13, 20, 22, and 24		

Source: City of Wildomar 2003; CGS 1978a, 1978b, 2007b
[a] Maximum Credible Earthquake shows the earthquake magnitude each fault is capable of generating.
[b] PGA is the measure of earthquake acceleration (intensity) on the ground (e.g., how hard the earth shakes in a given geographic area) and is expressed in "g" (the acceleration due to the earth's gravity, equivalent to g-force).

Liquefaction

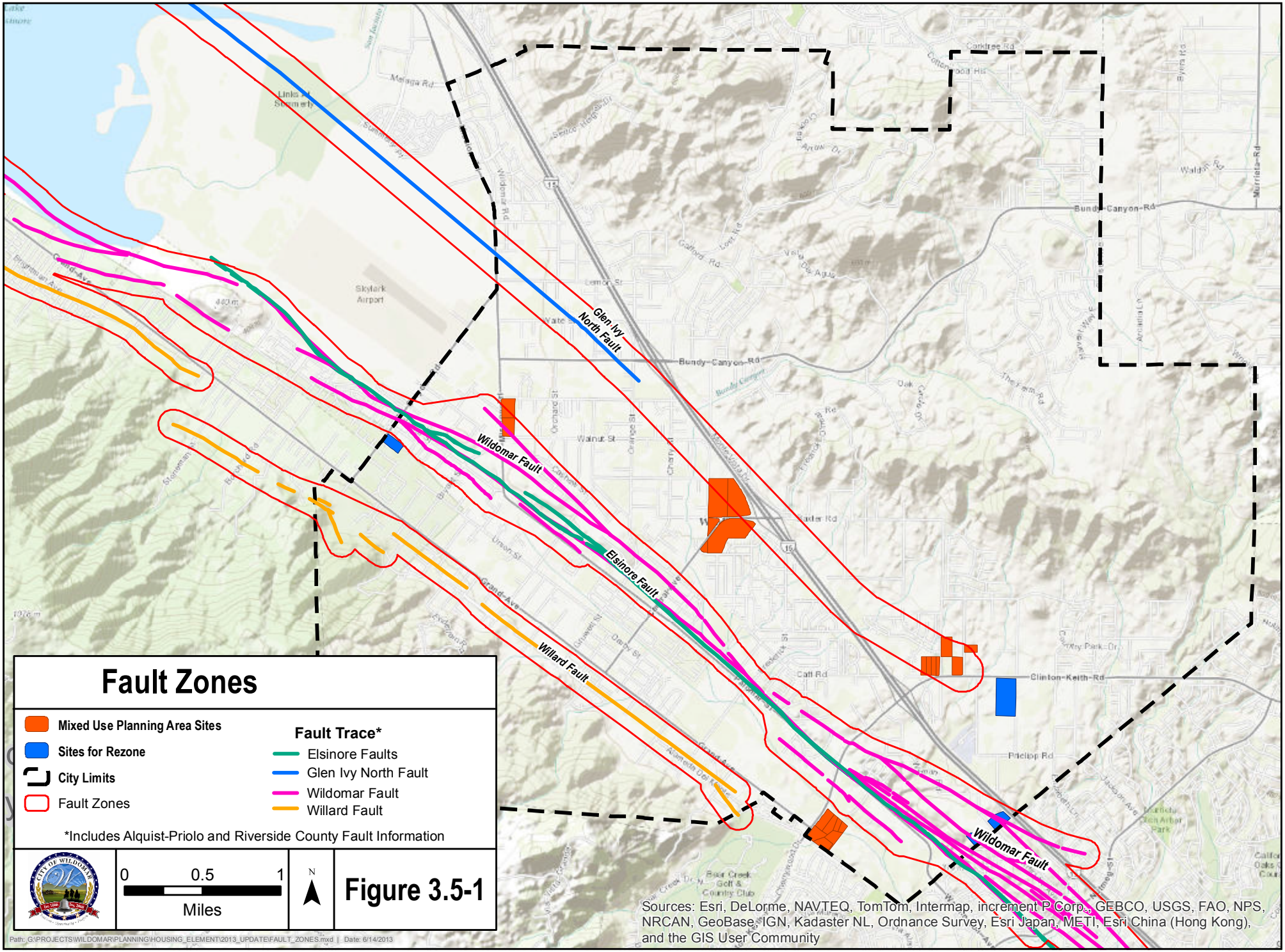
Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. Earthquake waves cause water pressures to increase in the sediment and the sand grains to lose contact with each other, leading the sediment to lose strength and behave like a liquid. The soil can lose its ability to support structures, flow down even very gentle slopes, and erupt to the ground surface to form sand boils. Many of these phenomena are accompanied by settlement of the ground surface, usually in uneven patterns that damage buildings, roads, and pipelines (USGS 2009).

Three factors are required for liquefaction to occur: (1) loose, granular sediment (typically "made" land and beach and stream deposits that are young enough (late Holocene) to be loose); (2) saturation of the sediment by shallow groundwater (water fills the spaces between sand and silt grains); and (3) strong shaking. Liquefaction causes three types of ground failure: lateral spreads, flow failures, and loss of bearing strength. In addition, liquefaction enhances ground settlement and sometimes generates sand boils (fountains of water and sediment emanating from the pressurized liquefied zone).

Groundwater depth in Wildomar is shallow, and substrate in some areas is very susceptible (Holocene sedimentation) and susceptible (Pleistocene sedimentation) to liquefaction due to age (younger soil is less compacted and dense than older soil) and composition of the soil (City of Wildomar 2003; CGS 2007b).

Landslides and Slope Failure

Landslides and other forms of slope failure form in response to the long-term geologic cycle of uplift, mass wasting, and disturbance of slopes. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides, and rock fall—processes that are commonly triggered by intense precipitation, which varies according to


Fault Zones
Mixed Use Planning Area Sites
Sites for Rezone
City Limits
Fault Zones
Fault Trace*
Elsinore Faults
Glen Ivy North Fault
Wildomar Fault
Willard Fault
*Includes Alquist-Priolo and Riverside County Fault Information
0
0.5
1
Miles
N
Figure 3.5-1
Glen Ivy North Fault
Wildomar Fault
Elsinore Fault
Willard Fault
Wildomar Fault
Bundy Canyon Rd
Clinton Keith Rd
Grand Ave
Skylark Airport
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community
Path: G:\PROJECTS\WILDOMAR\PLANNING\HOUSING_ELEMENT\2013_UPDATE\FAULT_ZONES.mxd | Date: 6/14/2013

This page intentionally left blank.

climatic shifts. Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil.

Geologists classify landslides into several different types that reflect differences in the type of material and type of movement. The four most common types of landslides are translational, rotational, earth flow, and rock fall. Debris flows are another common type of landslide similar to earth flows, except that the soil and rock particles are coarser. Mudslide is a term that appears in nontechnical literature to describe a variety of shallow, rapidly moving earth flows.

A landslide inventory conducted by the CGS and a review of geologic literature and geologic mapping conclude that landslides are not common in Wildomar (CGS 2007b).

3.5.2 REGULATORY FRAMEWORK

STATE

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 (originally enacted as the Alquist-Priolo Special Studies Zones Act and renamed in 1994) and is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law only addresses the hazard of surface fault rupture and is not directed to other earthquake hazards.

The act requires the State Geologist to establish regulatory zones known as earthquake fault zones around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. According to the maps and reports of Alquist-Priolo zones maintained by the California Department of Conservation (2012a), there are two Alquist-Priolo earthquake faults in the city—the Elsinore Fault and the Wildomar Fault. The Wildomar Fault traverses sites 13, 20, 22, and 24 (**Figure 3.5-1**).

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act addresses nonsurface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. Passed by the California legislature in 1990, this law was codified in the California Public Resources Code as Division 2, Chapter 7.8A, and became operative in April 1991. The act resulted in a mapping program that is intended to reflect areas that have the potential for liquefaction, landslide, strong earth ground shaking, or other earthquake and geologic hazards. In Riverside County, only Murrieta has an official seismic-hazard zone map. Wildomar is shown as a planned mapping area as of the date of the map in 2008.

California Building Code

The State of California provides minimum standards for building design through the California Building Code (CBC) (California Code of Regulations, Title 24). The CBC is based on the Uniform Building Code (UBC), which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for conditions in California. State regulations and engineering standards related to geology, soils, and seismic activity in the

UBC are reflected in the CBC requirements. Through the CBC, the State of California provides a minimum standard for building design and construction.

The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control. Wildomar enforces the CBC through its Municipal Code. The City Building Code (Wildomar Municipal Code, Title 8) incorporates the CBC, including recent changes.

The Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA) provides for reclamation of mined lands and directs the State Geologist to classify land within California according to the presence or likely occurrence of significant mineral deposits (CGS 2007a). The mineral land classification reports and maps are made available to the appropriate lead agencies, which are required to incorporate the information in their general plans. Since 1975, known and potential mineral deposits have been mapped in about one-third of the state under SMARA. The primary intent of SMARA is to create effective and comprehensive reclamation policies and regulations to reduce the adverse environmental effects and to ensure mined lands are reclaimed to a usable condition. The act also encourages the production and conservation of mineral resources.

As stated above, SMARA requires the State Geologist to classify land into Mineral Resource Zones according to its known or inferred mineral potential. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized by local government decision-makers and considered before land use decisions are made that could preclude mining.

LOCAL

Wildomar Municipal Code Chapter 5.44

Wildomar Municipal Code Chapter 5.44 regulates surface mining operations. The ordinance regulates all surface mining operations in the city, as authorized by SMARA, to ensure that:

- The production and conservation of minerals will be encouraged while considering values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment, and at the same time, eliminating or minimizing the residual hazards to public health and safety.
- The adverse effects of surface mining operations will be prevented or minimized and mined lands will be reclaimed to a usable condition which is readily adaptable for alternative land use.
- The reclamation of mined lands will be carried out in such a way that the continued mining of minerals will be permitted.

City of Wildomar General Plan

The General Plan includes policies designed to ensure that planning of land uses and new development is compatible with the local geologic, soil, and mineral resources. While this Draft EIR analyzes the proposed project's consistency with the City of Wildomar General Plan pursuant to CEQA Section 15125(d), the City of Wildomar City Council will ultimately make the determination of the project's consistency with the General Plan.

Mineral Resources

Relevant mineral resources policies are identified in the Wildomar General Plan Land Use Element and Multipurpose Open Space Element. The General Plan policies are aimed at the conservation of those areas within the county as supporting or potentially supporting significant mineral deposits, including oil and gas resources, for potential future use. Because mining and/or extraction activities have the potential to result in significant environmental impacts or the depletion of the county's mineral resources, the General Plan policies are also intended to guide the reasonable, safe, and orderly operation of mining and extraction activities in areas designated for such use and where potential environmental, aesthetic, and land use compatibility impacts can be properly mitigated to reduce such impacts.

The following policies are identified in the Land Use Element and the Multipurpose Open Space Element:

Land Use (LU) Element Policies

The following policies apply to those lands designated as Open Space-Mineral Resources on land use maps:

Policy 21.1: Require that surface mining activities and lands containing mineral deposits of statewide or of regional significance comply with City ordinances and the SMARA.

Policy 21.2: Protect lands designated as Open Space-Mineral Resources from encroachment of incompatible land uses through buffer zones or visual screening.

Policy 21.3: Protect road access to mining activities and prevent or mitigate traffic conflicts with surrounding properties.

Policy 21.4: Require the recycling of mineral extraction sites to open space, recreational, or other uses that are compatible with the surrounding land uses.

Policy 21.5: Require an approved reuse plan prior to the issuing of a permit to operate an extraction operation.

Multipurpose Open Space (OS) Element Policies

The following policies from the Multipurpose Open Space Element pertain to nonrenewable mineral resources:

Policy OS 14.1: Require that the operation and reclamation of surface mines be consistent with the State Surface Mining and Reclamation Act (SMARA) and County Development Code provisions.

Policy OS 14.2: Restrict incompatible land uses within the impact area of existing or potential surface mining areas.

Policy OS 14.3: Restrict land uses incompatible with mineral resource recovery within areas designated Open Space-Mineral Resources.

City of Wildomar Development Standards

Chapter 15.76 codifies the report and application requirements of the Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code, Section 2621, et seq.) and the adopted policies and criteria of the State Mining and Geology Board. The purpose of this chapter is to ensure compliance with development standards pursuant to the requirements of the Alquist-Priolo Earthquake Fault Zoning Act and the adopted policies and criteria of the State Mining and Geology Board.

3.5.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Based on Appendix G of the CEQA Guidelines, a geology, soils, or mineral resources impact is considered significant if project implementation would result in any of the following:

1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving:

    a) 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 based on other substantial evidence of a known fault. Refer to California Geological Survey (formerly Division of Mines and Geology) Special Publication 42.

    b) Strong seismic ground shaking.

    c) Seismic-related ground failure, including liquefaction.

    d) Landslides.

2) Result in substantial soil erosion or the loss of topsoil.

3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

4) 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.

5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

6) Result in the loss of availability of known mineral resource that would be of value to the region and the residents of the state.

7) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

METHODOLOGY

Various public documents were utilized in evaluating potential seismic impacts, including the Geologic Map of California and Fault Activity Map of California, both prepared by the California

Geological Survey, the City of Wildomar General Plan, Seismic Hazard Zonation of the Murrieta Quadrangle, and the Natural Resources Conservation Service's web soil survey.

PROJECT IMPACTS AND MITIGATION MEASURES

Impacts Associated with Fault Rupture (Standard of Significance 1a)

Impact 3.5.1 The proposed project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. Therefore, impacts are considered **potentially significant**.

Southern California, including Wildomar, is subject to the effects of seismic activity due to the active faults that traverse the area. As discussed in the Existing Setting subsection above, two Alquist-Priolo Special Earthquake Study Zone Faults traverse the city—the Elsinore Fault and the Wildomar Fault. Additionally, the Wildomar Fault traverses sites 13, 20, 22, and 24 (APNs 367050068, 367050064, 380220002, and 380270013, respectively). Because these two faults are Alquist-Priolo faults, there is a potential for surface ground rupture during a seismic event along these segments.

However, residential and mixed-use development that may be developed on any of the subject sites would be designed in accordance with CBC requirements which address structural seismic safety. The CBC established standards for seismic design based on occupancy type. Mitigation measure **MM 3.5.1** requires compliance with this portion of the CBC prior to the issuance of a building permit.

Mitigation Measures

MM 3.5.1 Prior to the issuance of building permits for development on the subject sites associated with the proposed project, the project applicant(s) shall submit design-level, site-specific geotechnical reports and building plans to the City of Wildomar for review and approval. The geotechnical report shall summarize the subsurface investigations performed, interpret the existing geological conditions, establish the geotechnical design parameters for the various soils and rock strata encountered, provide geotechnical recommendations for design of the proposed foundations and/or geotechnical features, and identify existing conditions that may influence construction. The investigation shall include fieldwork, such as trench excavations and/or borings, geologic mapping, soils samples, laboratory analysis, and a thorough evaluation of all encountered geotechnical hazards. Additionally, for sites 13, 20, 22, and 24 (APNs 367050068, 367050064, 380220002, and 380270013, respectively), the report shall define and delineate any hazard of surface fault rupture and shall be prepared in accordance with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act (per Chapter 15.76 of the City of Wildomar Municipal Code). The recommendations in the report shall ensure that the project is built to standards outlined in the California Building Code. The project applicant(s) shall incorporate the recommendations of the approved project-level geotechnical study into project plans. The project's building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements

of the latest adopted version of the CBC. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. All on-site soil engineering activities shall be conducted under the supervision of a licensed geotechnical engineer or certified engineering geologist.

Timing/Implementation: *Prior to the issuance of a building permit*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Compliance with CBC requirements addressing structural seismic safety and implementation of mitigation measure **MM 3.5.1** would result in **less than significant** impacts.

Impacts Associated with Strong Seismic Ground Shaking (Standard of Significance 1b)

Impact 3.5.2 The project area includes soils that may be subject to strong seismic ground shaking. This impact is considered **potentially significant**.

Southern California has numerous active seismic faults subjecting people to potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for people and structures, categorized either as primary or secondary hazards. According to the City of Wildomar General Plan Safety Element and the CGS, the proposed project is located in a seismically active area and could experience ground shaking associated with an earthquake. Primary hazards include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Primary hazards can also induce secondary hazards such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires. In general, these secondary effects of seismic shaking are a possibility throughout Southern California; severity is dependent on the distance between the site and the causative fault and the on-site geology. All the faults associated with the Elsinore fault zone are major active faults that, in theory, could produce these secondary effects.

Although some structural damage is typically not avoidable during a large earthquake, any development associated with the proposed project would be constructed to meet existing construction ordinances and the CBC in order to protect against building collapse and major injury during a seismic event. The CBC includes specific design measures intended to maximize structural stability in the event of an earthquake. Adherence to the building requirements and implementation of mitigation measure **MM 3.5.1** would minimize risks related to seismic shaking to a less than significant level.

Mitigation Measures

Implementation of mitigation measure **MM 3.5.1.**

Exposure to Seismic-Related Ground Failure, Including Liquefaction (Standard of Significance 1c)

Impact 3.5.3 The city includes soils that may be subject to seismic-related liquefaction. This impact is considered **potentially significant**.

Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Liquefaction is characterized by a loss of shear strength in the affected soil layers, thereby causing the soils to behave as a viscous liquid. Susceptibility to liquefaction is based on geologic

data. River channels and floodplains are considered most susceptible to liquefaction, while alluvial fans have a lower susceptibility. Depth to groundwater is another important element in the susceptibility to liquefaction. Groundwater shallower than 30 feet results in high to very high susceptibility to liquefaction, while deeper water results in lower susceptibility.

Due to soil composition and depth of groundwater, there is a potential for seismic-induced liquefaction. Therefore, to minimize potential impacts associated with seismically induced liquefaction, development that may occur on any of the subject sites would be designed in accordance with CBC requirements. Additionally, the implementation of mitigation measure **MM 3.5.1** would further minimize impacts related to liquefaction hazards to **less than significant** levels.

Mitigation Measures

Implementation of mitigation measure **MM 3.5.1**.

Impacts Associated with Landslides (Standard of Significance 1d)

Impact 3.5.4 Wildomar is located in a region designated as an area of low landslide activity. This impact is considered **less than significant**.

A landslide inventory conducted by the CGS and a review of geologic literature and geologic mapping concluded that landslides are not common in the city (CGS 2007b). Therefore, project implementation would result in **less than significant** impacts associated with the exposure of people or structures to potential substantial adverse effects involving landslides.

Mitigation Measures

None required.

Soil Erosion or Loss of Topsoil (Standard of Significance 2)

Impact 3.5.5 The proposed project could result in substantial soil erosion or the loss of topsoil. However, compliance with the National Pollutant Discharge Elimination System (NPDES) Storm Water General Construction Permit, the California Building Code, and local City ordinances would result in **less than significant** impacts.

Potential grading and excavation activities associated with the development that may occur on any of the subject sites would expose soils to potential short-term erosion by wind and water. All demolition and construction activities related to the proposed project would be subject to compliance with the CBC. Further, all allowed development associated with the proposed project would be subject to compliance with the requirements set forth in the NPDES Storm Water General Construction Permit for construction activities (discussed in further detail in Section 3.6, Hydrology and Water Quality). Compliance with the CBC and the NPDES would minimize effects from erosion and ensure consistency with the Water Quality Control Plans of the San Diego Regional Water Quality Control Board (1994) and the Santa Ana Regional Water Quality Control Board (1995). Additionally, as part of the approval process, prior to grading plan approval, project applicants for future development associated with the proposed project will be required to comply with Chapter 13.12, Stormwater and Drainage System Protection, of the City of Wildomar Municipal Code (see Section 3.6, Hydrology and Water Quality, for a discussion of this chapter of the Municipal Code). Water quality features intended to reduce construction-related erosion impacts will be clearly denoted on the grading plans for implementation by the

construction contractor. Compliance with Wildomar Municipal Code Chapter 13.12 and NPDES requirements would result in **less than significant** impacts related to soil erosion.

Mitigation Measures

None required.

Unstable Soils (Standard of Significance 3)

Impact 3.5.6 Wildomar is located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, impacts are considered **potentially significant**.

Subsidence refers to the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. It may be caused by a variety of human and natural activities, including earthquakes. According to the City of Wildomar General Plan (2003), the city is located in a susceptible subsidence zone. However, any potential future development associated with the proposed project would be designed in accordance with CBC requirements. Additionally, the implementation of mitigation measure **MM 3.5.1** would further minimize impacts related to liquefaction hazards to **less than significant** levels.

Mitigation Measures

Implementation of mitigation measure **MM 3.5.1**.

Expansive Soils (Standard of Significance 4)

Impact 3.5.7 Sites 1 through 25 are not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) and therefore would not create substantial risks to life or property. Impacts are **less than significant**.

Soil permeability is the property of the soil to transmit water and air. The more permeable the soil, the greater the seepage (FAO 2013), resulting in higher rates of infiltration. Pore size and number of pores closely relate to soil texture and structure, and also influence permeability (FAO 2013). Soils that transmit water faster (such as sandy soils) and have higher permeability will have less shrink-swell potential because less water retention occurs with these types of soils. Conversely, soils that transmit water at a slower rate (such as soils with high clay content) have lower permeability and therefore higher shrink-swell potential and the potential for significant expansion. **Table 3.5-2** lists the different soil types and their expansion potential for sites 1–25. **Table 3.5-3** shows the permeability rates that correspond with soil texture. As shown in **Tables 3.5-1** and **3.5-2**, the soils found on sites 1–25 comprise primarily sand and therefore are considered to have low expansion potential. Thus, impacts are considered **less than significant**.

Mitigation Measures

None required.

Soil Incapable of Supporting Septic Tanks (Standard of Significance 5)

Impact 3.5.8 The proposed project would not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, **less than significant** impacts would occur.

The wastewater service area includes six drainage basins: Horsethief Canyon, Canyon Lake, Regional, Southern Section, Alberhill, and Southwestern. The project area lies within the Regional and Southern Section drainage basins. Effluent generation in the regional drainage basin is conveyed and treated at the Elsinore Valley Municipal Water District's (EVMWD) regional wastewater treatment plant. Flow generated in the Southern Section of the EVMWD's service area is treated at the Santa Rosa Water Reclamation Facility operated by the Rancho California Water District (RCWD) or is on individual septic systems, which are typically in areas not served by municipal sewer systems.

The proposed project allows for the development of high-density residential units in Wildomar. Because existing municipal sewer systems serve multiple-family residential dwellings, potential development associated with the proposed project would not propose the construction of septic tanks or alternative wastewater systems. As such, impacts are **less than significant**.

Mitigation Measures

None required.

Mineral Resources (Standards of Significance 6 and 7)

Impact 3.5.9 Wildomar is located in an area classified as having potential for mineral deposits to exist. Therefore, impacts are **potentially significant**.

As previously discussed in the Existing Setting subsection, the City of Wildomar is located within an area designated MRZ-3a, an area where geologic information indicates that mineral deposits are likely to exist; however, the significance of the deposit is undetermined. Therefore, although areas classified as MRZ-3 are not considered to be areas of known mineral resources, there is the potential for presently unidentified, significant aggregate mineral resources to occur.

The General Plan Open Space-Mineral Resources (OS-MIN) land use designation allows for mineral extraction and processing facilities, based on the applicable SMARA classification. Those land areas held in reserve for future mining activities are also designated as OS-MIN. No areas within the city boundaries are designated as OS-MIN.

As identified in the Riverside County General Plan EIR No. 441, the county as a whole offers extensive availability of potential aggregate resources; impacts on the MRZ-3 designated area could be considered less than significant. The proposed project allows for the development of 1,678 high-density residential units. As such, future site-specific project development projects will be required to comply with applicable local, state, and federal regulations, including City of Wildomar General Plan Policies LU 21.1 through 21.5 and OS 14.1 through 14.6 addressing mineral resources issues in compliance with SMARA. In addition, to minimize the potential for loss of or adverse effects to presently unidentified mineral resources, implementation of mitigation measure **MM 3.5.9** would be required prior to approval of potential land-disturbing activities.

Mitigation Measures

MM 3.5.9 Pursuant to the Public Resources Code, the Surface Mining and Reclamation Act, Chapter 9, Article 4, Section 2762(e), prior to the issuance of grading

permit on lands classified by the State Geologist as MRZ-3 (as described in paragraph (3) of subdivision (b) of Section 2761), the County Geologist shall make a site-specific determination as to the site's potential to contain or yield important or significant mineral resources of value to the region and the residents of the State of California.

- If it is determined by the County Geologist that lands classified as MRZ-3 have the potential to yield significant mineral resources which may be of "regional or statewide significance" and the proposed use is considered "incompatible" (as defined by Section 3675 of Title 14, Article 6, of the California Code of Regulations) and could threaten the potential to extract said minerals, the project applicant(s) shall prepare an evaluation of the area in order to ascertain the significance of the mineral deposit located therein. This site-specific mineral resources study shall be performed to, at a minimum, document the site's known or inferred geological conditions; describe the existing levels of development on or near the site which might preclude mining as a viable adjacent use; and analyze the state standards for designating land as having "regional or statewide significance" under the Surface Mining and Reclamation Act. The results of such evaluation shall be transmitted to the State Geologist and the State Mining and Geological Board (SMGB).

- Should significant mineral resources be identified, the project applicant(s) shall either avoid said resource or shall incorporate appropriate identified resources subject to a site-specific discretionary review and CEQA process.

Timing/Implementation: *Prior to the issuance of a building permit*

Enforcement/Monitoring: *City of Wildomar Planning Department*

Implementation of the above mitigation measure and adherence to state regulations and City of Wildomar General Plan policies would reduce or eliminate adverse impacts caused by mineral extraction and/or urbanization. Impacts would be **less than significant**.

3.5.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

Geotechnical impacts tend to be site-specific rather than cumulative in nature. For example, seismic events may damage or destroy a building on a project site, but the construction of a development project on one site would not cause any adjacent parcels to become more susceptible to seismic events, nor can a project affect local geology in such a manner as to increase risks regionally.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Soil Stability and Seismic Impacts

Impact 3.5.10 Implementation of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in Wildomar and nearby areas, would not contribute to cumulative geologic, soils, and

minerals impacts. The proposed project's incremental contribution would be **less than cumulatively considerable**.

The proposed project allows the development of high-density residential units. All new development, including development in areas outside of Wildomar, would have to comply with the CBC, which requires stringent earthquake-resistant design parameters and common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil-related impacts. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of 1 or more acres, or any project involving less than 1 acre that is part of a larger development plan and includes clearing, grading, or excavation, is subject to NPDES Storm Water Construction General Permit provisions. These requirements would significantly reduce the potential for substantial erosion or topsoil loss to occur in association with new development by requiring an approved stormwater pollution prevention plan that provides a schedule for the implementation and maintenance of erosion control measures and a description of erosion control practices, including appropriate design details and a time schedule**.**

Additionally, the development allowed on any of the subject sites associated with the proposed project would not have a cumulatively considerable significant impact on mineral resources. As previously stated, there is a potential for unidentified, significant aggregate minerals to occur in Wildomar; however, mineral resources have not been identified within city boundaries and no designated mineral extraction sites are located within the city.

Implementation of NPDES requirements and CBC standards as discussed under Impacts 3.5.1, 3.5.2, 3.5.3, 3.5.5, and 3.5.6 above would reduce cumulative impacts associated with geology and soils throughout the region. Furthermore, site-specific review, including geotechnical reports, required by the City of Wildomar, and compliance with existing regulatory requirements and General Plan policies regarding mineral resources would reduce the proposed project's contribution to cumulative impacts to **less than cumulatively considerable**.

Mitigation Measures

None required.

REFERENCES

California Department of Conservation. 2012a. *Alquist-Priolo Earthquake Fault Zone Maps*. Accessed June 2013. http://www.quake.ca.gov/gmaps/ap/ap_maps.htm.

———. 2012b. *Seismic Hazards Zonation Program*. Accessed June 2013. http://gmw.consrv.ca.gov/shmp/html/pdf_maps_so.html.

CGS (California Geologic Survey). 1978a. Fault Evaluation Report FER-72.

———. 1978b. Fault Evaluation Report FER-76.

———. 1979a. Supplement to Fault Evaluation Report FER-72.

———. 1979b. Fault Evaluation Report FER-76, Supplement No. 1.

———. 1979c. Fault Evaluation Report FER-76, Supplement No. 2.

———. 2002. *Note 32, How Earthquakes and Their Effects Are Measured*. Sacramento.

———. 2007a. *California Geological Survey – SMARA Mineral Land Classification*. Accessed June 2013. http://www.conservation.ca.gov/cgs/minerals/mlc/Pages/Index.aspx.

———. 2007b. *Seismic Hazard Report for the Murrieta 7.5-Minute Quadrangle, Riverside County, California.*

———. 2010a. *Geologic Map of California*

———. 2010b. *Fault Activity Map of California.*

Christenson, Gary E. 1994. *Earthquake Ground Shaking in Utah*.

City of Wildomar. 2003. *General Plan.*

County of Riverside. 2003. *Riverside County General Plan EIR No. 441*.

FAO (Food and Agriculture Organization of the United Nations). 2013. Soil Permeability. Accessed July 2013. ftp://ftp.fao.org/fi/CDrom/FAO_Training/FAO_Training/General/x6706e/x6706e09.htm

NRCS (Natural Resource Conservation Service [US Department of Agriculture]). 2003. Soil Series Name Search.

———. 2012. *National Soil Survey Handbook.* Accessed June 2013. http://soils.usda.gov/technical/handbook/.

San Diego Regional Water Quality Control Board. 1994. *Water Quality Control Plan for the San Diego Basin*. (With amendments effective prior to April 25, 2007.)

Santa Ana Regional Water Quality Control Board. 1995. *Water Quality Control Plan for the Santa Ana River Basin.*

SCEC (Southern California Earthquake Center). 2013. *Significant Earthquakes and Faults*.

USGS (US Geological Survey). 2009. http://www.usgs.gov/ (accessed June 2013).

———. 2012. The Modified Mercalli Intensity Scale. Accessed June 2013. http://earthquake.usgs.gov/learning /topics/mercalli.php.

3.6 HYDROLOGY AND WATER QUALITY

This section addresses the potential environmental impacts of the proposed project related to hydrology and water quality. The existing surface water and groundwater hydrologic conditions of the proposed project and in the surrounding area are characterized, and a summary is provided of relevant laws and regulations as they apply to the proposed project. The impact analysis focuses on potential issues associated with drainage, erosion, and flooding associated with increased stormwater runoff and water quality. Information used in the preparation of this section was obtained primarily from the City of Wildomar General Plan (2003) and zoning regulations. Draft EIR Section 3.9, Public Services, Recreation, and Utilities, discusses impacts related to water supply and service.

3.6.1 EXISTING SETTING

REGIONAL HYDROLOGY

The project site is tributary to two separate receiving watersheds, the Santa Ana Watershed and the Santa Margarita Watershed, as shown in **Figure 3.6-1**.

Santa Ana Watershed

The Santa Ana Watershed (SAW) is located in the northwestern corner of Riverside County. The SAW is bounded on the south by the Santa Margarita Watershed, on the east by the Salton Sea Watershed, on the southwest by Orange County, and on the northwest by San Bernardino County. The SAW, including the San Jacinto River subwatershed, encompasses 1,603 square miles (22 percent of the 7,300 square miles within Riverside County), and includes one of the 28 cities in Riverside County (Riverside County 2011, pp. 2-8 and 2-10).

Because the SAW is arid, there is little natural perennial surface water. Surface waters start in the upper erosion zone of the watershed—primarily in the San Bernardino, Santa Ana, and San Jacinto mountains. This upper zone has the highest gradient and soils/geology that do not allow large quantities of percolation of surface water into the ground. Flows consist mainly of snowmelt and storm runoff from the lightly developed San Bernardino National Forest. From the City of San Bernardino to the City of Riverside, the Santa Ana River flows perennially, mostly due to treated discharges from wastewater treatment plants.

From the City of Riverside to Prado Dam, the flow in the Santa Ana River consists of highly treated wastewater and groundwater discharges, potable water transfers, irrigation runoff, groundwater forced to the surface by shallow/rising bedrock, and minor amounts of urban stormwater runoff, which provides a proportionately greater contribution to the flow of the river during significant storm events. Lake Elsinore is the only natural freshwater lake of any size in the SAW. A variety of water storage reservoirs (e.g., Lake Perris, Canyon Lake, and Lake Mathews) and flood control areas (Prado Dam area) have been created to hold surface water in Riverside County (Riverside County 2011, p. 2-11).

Climate and Precipitation

The climate of the SAW is Mediterranean with hot, dry summers and cooler, wetter winters. Average annual precipitation ranges from 10 to 13 inches per year in the inland alluvial valleys, reaching 36 inches or more in the San Bernardino and San Jacinto mountains. Most of the precipitation in the SAW occurs between November and March in the form of rain, with variable amounts of snow in the higher elevations. The climate cycle of the Santa Ana Watershed results in high surface water flows in the spring and early summer, followed by low flows during the dry

season. Winter and spring floods generated by storms are not uncommon in wet years (Riverside County 2011, pp. 2-10 and 2-11).

Santa Margarita River Watershed

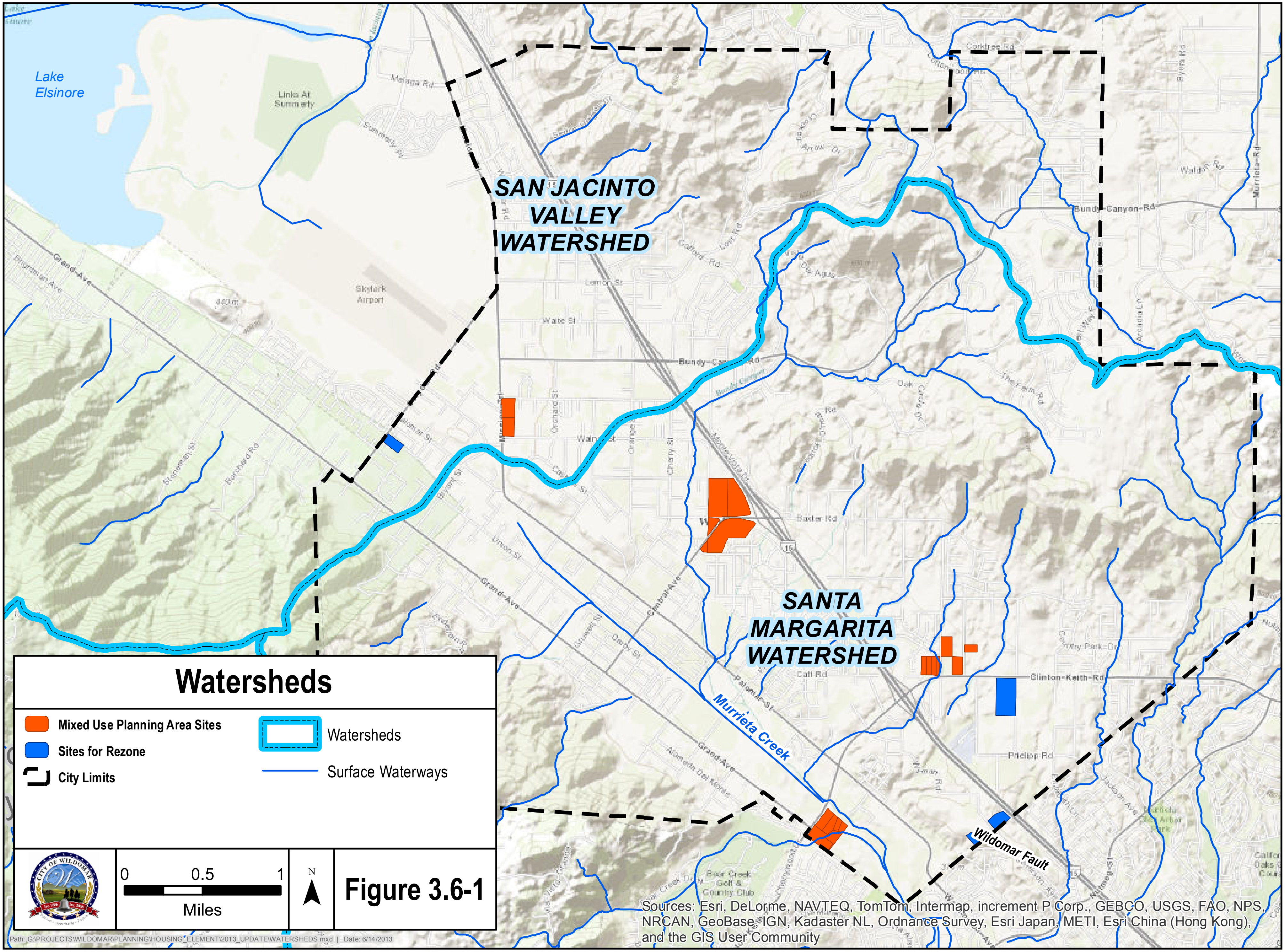
The Santa Margarita Watershed (SMW) covers approximately 746 square miles, split into a mountainous highland (upper drainage basin) and a broad, flat-topped sea terrace (coastal drainage basin). The boundary between the upper drainage basin and the coastal drainage basin transitions at the county line between Riverside and San Diego counties.

The upper drainage basin is formed almost solely by Murrieta Creek, which has a drainage area of 222 square miles and is a major tributary of the greater 750-square-mile Santa Margarita Watershed. This watershed consists of three major portions: the Murrieta Creek subwatershed to the north, the Temecula Creek subwatershed to the southeast, and the Santa Margarita River to the southwest. The SMW currently contains three major water storage reservoirs: Lake Skinner and the recently completed Diamond Valley Reservoir, which are part of the Murrieta Creek subwatershed, and Vail Lake, which is part of the Temecula Creek subwatershed. These reservoirs control over 50 percent of the SMW. Runoff entering the reservoirs is initially stored and excess flows (depending on available storage volume) are discharged downstream. The combined reservoirs have a substantial storage capacity capable of significantly reducing downstream flows from the natural condition.

Temecula and Murrieta creeks join along the Elsinore fault zone at the head of Temecula Canyon to form the Santa Margarita River. Temecula Canyon is approximately 5 miles long and is a steep, narrow, and rocky canyon. The San Diego-Riverside county line crosses Temecula Canyon. From here, the river traverses 27 miles to the Pacific Ocean (Riverside County 2006, pp. 2-15 and 2-17).

Climate and Precipitation

The climate of the SMW is typically Mediterranean, characterized by warm dry summers and cool rainy winters. About 75 percent of the precipitation occurs during the four-month period from December through March. Mean seasonal precipitation ranges from less than 10 inches near Vail Reservoir to over 40 inches west of Palomar Observatory, varying with elevation and topographic influences. Precipitation increases with increasing elevation to the summit of the Coastal Range. Shading effects of the Coastal Range lead to a marked decrease in precipitation throughout the lower portions of the inland area. Precipitation increases again farther away from the Coastal Range in the northeastern area of the inland area (Riverside County 2006, p. 2-17).


Lake Elsinore
SAN JACINTO VALLEY WATERSHED
SANTA MARGARITA WATERSHED
Murrieta Creek
Wildomar Fault
Bundy Canyon Rd
Clinton-Keith-Rd
Grand Ave
Skylark Airport
Links At Summerly
Bear Creek Golf & Country Club
Watersheds
Mixed Use Planning Area Sites
Sites for Rezone
City Limits
Watersheds
Surface Waterways
0
0.5
1
Miles
N
Figure 3.6-1
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community
Path: G:\PROJECTS\WILDOMAR\PLANNING\HOUSING_ELEMENT\2013_UPDATE\WATERSHEDS.mxd | Date: 6/14/2013

This page intentionally left blank.

Topography

Regional topography varies dramatically from low-lying valleys to rolling hills and steep mountainous terrain with large rock outcroppings (City of Wildomar 2003). The variation in topography is controlled by the Elsinore fault zone, which extends from the San Gabriel Valley southeasterly to the United States-Mexico border. The City of Wildomar is located within a down-dropped structural valley, known geologically as the Elsinore Trough (CGS 2007). Based on the Wildomar and Murrieta 7.5-minute US Geological Survey (USGS) quadrangles, the City of Wildomar is located on relatively flat terrain within the Elsinore Trough at approximately 1,400 feet in elevation with very little topographical variation.

GROUNDWATER

The Elsinore Groundwater Basin underlies the Elsinore Valley in western Riverside County. The basin is bounded on the southwest by the Santa Ana and Elsinore mountains along the Willard fault, a splay of the active Elsinore fault zone. The basin adjoins the Temecula Valley Groundwater Basin on the southeast at a low surface drainage divide. The basin is bounded on the northwest by the Temescal Subbasin of the Upper Santa Ana River Valley Groundwater Basin at a constriction in Temescal Wash. The basin is bounded on the northeast by non-water-bearing rocks of the Peninsular Ranges along the Glen Ivy fault. Average annual precipitation ranges from 12 to 14 inches.

Groundwater Recharge

The principal recharge of the basin is from infiltration of stream flow through alluvial fan deposits near the edges of the basin and through gravel deposits along the course of the San Jacinto River. Other contributing sources include infiltration from unlined channels overlying the basin, underflow from saturated alluvium and fractures in the surrounding bedrock mountains and hills, and spreading of water in recharge basins (DWR 2006).

Groundwater Levels

Groundwater levels in the Elsinore Groundwater Basin declined more than 100 feet between 1927 and 1950 (DWR 2006). A hydrograph from one well shows that the water level declined about 110 feet in the southern part of the basin from 1967 through 1985. However, a hydrograph from a well in the northern part of the basin shows a rise in water level of about 65 feet from 1963 through 1980. Under natural conditions, groundwater should flow generally toward Lake Elsinore; however, because faults cutting the sediments impede groundwater movement, groundwater flow is predominantly contained within fault blocks in the basin (DWR 2006).

WATER QUALITY

Surface Water Quality

Section 303(d) of the federal Clean Water Act (CWA) requires states to identify the waters of the State that do not meet the designated beneficial uses and to develop total maximum daily loads (TMDLs) for such waters, with oversight by the US Environmental Protection Agency (EPA). These waters are commonly referred to as impaired. A TMDL is a quantifiable assessment of potential water quality issues, contributing sources, and load reductions or control actions needed to restore or protect bodies of water. TMDLs are discussed further in the Regulatory Framework subsection below. Five of the six receiving waters for the proposed project are included on the 2010 Clean Water Act Section 303(d) List of Water Quality Limited Segments

requiring TMDL. **Tables 3.6-1** and **3.6-2** detail the pollutants that are impairing the water bodies and the status of the TMDLs.

TABLE 3.6-1
RECEIVING WATERS FOR URBAN RUNOFF FROM PROPOSED PROJECT – SANTA MARGARITA WATERSHED

Receiving Water	303(d) List Impairments	TMDL Status
Murrieta Creek	Chlorpyrifos	TMDL needed
	Copper, Iron, Manganese	TMDL needed
	Nitrogen	TMDL needed
	Phosphorus	TMDL needed
	Toxicity	TMDL needed
Santa Margarita River (Upper)	Phosphorus	TMDL needed
	Toxicity	TMDL needed
Santa Margarita Lagoon	Eutrophic	TMDL needed

Source: SWRCB 2013

TABLE 3.6-2
RECEIVING WATERS FOR URBAN RUNOFF FROM PROPOSED PROJECT – SANTA ANA WATERSHED

Receiving Water	303(d) List Impairments	TMDL Status
San Jacinto River	None	N/A
Canyon Lake	Nutrients	Approved 2005
	Pathogens	TMDL Complete 2006
Lake Elsinore	Nutrients	Approved 2005
	Organic Enrichment – Low Dissolved Oxygen	Approved 2005
	Polychlorinated Biphenyls (PCBs)	TMDL needed
	Sediment Toxicity	TMDL needed
	Unknown Toxicity	TMDL Complete 2007

Source: SWRCB 2013

Groundwater Quality

The groundwater in the Elsinore Groundwater Basin is generally of good to fair quality, with total dissolved solids (TDS) concentrations ranging from 250 milligrams per liter (mg/L) in the Back Basin area east of Lake Elsinore to about 600 mg/L in the northwest part of the basin (MWD 2007). Contaminants of concern for the Elsinore Basin are summarized in **Table 3.6-3**. As shown in the table, total dissolved solids (TDS), nitrate, and arsenic are present in the basin.

TABLE 3.6-3
SUMMARY OF CONSTITUENTS OF CONCERN IN THE GROUNDWATER BASIN

Constituent	Units	Range	Description
Total Dissolved Solids MCL[1] = 500	mg/L	250 to >600 Ambient: 460	TDS concentrations range from about 250 mg/L in the Back Basin area to above 600 mg/L northwest of Lake Elsinore.
Nitrate Primary MCL = 10	mg/L	Not detectable to 8 Ambient: 2.4	Nitrate concentrations range from non-detect in the Back Basin area to as much as 8 mg/L along the southern margin of the basin. Nitrate concentrations in areas where septic tanks exist are currently increasing.
Volatile Organic Compounds (VOCs): Trichloroethylene (TCE) and **Perchloroethylene (PCE)** Primary MCL for TCE = 5 Primary MCL for PCE = 5	µg/L	PCE: Not detectable TCE: Not detectable	TCE and PCE have not been detected in the Elsinore Basin.
Perchlorate Notification level = 6	µg/L	Not detectable	Perchlorate has not been detected in the Elsinore Basin.
Arsenic Primary MCL = 10	µg/L	Not detectable to 35	Concentrations of arsenic range from non-detect in the northwestern portions of the basin to as much as 35 mg/L in the Back Basin area and exceed the primary MCL for arsenic. The highest concentrations of arsenic are found in the deeper zones of the basin.

Source: MWD 2007
[1] MCL = maximum contaminant level

FLOODING

According to Flood Insurance Rate Map (FIRM) Panels 06065C2705G, 06065C2682G, and 06065C2681G, published by the Federal Emergency Management Agency (FEMA), for Riverside County dated August 28, 2008, the majority of Wildomar is designated as Zone X (low flood risk areas). According to FIRM Panel 06065C2684G, also dated August 28, 2008, Mixed Use Planning Area (MUPA) sites 2, 3, 5, 7, 11, 14, and 19 are within Zone AE (high flood risk areas), a designated 100-year mapped floodplain. **Figure 3.6-2** depicts the FEMA-designated flood zones.

3.6.2 REGULATORY FRAMEWORK

FEDERAL

Executive Order 11988 for Floodplain Management

Executive Order (EO) 11988 for Floodplain Management (1977) directs all federal agencies to evaluate potential effects of any actions it may take in the floodplain and to avoid all adverse impacts associated with modifications to floodplains. It also directs federal agencies to avoid floodplain development whenever there is a practicable alternative and to restore and preserve the natural and beneficial values served by floodplains.

National Flood Insurance Program

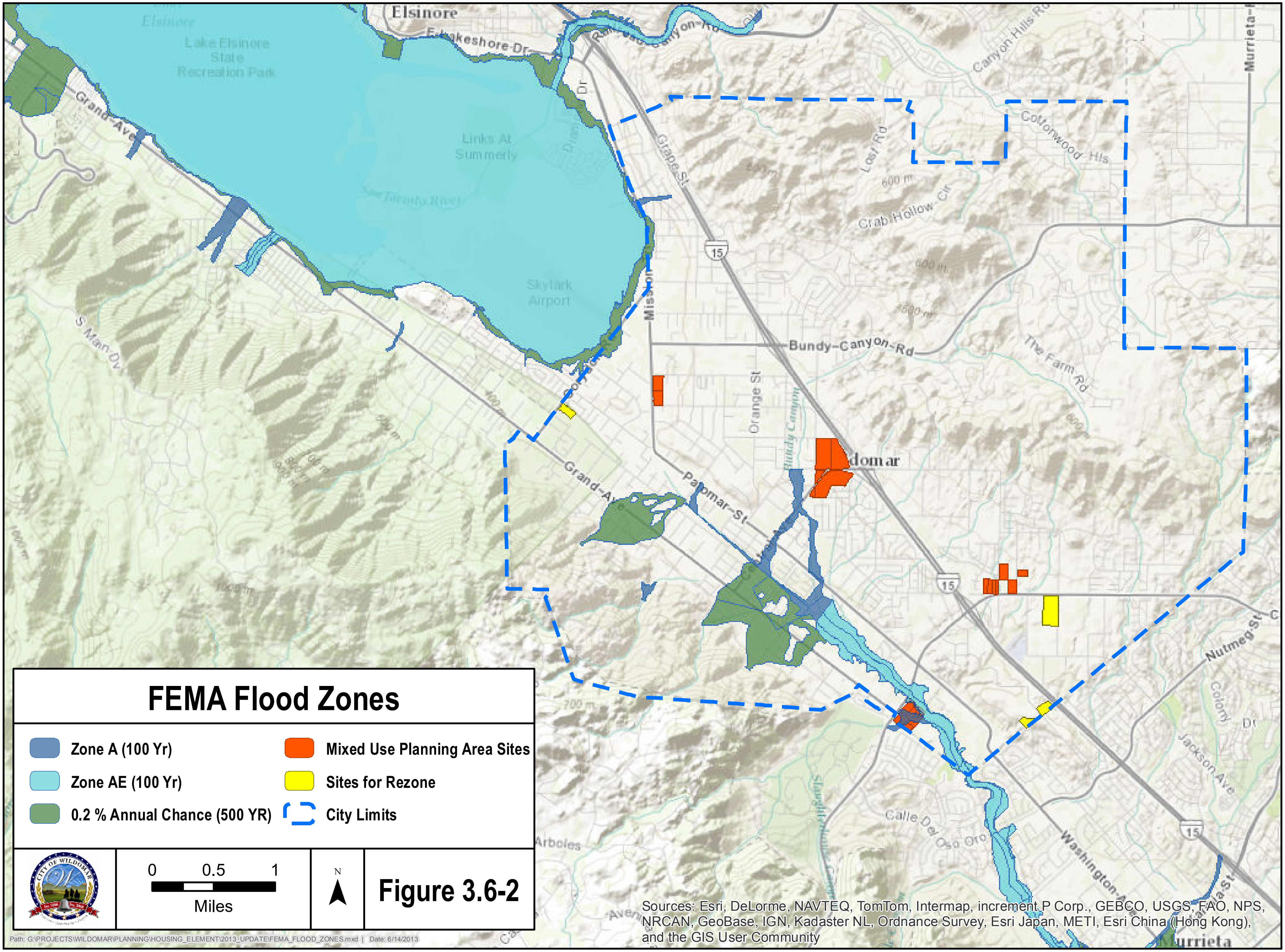
The Federal Emergency Management Agency oversees floodplains and administers the National Flood Insurance Program (NFIP) adopted under the National Flood Insurance Act of 1968. The program makes federally subsidized flood insurance available to property owners in communities that participate in the program. Areas of special flood hazard (those subject to inundation by a 100-year flood) are identified by FEMA through regulatory flood maps titled Flood Insurance Rate Maps. The NFIP mandates that development cannot occur within the regulatory floodplain (typically the 100-year floodplain) if that development results in an increase of more than 1 foot elevation. In addition, development is not allowed in delineated floodways within the regulatory floodplain.

Clean Water Act

The federal Clean Water Act (CWA) gives states the primary responsibility for protecting and restoring water quality. In California, the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) are the agencies with the primary responsibility for implementing federal CWA requirements, including developing and implementing programs to achieve water quality standards. Water quality standards include designated beneficial uses of water bodies, criteria or objectives (numeric or narrative) which are protective of those beneficial uses, and policies to limit the degradation of water bodies. The proposed project is located in a portion of the state that is regulated by the San Diego Regional Water Quality Control Board (SDRWQCB) and the Santa Ana Regional Water Quality Control Board (SARWQCB). water quality standards for water bodies in the San Diego region are primarily contained in the Water Quality Control Plan for the San Diego Region Basin (Basin Plan) (SDRWQCB 1994), and the Santa Ana Region Basin Plan (SARWQCB 1995) which are discussed in more detail below.

Sections 401 and 404 of the CWA

Sections 401 and 404 of the CWA are administered through the regulatory program of the US Army Corps of Engineers (USACE) and regulate the water quality of all discharges of fill or dredged material into waters of the United States, including wetlands and intermittent stream channels. Section 401, Title 33, Section 1341 of the Clean Water Act sets forth water quality certification requirements for any applicant applying for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters.


FEMA Flood Zones
Zone A (100 Yr)
Zone AE (100 Yr)
0.2 % Annual Chance (500 YR)
Mixed Use Planning Area Sites
Sites for Rezone
City Limits
0 0.5 1
Miles
N
Figure 3.6-2
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community
Path: G:\PROJECTS\WILDOMAR\PLANNING\HOUSING_ELEMENT\2013_UPDATE\FEMA_FLOOD_ZONES.mxd | Date: 6/14/2013
Elsinore
Lake Elsinore State Recreation Park
Links At Summerly
Skylark Airport
Grand Ave
Bundy-Canyon-Rd
Palomar-St
Orange St
Grape St
Washington Ave
Nutmeg St
Murrieta

This page intentionally left blank.

Section 404, Title 33, Section 1344 of the Clean Water Act in part authorizes the USACE to:

- Set requirements and standards pertaining to such discharges: subparagraph (e);
- Issue permits "for the discharge of dredged or fill material into the navigable waters at specified disposal sites:" subparagraph (a);
- Specify the disposal sites for such permits: subparagraph (b);
- Deny or restrict the use of specified disposal sites if "the discharge of such materials into such area would have an unacceptable, adverse effect on municipal water supplies and fishery areas:" subparagraph (c);
- Specify type of and conditions for non-prohibited discharges: subparagraph (f);
- Provide for individual state or interstate compact administration of general permit programs: subparagraphs (g), (h), and (j);
- Withdraw approval of such state or interstate permit programs: subparagraph (i);
- Ensure public availability of permits and permit applications: subparagraph (o);
- Exempt certain federal or state projects from regulation under this section: subparagraph (r); and
- Determine conditions and penalties for violation of permit conditions or limitations: subparagraph (s).

National Pollutant Discharge Elimination System

As authorized by Section 402(p) of the CWA, the National Pollutant Discharge Elimination System (NPDES) Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The State Water Resources Control Board issues NPDES permits to cities and counties through the RWQCBs, and it is the responsibility of the RWQCBs to preserve and enhance the quality of the state's waters through the development of water quality control plans and the issuance of waste discharge requirements. Waste discharge requirements for discharges to surface waters also serve as NPDES permits. The SDRWQCB, the SARWQCB and applicable NPDES permit are discussed in more detail below.

General Construction Activity Storm Water Permits and Stormwater Pollution Prevention Plans

In accordance with NPDES regulations, the SWRCB has issued a Statewide General Permit (Water Quality No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ) for construction activities in the state. The Construction General Permit (General Permit) is implemented and enforced by the RWQCBs. The General Permit applies to any construction activity affecting 1 acre or more and requires those activities to minimize the potential effects of construction runoff on receiving water quality. Performance standards for obtaining and complying with the General Permit are described in NPDES General Permit No. CAS000002, Waste Discharge Requirements, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ.

General Permit applicants are required to submit to the appropriate regional board Permit Registration Documents for the project, which include a Notice of Intent, a risk assessment, a site map, a signed certification statement, an annual fee, and a stormwater pollution prevention

plan (SWPPP). The permit program is risk based wherein a project's risk is based on the project's potential to cause sedimentation and the risk of such sedimentation on the receiving waters. A project's risk determines its water quality control requirements, ranging from Risk Level 1, which consists of only narrative effluent standards, implementation of best management practices (BMPs), and visual monitoring, to Risk Level 3, which consists of numeric effluent limitations, additional sediment control measures, and receiving water monitoring. Additional requirements include compliance with post construction standards focusing on low impact development (LID), preparation of rain event action plans, increased reporting requirements, and specific certification requirements for certain project personnel.

The SWPPP must include implementing best management practices to reduce construction effects on receiving water quality by implementing erosion control measures and reducing or eliminating non-stormwater discharges. Examples of typical construction best management practices included in SWPPPs include, but are not limited to, using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; and installing sediment control devices such as gravel bags, inlet filters, fiber rolls, or silt fences to reduce or eliminate sediment and other pollutants from discharging to the drainage system or receiving waters.

Total Maximum Daily Loads

Under CWA Section 303(d) and California's Porter-Cologne Water Quality Control Act of 1969 (discussed below), the State of California is required to establish beneficial uses of state waters and to adopt water quality standards to protect those beneficial uses. Section 303(d) establishes the total maximum daily load (TMDL) process to assist in guiding the application of state water quality standards, requiring the states to identify waters whose water quality is "impaired" (affected by the presence of pollutants or contaminants) and to establish a TMDL or the maximum quantity of a particular contaminant that a water body can assimilate without experiencing adverse effects on the beneficial use identified.

The establishment of TMDLs is generally a stakeholder-driven process that involves investigation of sources and their loading (pollution input), estimation of load allocations, and identification of an implementation plan and schedule. Where stakeholder processes are not effective, total maximum daily loads can be established by the RWQCBs or the US Environmental Protection Agency (EPA). TMDLs are adopted as amendments to the Basin Plan.

As discussed in the Existing Setting subsection above and shown in **Tables 3.6-1** and **3.6-2**, the proposed project would discharge into five Section 303(d) listed impaired waterways**.** TMDLs have been established for only Lake Elsinore and Canyon Lake.

STATE

Porter-Cologne Water Quality Control Act

In 1969, the California legislature enacted the Porter-Cologne Water Quality Control Act to preserve, enhance, and restore the quality of the state's water resources. The CWA and the Porter-Cologne Water Quality Control Act are similar in many ways, with the fundamental purpose of both laws being to protect the beneficial uses of water. An important distinction between the two is that the Porter-Cologne Water Quality Control Act addresses both groundwater and surface water, while the CWA addresses surface water only.

The Porter-Cologne Water Quality Control Act established the SWRCB and the nine RWQCBs as the principal state agencies with the responsibility for controlling water quality in California. Under the act, water quality policy is established, water quality standards are enforced for both surface water and groundwater, and the discharges of pollutants from point and nonpoint sources are regulated. The act authorizes the SWRCB to establish water quality principles and guidelines for long-range resource planning, including groundwater and surface water management programs and control and use of recycled water.

State Water Resources Control Board

The five-member SWRCB allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Quality Control Boards located in the major watersheds of the state. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters (SWRCB 2012). The SWRCB is responsible for implementing the Clean Water Act and issues NPDES permits to cities and counties through Regional Water Quality Control Boards.

REGIONAL

The project site is actually within the jurisdictional boundaries of two RWQCBs—the San Diego RWQCB and the Santa Ana RWQCB. As a result, Wildomar is regulated by the SDRWQCB and SARWQCB and is required to comply with the SDRWQCB MS4 Permit (NPDES No. CA S0108766, Order No. R9-2010-0016 and the NPDES Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District NPDES No. CAS 618033, Order No. R8-2010-0033.

Regional Water Quality Control Board, San Diego and Santa Ana Regions

The San Diego Regional Water Quality Control Board (SDRWQCB) has responsibility for controlling water quality in San Diego County, Imperial County, and parts of Riverside County. As previously stated, the water quality standards for water bodies in the San Diego region are primarily contained in the Water Quality Control Plan for the San Diego Region Basin (SDRWQCB 1994).

Similarly, Santa Ana Regional Water Quality Control Board (SARWQCB) has the responsibility for controlling water quality, in Los Angeles County, San Bernardino County, Orange County, and parts of Riverside County. The water quality standards for water bodies in the Santa Ana Region are contained in the Water Quality Control Plan for the Santa Ana River Basin (SARWQCB 1995).

Water Quality Control Plan for the San Diego Basin (Basin Plan)

The Water Quality Control Plan for the San Diego Basin designates beneficial uses for water bodies in the San Diego region and establishes water quality objectives and implementation plans to protect those beneficial uses. Specifically, the Basin Plan (1) designates beneficial uses for surface water and groundwater; (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy; (3) describes implementation programs to protect the beneficial uses of all waters in the region; and (4) describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan.

The SDRWQCB issues permits, called waste discharge requirements and master reclamation permits, which require that waste and reclaimed water not be discharged in a manner that

would cause an exceedance of applicable water quality objectives or adversely affect beneficial uses designated in the Basin Plan. The SDRWQCB enforces these permits through a variety of administrative means. **Table 3.6-4** lists beneficial uses of the receiving waters, located in the Santa Margarita Watershed, for the proposed project.

Water Quality Control Plan for the Santa Ana River Basin (Santa Ana Region Basin Plan)

Similar to the Basin Plan described above, the Santa Ana Region Basin Plan is the basis for the Regional Boards regulatory programs establishing water quality standards for the ground and surface waters of the region to protect beneficial uses of the receiving water bodies within the basin. The Santa Ana Region Basin Plan has essentially the same functions as those described for the Basin Plan with the exception that the water bodies regulated are located in the Santa Ana Region.

TABLE 3.6-4
BENEFICIAL USES FOR THE RECEIVING WATERS FOR THE SANTA MARGARITA AND SANTA ANA WATERSHEDS

Water Body	Beneficial Uses														
	MUN	GWR	AGR	IND	PROC	REC-1	REC-2	WARM	COLD	EST	WILD	RARE	MAR	MIGR	SPWN
Santa Margarita Watershed (San Diego Region)															
Murrieta Creek	X		X	X	X	P	X	X			X				
Santa Margarita River	X		X	X		X	X	X	X		X	X			
Santa Margarita Lagoon						X	X			X	X	X	X	X	X
Santa Ana Watershed (Santa Ana Region)															
San Jacinto River (Reach 1)	I	I	I			I	I	I			I				
Canyon Lake	X	X	X			X	X	X			X				
Lake Elsinore	+					X	X	X			X				

Source: SDRWQCB 1994; SARWQCB 1995

Notes: (X) Existing Beneficial Use; (P) Potential Beneficial Use; (I) Intermittent Beneficial Use; (+) Excepted from MUN

As listed in **Table 3.6-4**, beneficial uses include the following:

- Municipal and Domestic Supply (MUN) – Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

- Groundwater Recharge (GWR) – Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.

- Agricultural Supply (AGR) – Includes uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

- Industrial Service Supply (IND) – Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

- Industrial Process Supply (PROC) – Includes uses of water for industrial activities that depend primarily on water quality.

- Water Contact Recreation (REC-1) – Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, or use of natural hot springs.

- Non-Contact Water Recreation (REC-2) – Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

- Warm Freshwater Habitat (WARM) – Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

- Cold Freshwater Habitat (COLD) – Includes uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

- Estuarine Habitat (EST) – Includes uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

- Wildlife Habitat (WILD) – Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

- Rare, Threatened or Endangered Species (RARE) - Waters that support the habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened or endangered.

- Marine Habitat (MAR) – Includes uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

- Migration of Aquatic Organisms (MIGR) – Includes uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.

- Spawning, Reproduction, and/or Early Development (SPWN) – Includes uses of water that support high quality habitats suitable for reproduction, early development and sustenance of marine fish and/or cold freshwater fish.

Waste Discharge Requirements for Riverside County MS4s

The federal CWA was amended in 1987 to address stormwater runoff from municipal and industrial dischargers. One requirement of the amendment was that many municipalities throughout the United States were obligated for the first time to obtain NPDES permits for discharges of stormwater runoff from their municipal separate storm sewer system (MS4).

Waste Discharge Requirements for Discharges from the MS4s (Order No. R9-2010-0016)

In response to the CWA amendment (and the pending federal NPDES regulations which would implement the amendment), the SDRWQCB issued a municipal stormwater permit, Order No. 90-46, in July 1990 to the co-permittees for their MS4 discharges. NPDES No. CAS0108766, Order No. R9-R9-2010-0016 (Waste Discharge Requirements for Discharges from the MS4s Draining the County of Riverside, the Incorporated Cities of Riverside County, and the Riverside County Flood Control and Water Conservation District within the San Diego Region) is the fourth iteration of the stormwater permit for MS4s in the Riverside County portion of the San Diego RWQCB.

The order specifies requirements necessary for the co-permittees to reduce the discharge of pollutants in stormwater to the maximum extent practicable and to achieve water quality standards. Some of the requirements, such as the revised Watershed Water Quality Workplan (Watershed Workplan) section, are designed to specifically address high priority water quality problems. Other requirements, such as for unpaved roads, are a result of the SDRWQCB's identification of water quality problems through investigations and complaints during the previous permit period. Other requirements address program deficiencies that have been noted during audits, report reviews, and other SDRWQCB compliance assessment activities. Potential development projects resulting from the proposed project would be required to comply with all applicable provisions of this order.

National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements (Order No. R8-2010-0033)

Similar to the waste discharge requirements described above for the Riverside County portion of the San Diego RWQCB, NPDES No. CAS618033, Order No. R8-2010-0033 (National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riversides within the Santa Ana Region) regulates co-permittees for their MS4 stormwater discharges into receiving waters within the Santa Ana Region.

LOCAL

City of Wildomar Municipal Code

The City of Wildomar Municipal Code establishes the following requirements that pertain to hydrology and water quality:

- Title 13, Chapter 13.12 establishes requirements for stormwater and non-stormwater quality discharge and control. The chapter prohibits discharges of pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards. The chapter codifies various federal and state requirements for stormwater pollution prevention and requires compliance with these statutes and regulations. The purpose of this Chapter is to reduce pollutants in stormwater discharges to the maximum extent practicable, regulate illicit connections and discharges to the storm drain system, and regulate non-stormwater discharges to the storm drain system. The chapter requires new development projects to control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water via best management practices (BMPs) that may, among other things, require new developments or redevelopments to increase permeable areas, direct runoff to permeable areas, and maximize stormwater storage for reuse.

- Title 15, Chapter 15.96 prohibits any development within floodways and also establishes requirements for construction within floodplains. This chapter codifies federal requirements for development within floodplains and requires compliance with those regulations.

3.6.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. A project is considered to have significant impacts if implementation of the project will:

1) Violate any water quality standards or waste discharge requirements.

2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

3) Substantially alter the existing drainage pattern of the site or area, including through 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.

4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

5) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

6) Otherwise substantially degrade water quality.

7) 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.

8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

9) Expose people or structures to a significant loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

10) Inundation by seiche, tsunami, or mudflow.

Riverside County identifies dam inundation hazard areas throughout the county. A review of records maintained at the California Office of Emergency Services provided potential failure inundation maps for 23 dams affecting Riverside County; these maps were compiled into the geographic information system digital coverage of potential dam inundation zones. The City's dam inundation zones are identified in Figure S-10 of the City of Wildomar General Plan. According to Figure S-10, the project site is not within any dam inundation hazard zones. In addition, the project is not in the vicinity of any levees. Therefore, no impact would occur and these issues (Standard of Significance 9) will not be addressed further in this Draft EIR.

Based on the elevation of the project site above sea level and the lack of nearby enclosed bodies of water, the potential for inundation by seiche, tsunami, or mudflow is nonexistent. Therefore, no impact would occur and these issues (Standard of Significance 10) will not be addressed further in this Draft EIR.

METHODOLOGY

The hydrology and water quality analysis presented below is based on a review of published information, reports, and plans regarding regional and local hydrology, climate, topography, and geology obtained from private and governmental agencies as well as from Internet websites. Primary sources include the City of Wildomar General Plan (2003), California's Groundwater Bulletin 118 ("Elsinore Groundwater Basin"), the SDRWQCB's Basin Plan (1994), NPDES No. CAS0108766, Order No. R9-2010-0016, SARWQCB Basin Plan NPDES No. CAS618033, Order No. R8-2010-0033, and FEMA flood hazard mapping.

IMPACTS AND MITIGATION MEASURES

Water Quality (Standards of Significance 1 and 6)

Impact 3.6.1 Potential development associated with the proposed project could result in erosion and water quality degradation of downstream surface water and groundwater resources. Compliance with the requirements of the SWRCB's Construction General Permit during construction and implementation of best management practices during operations would minimize the potential for such degradation. However, this impact would be **potentially significant.**

Urban runoff (both dry and wet weather) discharges into storm drains and, in most cases, flows directly to creeks, rivers, lakes, and the ocean. Polluted runoff can have harmful effects on drinking water, recreational water, and wildlife. Urban runoff pollution includes a wide array of environmental, chemical, and biological compounds from both point and nonpoint sources. In the urban environment, stormwater characteristics depend on site conditions (e.g. land use, impervious cover, pollution prevention, types and amounts of best management practices), rain events (duration, amount of rainfall, intensity, and time between events), soil type and particle sizes, multiple chemical conditions, the amount of vehicular traffic, and atmospheric deposition (EPA 2012). Major pollutants typically found in runoff from urban areas include sediments, nutrients, oxygen-demanding substances, heavy metals, petroleum hydrocarbons, pathogens, and bacteria.

Urban runoff can be divided into two categories: dry and wet weather urban runoff.

- Dry weather urban runoff occurs when there is no precipitation-generated runoff. Typical sources include landscape irrigation runoff, driveway and sidewalk washing, noncommercial vehicle washing, groundwater seepage, fire flow, potable water line operations and maintenance discharges, and permitted or illegal non-stormwater discharges.

- Wet weather urban runoff refers collectively to nonpoint source discharges that result from precipitation events. Wet weather runoff includes stormwater runoff. Stormwater discharges are generated by runoff from land and impervious areas such as building rooftops and paved streets and parking lots.

Wet and dry weather runoff typically contains similar pollutants of concern. However, except for the first flush concentrations following a long period between rainfall, the concentration levels found in wet weather flows are typically lower than levels found in dry weather flows because the larger wet weather flows dilute the amount of pollution in runoff waters. Most urban stormwater discharges are considered nonpoint sources and are regulated by an NPDES Municipal General Permit or Construction General Permit.

A net effect of development can be to increase pollutant export over naturally occurring conditions. The impact of the higher export can be on the adjacent streams and also on the downstream receiving waters. However, an important consideration in evaluating stormwater quality from the project is to assess whether it impairs the beneficial use to the receiving waters. Receiving waters can assimilate a limited quantity of various constituent elements; however, there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable impact. For this evaluation, impacts to stormwater quality would be considered significant if the project did not attempt to address stormwater pollution to the maximum extent practicable.

Existing Conditions

In the absence of site-specific data, expected stormwater quality can be qualitatively discussed by relating typical pollutants to specific land uses. All the sites are generally flat, and with the exception of site 20, are currently vacant, with naturally vegetated, pervious ground cover. Part of site 20 is paved with a parking lot, while the rest is used for recreational sports and has vegetation for groundcover. The expected existing pollutants in the existing condition stormwater runoff from all the sites include trash and bacteria; in addition to the previously mentioned pollutants, site 20 also has oil and grease. Under existing conditions, it is unlikely that any of the potential pollutants are removed prior to entering the perimeter storm drain systems.

Short-Term Construction

During construction activities, erosion potential and the possibility of water quality impacts are always present and occur when protective vegetative cover is removed and soils are disturbed. Construction activities can result in sediment runoff rates, which greatly exceed natural erosion rates of undisturbed lands, causing siltation and impairment of receiving waters. In addition to sediment, stormwater flowing over a construction site can carry various pollutants such as nutrients, bacteria and viruses, oil and grease, heavy metals, organics, pesticides, gross pollutants, and miscellaneous waste into receiving waters. These pollutants can originate from soil disturbances, construction equipment, building materials, and workers.

In the case of the proposed project, potential grading of the MUPA sites and sites identified for rezone, along with other construction activities, may introduce sediments and other contaminants typically associated with construction into stormwater runoff, potentially resulting in the degradation of downstream surface water and groundwater. The proposed project has the potential to result in the generation of new dry weather runoff containing these pollutants and to increase the concentration and/or total load of the pollutants in wet weather stormwater runoff. Dry weather urban runoff in the storm drain system occurs when there is no measurable precipitation. It originates from human activities, including car washing, landscape irrigation, street washing, dewatering during construction activities, and natural groundwater seepage that discharges to the storm drain system. Dry weather urban runoff can contain high levels of pollutants, as the water typically flows over paved or highly developed surfaces.

The SWRCB is responsible for implementing the Clean Water Act and has issued a Statewide General Permit (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ) for construction activities within the state (see the Regulatory Framework subsection above). In Wildomar, the Construction General Permit (CGP) is implemented and enforced by the SDRWQCB and the SARWQCB. In accordance with the requirements of the CGP, prior to construction of the proposed project, a risk assessment must be prepared and submitted to the SDRWQCB to determine the project's risk level and associated water quality control requirements. These requirements will, at a minimum, include the preparation and implementation of a stormwater pollution prevention plan identifying specific BMPs to be implemented and maintained on the sites in order to comply with the applicable narrative effluent standards.

The best management practices that must be implemented as part of a SWPPP can be grouped into two major categories: (1) erosion and sediment control BMPs and (2) non-stormwater management and materials management BMPs. Erosion and sediment control BMPs fall into four main subcategories:

- Erosion controls
- Sediment controls
- Wind erosion controls
- Tracking controls

Erosion controls include practices to stabilize soil, to protect the soil in its existing location, and to prevent soil particles from migrating. Examples of erosion control BMPs are preserving existing vegetation, mulching, and hydroseeding. Sediment controls are practices to collect soil particles after they have migrated, but before the sediment leaves the site. Examples of sediment control BMPs are street sweeping, fiber rolls, silt fencing, gravel bags, sand bags, storm drain inlet protection, sediment traps, and detention basins. Wind erosion controls prevent soil particles from leaving the site in the air. Examples of wind erosion control BMPs include applying water or other dust suppressants to exposed soils on the site. Tracking controls prevent sediment from being tracked off site via vehicles leaving the site to the extent practicable. A stabilized

construction entrance not only limits the access points to the construction site but also functions to partially remove sediment from vehicles prior to leaving the site.

Non-stormwater management and material management controls reduce non-sediment-related pollutants from potentially leaving the construction site to the extent practicable. The Construction General Permit prohibits the discharge of materials other than stormwater and authorized non-stormwater discharges (such as irrigation and pipe flushing and testing). Non-stormwater BMPs tend to be management practices with the purpose of preventing stormwater from coming into contact with potential pollutants. Examples of non-stormwater BMPs include preventing illicit discharges and implementing good practices for vehicle and equipment maintenance, cleaning, and fueling operations, such as using drip pans under vehicles. Waste and materials management BMPs include implementing practices and procedures to prevent pollution from materials used on construction sites. Examples of materials management BMPs include:

- Good housekeeping activities such as storing of materials covered and elevated off the ground, in a central location;
- Securely locating portable toilets away from the storm drainage system and performing routine maintenance;
- Providing a central location for concrete washout and performing routine maintenance;
- Providing several dumpsters and trash cans throughout the construction site for litter/floatable management; and
- Covering and/or containing stockpiled materials and overall good housekeeping on the site.

The Construction General Permit also requires that construction sites be inspected before and after storm events and every 24 hours during extended storm events. The purpose of the inspections is to identify maintenance requirements for the BMPs and to determine the effectiveness of the BMPs that are being implemented. The SWPPP is a "living document" and as such can be modified as construction activities progress. Additional requirements include compliance with post-construction standards focusing on low impact development (LID) and preparation of rain event action plans.

The SWRCB has also issued a Statewide General Permit (Water Quality Order R5-2008-0081, NPDES No. CAG995001 and) for dewatering and other low-threat discharges to surface waters within the state. Should construction of a proposed project require dewatering, the project applicant would be required to submit a Notice of Intent, as well as a Best Management Practices Plan, to comply with the general permit. The BMP Plan would include disposal practices to ensure compliance with the general permit, such as the use of sediment basins or traps, dewatering tanks, or gravity or pressurized bag filters. Monitoring and reporting would also be performed to ensure compliance with the permit. Mitigation measure **MM 3.6.1** requires preparation of a stormwater pollution prevention plan (SWPPP) and indicates the types of BMPs that are typically required as part of the permit.

Project Operation

The proposed project could convert approximately 142 acres (5 acres for site 20 was deducted from 147 total acres for all the sites; see **Tables 2.0-3** and **2.0-4** in Section 2.0, Project Description, for acreage breakdown) from naturally vegetated open space to urban uses. This conversion will substantially increase the impervious surface area of each site through the introduction of

new and improved roads and driveways, parking areas, rooftops, and other surfaces. An increase in impervious surface area would substantially increase runoff potentially containing urban pollutants. Additionally, runoff associated with landscaped areas typically contributes pollutants from fertilizers and pesticides. Expected pollutants for the proposed project include sediment/turbidity, nutrients, organic compounds (petroleum hydrocarbons), trash and debris, oxygen demanding substances, bacteria and viruses, oil and grease, pesticides, and metals.

As identified above, water in the proposed project area drains to two separate receiving watersheds: the Santa Margarita Watershed and the Santa Ana Watershed. Within those watersheds, the proposed project drains to six receiving waters, some of which are Section 303(d) listed impaired waterways as detailed in **Table 3.6-1** and **Table 3.6-2**. Expected pollutants that would contribute to the Section 303(d) impaired water bodies are unknown at this time and would be site-specific. However, the most common categories of pollutants in urban runoff include total suspended solids, sediment, pathogens (e.g., bacteria, viruses, protozoa), heavy metals (e.g., copper, lead, zinc, and cadmium), petroleum products and polynuclear aromatic hydrocarbons, synthetic organics (e.g., pesticides, herbicides, and PCBs), nutrients (e.g., nitrogen and phosphorus fertilizers), oxygen-demanding substances (decaying vegetation), detergents and trash. To reduce urban runoff impacts associated with potential pollutants, a Water Quality Management Plan (WQMP) specific to each individual site, as discussed in mitigation measure **MM 3.6.1**, would be required.

Mitigation Measures

MM 3.6.1 Prior to the approval of the grading permit for future development on each of the project sites, the project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are less than significant. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the project site at all times. In addition, the project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan (WQMP) prior to the issuance of the grading permit for future development on the project site in compliance with the Areawide Urban Runoff Management Program. The project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device. The project will be responsible for maintenance of the basins.

Timing/Implementation: *Prior to issuance of a grading permit*

Enforcement/Monitoring: *City of Wildomar Engineering Department*

Following compliance with Wildomar Municipal Code Chapter 13.12, Stormwater and Drainage System Protection, and implementation of mitigation measure **MM 3.6.1**, impacts to water quality would be **less than significant**.

Groundwater (Standard of Significance 2)

Impact 3.6.2 The proposed project would introduce impervious surfaces in the form of structures and parking lots to previously undeveloped parcels of land. This would result in an incremental reduction in recharge of the local groundwater aquifer. However, implementation of the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. This impact is considered **less than significant**.

The project sites are within the service area of the Elsinore Valley Municipal Water District (EVMWD), which serves a total of 37,250 potable service connections and has a normalized average annual potable demand of approximately 32,000 acre-feet per year (EVMWD 2011. Water demand is met through a combination of surface water from Canyon Lake, local groundwater, and imported water from the Metropolitan Water District of Southern California (MWD) via the Temescal Valley Pipeline and Auld Valley Pipeline.

In the Elsinore Basin, the EVMWD has seven operating potable groundwater wells with a total production capacity of 17,140 acre-feet per year. The Elsinore Groundwater Basin is the major source of potable groundwater supply for the EVMWD, which is the largest pumper in the basin, accounting for approximately 95 percent of the total production. However, groundwater extraction from the Elsinore Groundwater Basin by the EVMWD has progressively decreased since 2006 (9,786 acre-feet per year). In 2010, groundwater supplies extracted by the EVMWD accounted for 2,529 acre-feet per year (7.9 percent) of the total water supply (EVMWD 2011).

During a normal year, the well pumps are not operated regularly during winter months when demands are low. However, during dry years, the well pumps can be used to extract groundwater throughout the year increasing total extraction. The EVMWD's conjunctive use program recharges imported water in the Elsinore Groundwater Basin during wet years, enhancing groundwater supply reliability. Conjunctive use and artificial recharge programs instituted by the EVMWD over the past several years and continued implementation of such programs in the future is expected to result in satisfactory management of the basin. As such, groundwater from the Elsinore Groundwater Basin is considered to be a reliable source of supply up to the long-term natural recharge of the groundwater basin. (The provision of water to the proposed project is discussed in Section 3.9, Public Services, Recreation, and Utilities.)

Implementation of the proposed project could result in potential development of sites with primarily impervious surfaces, reducing the existing pervious groundcover, consisting of natural vegetation. However, the incremental increase in water demand (discussed in Section 3.9, Public Services, Recreation, and Utilities) by the proposed project would not result a substantial depletion of groundwater supplies. As discussed, groundwater supplies extracted by EVMWD only account for a small portion of the needed potable water supply for the area. In addition, site development may provide opportunities to create new pervious surfaces through landscaping and use of porous pavement, which could increase groundwater recharge. Therefore, the proposed project would not significantly interfere with groundwater recharge nor would the project substantially deplete groundwater supplies. Thus, impacts would be **less than significant.**

Mitigation Measures

None required.

Alter Drainage Patterns Resulting in On- and Off-Site Erosion, Siltation, or Flooding or an Increase in Stormwater Runoff (Standards of Significance 3, 4, and 5)

Impact 3.6.3 Development of the proposed project may alter the existing drainage pattern of the sites to impact stormwater runoff rates and volumes compared to existing conditions. This impact is considered **potentially significant**.

Stormwater on undeveloped sites generally infiltrates into the soil to be stored either temporarily or permanently on the surface or underground. However, the natural drainage pattern of a site is altered when it is developed. Buildings, roads, and parking lots introduce impervious surfaces, such as asphalt, concrete, and roofing materials, to the landscape, resulting in a reduction in infiltration and an increase in the rate and volume of stormwater runoff. The increased flow rates and volumes of stormwater runoff may result in downstream erosion and/or flooding if not properly mitigated.

Potential new development associated with the proposed project would alter drainage on the project sites and increase stormwater runoff rates and volumes by introducing a total of 1,678 potential multi-family units and other impervious surfaces on 147 acres of currently vacant land. Details of potential development associated with the proposed project are unknown at this time. However, site-specific Water Quality Management Plans would address appropriate methods that will be used to capture and detain runoff, thereby preventing downstream flooding and erosion. To ensure that the storm drainage system associated with each development project is appropriately designed and implemented, mitigation is proposed requiring the project to comply with the requirements set forth in the NPDES Storm Water General Construction Permit for construction activities; refer to Impact 3.6.1.

Mitigation Measures

Implementation of mitigation measures **MM 3.6.1**.

Compliance with the recommended mitigation, which requires compliance with the NPDES, including preparation of a stormwater pollution prevention plan, would reduce the volume of sediment-laden runoff discharging from the sites. Therefore, project implementation would not substantially alter the existing drainage pattern of the sites such that substantial erosion or siltation would occur. With implementation of mitigation measure **MM 3.6.1**, impacts would be **less than significant.**

Flooding Hazards (Standards of Significance 7 and 8)

Impact 3.6.4 Several sites proposed for development are within Zone AE, a FEMA-designated 100-year floodplain. As a result, this impact is **potentially significant.**

As described in the Existing Setting subsection above, the proposed project is located within Zone X (low flood risk area). However, MUPA sites 2, 3, 5, 7, 11, 14, and 19 are designated by FEMA as Zone AE (high flood risk area), indicating that these sites are in an area identified by FEMA as a 100-year mapped floodplain. Therefore, potential development associated with the proposed project at these sites would expose people or structures to significant risk of flooding.

To decrease hazards associated with floodplain development, mitigation measure **MM 3.6.4** is required.

Mitigation Measures

MM 3.6.4 Prior to the approval of grading permits for potential future development on sites 2, 3, 5, 7, 11, 14, and 19, the City of Wildomar shall require that flood control measures be implemented to protect any structures from flooding that would be located with the 100-year mapped floodplain areas (Zone AE). This will include gaining concurrence from FEMA that proposed development on MUPA sites 2, 3, 5, 7, 11, 14, and 19 meets all development standards for development in floodplains.

Timing/Implementation: *Prior to the Issuance of grading permit*

Enforcement/Monitoring: *City of Wildomar Planning Division*

Following compliance with the City of Wildomar Municipal Code Chapter 15.96, Flood Hazard Area Regulations, and the implementation of mitigation measure **MM 3.6.4**, flood hazard–related impacts would be reduced to **less than significant**.

3.6.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for hydrology and water quality includes the Santa Margarita and Santa Ana watersheds and consists of all existing, planned, proposed, approved, and reasonably foreseeable development within those watersheds. .

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Hydrology and Water Quality

Impact 3.6.5 The proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the Santa Margarita and Santa Ana watersheds, could alter drainage conditions, rates, volumes, and water quality, which could result in potential erosion, flooding, and water quality impacts within the overall watersheds. This is considered a **less than cumulatively considerable** impact.

As discussed above, development under the Housing Element could contribute to water quality degradation from construction and operation, flooding, and alteration of drainage patterns. In terms of construction, implementation of all development within the project site would require grading and construction. While potential to degrade water quality exists, the project would be required to comply with the NPDES stormwater permitting program, which regulates water quality originating from construction sites. The NPDES program requires the preparation and implementation of a stormwater pollution prevention plan for construction activities that disturb more than 1 acre and the implementation of best management practices that ensure the reduction of pollutants during stormwater discharges as well as compliance with all applicable water quality requirements. Additionally, the implementation of mitigation measures **MM 3.6.1** would further reduce impacts.

From an operational standpoint, the proposed project, in combination with other planned and approved projects, would not violate water quality standards because a Water Quality Management Plan (WQMP) would be required for all future development for each specific individual site. As discussed in mitigation measure **MM 3.6.1**, the project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. As such, the proposed project in conjunction with other planned and approved projects would not result in cumulatively considerable impacts to hydrology and water quality. The proposed project's contribution to cumulative water quality, runoff, and flooding impacts is considered to be **less than cumulatively considerable.**

Mitigation Measures

None required.

REFERENCES

CGS (California Geologic Survey). 2007. Seismic Hazard Zone Report for the Murrieta 7.5-Minute Quadrangle, Riverside County, California.

City of Wildomar. 2003. *General Plan.*

DWR (California Department of Water Resources). 2006. "Elsinore Groundwater Basin." California's Groundwater Bulletin 118.

EPA (US Environmental Protection Agency). 2012. "Urban Runoff." Accessed May 6, 2013. http://www.epa.gov/etop/etc_at_ur.html.

EVMWD (Elsinore Valley Municipal Water District). 2011. *EVMWD Urban Water Management Plan*.

FEMA (Federal Emergency Management Agency). 2008. Flood Insurance Rate Map, Panels 06065C2705G, 06065C2682G, and 06065C2681G.

MWD (Metropolitan Water District of Southern California). 2007. "A Status Report on the Use of Groundwater in the Service Area of the Metropolitan Water District of Southern California." Accessed May 30, 2013. http://www.mwdh2o.com/mwdh2o/pages/yourwater/supply/groundwater/gwas.html.

Riverside County. 2007. *Riverside County Drainage Area Management Plan, Santa Ana and Santa Margarita Regions*.

———. 2011. *Riverside County Drainage Area Management Plan, Santa Ana Region*.

Riverside County Flood Control and Water Conservation District. 2006. *Riverside County Stormwater Quality Best Management Practice Design Handbook.*

SARWQCB (Santa Ana Regional Water Quality Control Board). 1995. Water Quality Control Plan for the Santa Ana River Basin

SDRWQCB (San Diego Regional Water Quality Control Board). 1994. *Water Quality Control Plan for the San Diego Basin*. (With amendments effective prior to April 25, 2007.)

SWRCB (State Water Resources Control Board). 2012. Water Boards' Structure. Accessed May 25. http://www.swrcb.ca.gov/about_us/water_boards_structure/index.shtml.

———. 2013. *2010 Integrated Report (CWA Section 303(d) List/ 305 (b) Report.* Accessed May 24. http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml.

USGS (US Geological Survey). 1983. Wildomar Quadrangle 7.5-Minute Series.

———.1983. Murrieta Quadrangle 7.5-Minute Series.

3.7 Land Use

This section discusses the potential environmental impacts of the proposed project associated with land use. Existing land uses in the project area are characterized in the context of the City of Wildomar General Plan and the Western Riverside County Multiple Species Habitat Conservation Plan. The analysis focuses on land use compatibility, General Plan consistency, and the implications of the proposed project on existing and surrounding land uses. Information for his section was obtained primarily from public documents and the proposed Housing Element 2013–2021 Update.

3.7.1 EXISTING SETTING

Land use in Wildomar has historically been rural and single-family residential, with commercial uses gradually developing over time. New development trends in the area have led to higher-density single-family residences with smaller lot sizes around within the city.

GENERAL PLAN SETTING AND BACKGROUND

The City's General Plan is a blueprint for Wildomar's future. It describes anticipated future growth, development, and environmental management over the long term. It is intended to act as a "constitution" for both public and private development, and serve as the foundation for the city's growth and land use–related decision-making. The General Plan is meant to express the community's goals with respect to both the man-made and natural environments and to set forth the policies and implementation measures needed to achieve those goals for the welfare of those who live, work, and do business in the city.

The Housing Element is a component of the General Plan. It purpose is to identify housing solutions that remedy local and regional housing demand and meet or exceed the Regional Housing Needs Allocation (RHNA) assigned by the Southern California Association of Governments (SCAG). The City recognizes that housing is a need that is met through many resources and interest groups. As such, the Housing Element establishes the local goals, policies, and actions (programs) the City will implement and/or facilitate to solve identified housing issues.

LAND USE

General Plan Designations

Each city and county in California must prepare a comprehensive, long-term general plan to guide its future. The land use element of the general plan establishes the basic land uses and density of development within each jurisdiction. Under state law, the general plan elements must be internally consistent, and each jurisdiction's zoning must be consistent with its general plan. Thus, the land use element must provide suitable locations and densities to implement the policies of the housing element.

Existing land uses in Wildomar consist of a variety of primarily residential, commercial, and office uses, as well as recreational, open space, and institutional uses. **Table 3.7-1** depicts the General Plan land use designations with allowed residential uses for the City of Wildomar.

TABLE 3.7-1
GENERAL PLAN LAND USE DESIGNATIONS

Land Use Designation		Allowed Density	General Uses
AG	Agriculture	10 ac min.	Agricultural land including row crops, groves, nurseries, dairies, poultry farms, processing plants, and other related uses One single-family residence allowed
RR	Rural Residential	5 ac min.	Single-family residences Allows limited animal-keeping and agricultural uses
RM	Rural Mountainous	10 ac min.	Single-family residential uses Allows limited animal-keeping, agriculture, recreational uses
RD	Rural Desert	10 ac min.	Single-family residential Allows limited animal-keeping, agriculture, recreational uses
EDR EDR-RC	Estate Density Residential	2 ac min.	Single-family detached residences Limited agriculture, intensive equestrian, and animal-keeping
VLDR VLD-RC	Very Low Density Residential	1 ac min.	Single-family detached residences Limited agriculture, intensive equestrian, and animal-keeping
LDR LDR-RC	Low Density Residential	1/2 ac min.	Single-family detached residences Limited agriculture, intensive equestrian, and animal-keeping
MDR	Medium Density Residential	2–5 du/ac	Single-family detached and attached residences Limited agriculture and animal-keeping is permitted
MHDR	Medium High Density Residential	5–8 du/ac	Single-family attached and detached residences
HDR	High Density Residential	8–14 du/ac	Single-family attached and detached residences, including townhouses, stacked flats, courtyard homes, patio homes, and zero lot line homes
VHDR	Very High Density Residential	14–20 du/ac	Single-family attached residences and multi-family dwellings
HHDR	Highest Density Residential	20–40 du/ac	Multi-family dwellings, including apartments and condominiums; multi-storied (3+) structures are allowed.
MUPA	Mixed Use Planning Area	No density range given	The intent of the designation is not to identify a particular mixture or intensity of land uses, but to designate areas where a mixture of residential, commercial, office, entertainment, educational, and/or recreational uses, or other uses is planned.

Source: City of Wildomar 2013

Zoning Districts

Zoning for the project area is governed by the City of Wildomar Zoning Ordinance and Zoning Map, and land use designations are provided in the Wildomar General Plan. Zoning, unlike the General Plan, is regulatory. Under the Zoning Ordinance, development must comply with specific, enforceable standards such as minimum lot requirements, minimum setbacks, maximum building heights, and a list of allowable uses. **Table 3.7-2** illustrates the different residential zoning districts in Wildomar.

TABLE 3.7-2
RESIDENTIAL ZONING DISTRICTS IN THE CITY OF WILDOMAR

Zone		General Uses
R-1	One-Family Dwelling	One-family dwellings, mobile homes on permanent foundations, mobile home parks
R-1A	One-Family Dwelling Mountain Resort	One-family dwellings, mobile home parks, planned residential developments
R-2	Multiple-Family Dwelling	One-family dwellings, multiple-family dwellings, congregate care residential, single-family subdivisions, two-family dwellings, mobile home parks, boarding, rooming and lodging houses, bungalow courts, apartment houses
R-2A	Limited Multiple Family Dwelling	One-family dwelling, multiple-family dwellings, two-family dwellings, mobile home parks, apartment houses, planned residential developments
R-3	General Residential	One-family dwellings, multiple-family dwellings, congregate care facilities, two-family dwellings, bungalow courts, apartment houses, boarding, rooming and lodging houses, mobile home parks
R-3A	Village Tourist Residential	One-family dwellings, apartments, hotels, RV parks, bungalow courts, planned residential developments
R-4	Planned Residential	One-family dwellings, multiple-family dwellings, mobile home parks
R-6	Residential Incentive	One-family dwellings, mobile homes on permanent foundations, mobile home parks, multiple-family dwellings, planned residential developments, apartments
A-1	Light Agriculture	One-family dwellings, mobile homes, farm labor camps, mobile home parks
A-2	Heavy Agriculture	One-family dwellings, agricultural mobile homes, labor camps
R-A	Residential Agriculture	One-family dwellings, mobile homes on permanent foundations, agricultural mobile homes, mobile home parks
R-D	Regulated Development Areas	One-family dwellings, apartment houses and hotels, mobile home parks, two-family dwellings, multiple-family dwellings, bungalow courts, boarding and rooming houses, congregate care facilities, RV parks, agricultural mobile homes
R-R R-R-O	Rural Residential	One-family dwellings, mobile home parks, RV parks, farm labor camps, guest ranches, planned residential developments
R-T	Mobile Home Subdivisions and Mobile Home Parks	One-family dwellings, mobile homes, mobile home parks, mobile home subdivisions
R-T-R	Mobile Home Subdivision – Rural	One-family dwellings, mobile homes
S-P	Specific Plan	Residential, commercial, manufacturing, open space, public facilities, health, and community facilities, agricultural uses

Source: City of Wildomar 2013

Vacant Parcels

The County of Riverside adopted a Housing Element for the 2006–2013 planning period (4th round Housing Element) covering the then-unincorporated community of Wildomar. Upon city incorporation on July 1, 2008, the City of Wildomar adopted the County General Plan, including the Housing Element for the 2006–2013 planning period, and then subsequently drafted a new 4th round Housing Element tailored to Wildomar.

Although the draft 4th round Housing Element document was never adopted, the City completed a vacant land survey/analysis and determined that sufficient vacant land was available to satisfy the City's RHNA for moderate- and above moderate-income households (sites 1–21). However, it was also determined that Wildomar did not have sufficient vacant housing stock allocated to accommodate low-income households. The survey identified potential vacant sites available for development to accommodate the needs of low-income households. In order to show sufficient availability of vacant housing stock to satisfy the City's RHNA for low-income housing, a change in the General Plan land use designation and zoning for approximately 26 acres of land from Medium High Density Residential (MHDR) and Business Park (BP) to Highest Density Residential (HHDR) and rezone from Rural Residential (R-R) to Planned Residential (R-4), respectively, was proposed to meet the City's RHNA for extremely low-, very low-, and low-income households.

Because the 4th round Housing Element was never officially adopted, the redesignation and rezone of sites 22 through 25 did not occur. As such, the City currently has an unaccommodated need of 364 units for extremely low-, very low-, and low-income households left over from the 2006–2013 RHNA. That total has now been added to the 2013–2021 RHNA low-income housing needs of 1,036 residential units.

3.7.2 REGULATORY FRAMEWORK

The land use designations and policies for the project sites are provided in the applicable land use plans, including the City of Wildomar General Plan and the Western Riverside County Multiple Species Habitat Conservation Plan. These plans and their relevant policy provisions are described below. The regional planning agency's role in the Housing Element process is also described below.

REGIONAL

Southern California Association of Governments

The Southern California Association of Governments is an association of all the local governments in the Southern California region. SCAG is the nation's largest metropolitan planning organization, representing six counties, 191 cities, including Wildomar, and more than 18 million residents. SCAG undertakes a variety of planning and policy initiatives to encourage a more sustainable Southern California now and in the future. SCAG's mission is to, under the guidance of the Regional Council, collaborate with its partners and facilitate a forum to develop and foster the realization of regional plans that improve the quality of life for residents of Southern California. SCAG's primary responsibility is to prepare all state and federally required transportation plans and programs that are necessary for securing transportation funding for highways, streets and roads, transit, bike and pedestrian facilities, and other transportation modes.

SCAG also adopts the Regional Housing Needs Plan allocating affordable housing responsibilities to its member agencies (SCAG 2013). SCAG is responsible for developing a Regional Housing Needs Plan (RHNP) allocating the region's share of the statewide housing needs to lower-level councils of governments, which then allocate the needs to cities and counties in the region. The Regional Housing Need Allocation is a minimum projection of additional housing units needed to accommodate projected household growth of all income levels by the end of the Housing Element's statutory planning period.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The MSHCP serves as a comprehensive, multi-jurisdictional habitat conservation plan, pursuant to Section (a)(1)(B) of the federal Endangered Species Act of 1973, as well as a natural communities conservation plan under the California Natural Community Conservation Planning Act of 2001. The plan "encompasses all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the Cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto." The overall biological goal of the MSHCP is to conserve covered species and their habitats, as well as to maintain biological diversity and ecological processes while allowing for future economic growth in a rapidly urbanizing region.

Federal and state wildlife agencies approved permits required to implement the MSHCP on June 22, 2004. Implementation of the plan will conserve approximately 500,000 acres of habitat, including 347,000 acres of land already in public or quasi-public ownership and about 153,000 acres of land that will be purchased or conserved through other means, such as land acquisition, conservation easements, or designated open space. The money for purchasing private land will come from numerous sources such as development mitigation fees as well as from state and federal funds. The MSHCP includes a program for the collection of development mitigation fees, policies for the review of projects in areas where habitat must be conserved, and policies for the protection of riparian areas, vernal pools, and narrow endemic plants. It also includes requirements to perform plant, bird, reptile, and mammal surveys in certain areas.

The primary intent of the MSHCP is to provide for the conservation of a range of plants and animals and in return, provide take coverage and mitigation for projects throughout western Riverside County to avoid the cost and delays of mitigating biological impacts on a project-by project basis. It would allow the incidental take (for development purposes) of species and their habitat from development. The City of Wildomar is a permittee to the MSHCP. For a detailed discussion, refer to Section 3.2, Biological and Natural Resources.

LOCAL

City of Wildomar General Plan

Upon incorporation in 2008, the City of Wildomar adopted the Riverside County General Plan. The adopted General Plan, which was drafted in 2003, is a unit of the Riverside County Integrated Project and aims to manage the overall pattern of development in the county. The General Plan focuses on community development to concentrate development to achieve community focal points, stimulate a mix of activities, promote economic development, achieve more efficient use of land, create a transit-friendly and walkable environment, and offer a broader mix of housing choices for implementing its vision. Specifically, the Land Use Element designates the general distribution and intensity of all uses of the land in the city. This includes residential, commercial, industrial, public facilities, and open space uses. It also provides development standards related to each land use category, as well as general policy–level direction for an array of land use–related issues such as hillside development and community design.

Sites 1 through 21 are currently designated Mixed Use Planning Area (MUPA). The intent of the MUPA designation is not to identify a particular mixture or intensity of land uses, but to designate areas where a mixture of residential, commercial, office, entertainment, educational, and/or recreational uses or other uses is planned.

Sites 22 through 24 are currently designated Medium High Density Residential (MHDR), which allows up to 8 dwelling units per acre. Site 25 is designated Business Park (BP), which does not allow residential development. The proposed project would amend these sites to Highest Density Residential (HHDR) development to allow development of up to 30 dwelling units per acre.

City of Wildomar Zoning Regulations

The Zoning Ordinance and Zoning Map of the City of Wildomar, found in the City's Municipal Code (Chapter 17), provide specific development and land use regulations for Wildomar. Zoning regulations are designed to protect and promote the health, safety, and general welfare of residents, as well as preserve the character and integrity of neighborhoods (City of Wildomar 2008.

Sites 1 through 21 are currently zoned General Commercial (C-1/C-P), Scenic Highway Commercial (C-P-S), or Rural Residential (R-R). The adoption and implementation of a Mixed Use (MU) overlay zone district would establish development parameters for property owners within the MUPA sites to allow high-density residential development.

Sites 22 through 25 are zoned R-R. To allow high-density residential development, these parcels will be rezoned Planned Residential (R-4), which allows multiple-family dwellings as a permitted use (Zoning Ordinance Section 17.60.020).

Table 3.7-3 illustrates the current land use designations and zoning districts for the vacant sites identified for development to meet RHNA requirements to provide adequate affordable housing.

TABLE 3.7-3
CURRENT GENERAL PLAN LAND USE DESIGNATIONS AND ZONING DISTRICTS FOR VACANT SITES

Site #	APN	Acreage	Existing Zoning	Existing General Plan Land Use
Mixed Use Planning Area (mixed use 30 du/acre)				
1	376190001	2.99	R-R	MUPA
2	380160005	1.74	C-1/C-P	MUPA
3	380160009	3.48	C-1/C-P	MUPA
4	376410021	1.60	C-P-S	MUPA
5	380160006	1.54	C-1/C-P	MUPA
6	362250027	4.98	C-P-S	MUPA
7	380160004	3.73	C-1/C-P	MUPA
8	376410017	2.40	C-P-S	MUPA
9	362250001	5.84	R-R	MUPA
10	376190002	23.92	C-P-S	MUPA
11	380160007	4.46	C-1/C-P	MUPA
12	376180006	1.36	C-P-S	MUPA
13	367050068	6.48	R-R	MUPA
14	380160003	4.83	C-1/C-P	MUPA

Site #	APN	Acreage	Existing Zoning	Existing General Plan Land Use
15	367180015	19.40	C-P-S	MUPA
16	367180043	16.14	C-P-S	MUPA
17	376410016	2.51	C-P-S	MUPA
18	362250029	2.63	R-R	MUPA
19	380160008	3.65	C-1/C-P	MUPA
20	367050064	5.84	R-R	MUPA
21	376410015	2.46	C-P-S	MUPA
Highest Density Residential				
22	380220002	5.06	R-R	MHDR
23	370400009	4.99	R-R	MHDR
24	380270013	5.91	R-R	MHDR
25	380250003	10	R-R	BP[1]

Source: City of Wildomar 2013

[1]Business Park (BP) does not allow residential development.

3.7.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

According to California Environmental Quality Act (CEQA) Guidelines Appendix G, impacts to land use are considered significant if implementation of the project would result in any of the following conditions:

1) Physically divide an established community.

2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan and zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

3) Conflict with any applicable habitat conservation plan or natural community conservation plan.

METHODOLOGY

For the purposes of this impact analysis, a significant impact would occur if project implementation would result in inconsistencies or conflicts with the adopted goals, objectives, and policies of the General Plan and/or applicable rules and regulations of the Zoning Ordinance. As such, evaluation of potential land use impacts of the proposed project was based on review of planning documents pertaining to the City of Wildomar, including the City of Wildomar General Plan and Zoning Ordinance.

IMPACTS AND MITIGATION MEASURES

Physically Divide an Established Community (Standard of Significance 1)

Impact 3.7.1 Implementation of the proposed Housing Element would not result in the division of an existing community nor would it result in substantial land use compatibility issues. Therefore, a **less than significant** impact will occur.

Division of an established community commonly occurs as a result of development and construction of physical features that constitute a barrier to easy and frequent travel between two or more constituent parts of a community. For example, a large freeway structure with few crossings could effectively split a community. Likewise, geographic features could similarly affect the community, such as the development of a large residential project on the opposite side of a river from the existing community.

The project does not propose site-specific development. Future residential development associated with the proposed project would occur on several parcels of vacant land, most of which are not zoned for residential development or are zoned for low-density residential development. The adoption of a Mixed Use overlay zone district for sites 1 through 21 would allow high-density residential development on MUPA parcels and would be compatible with the existing MUPA land use designation. Additionally, a proposed General Plan Amendment and Zone Change for sites 22 through 25 would allow for higher-density residential development in rezone areas when compared to existing conditions.

The Zoning Ordinance Amendment to the Planned Residential (R-4) zone would establish development standards to ensure that proposed residential development is integrated into and compatible with General Plan development guidelines. Compliance with the General Plan and Municipal Code would ensure that future residential development would not divide an established community. Thus, future development would not physically divide an established community, and impacts would be **less than significant.**

Mitigation Measures

None required.

Conflict with General Plan, Zoning Code, or Specific Plan (Standard of Significance 2)

Impact 3.7.2 The proposed project has been prepared to be consistent with the Wildomar General Plan and Zoning Ordinance. Therefore, the proposed project will result in a **less than significant** impact.

As previously discussed in the Existing Setting subsection, a resultant land survey subsequent to the new 4th round Housing Element drafted by the City of Wildomar identified sufficient vacant land available to satisfy the City's RHNA for moderate- and above moderate-income households. However, it was also determined that Wildomar did not have sufficient vacant housing stock allocated to accommodate low-income households. The results of the land survey initially conducted concluded that MUPA sites 1 through 21, listed in **Table 2.0-3,** with the adoption of the proposed Mixed Use overlay zoning district, would allow for the development of a variety of housing types to meet the needs of all income groups as allocated by SCAG for the 2013–2021 planning period.

Additionally, as previously identified through the land survey, sites 22 through 25 (**Table 2.0-4**) would ensure availability of land for the development of housing for lower-income households. However, to allow high-density development on sites 22 through 25, the City will need to amend its General Plan Land Use Map and Zoning Map to redesignate and rezone sites 22 through 25, a total of 25.96 acres. These sites are currently designated MHDR and BP and will be redesignated HHDR land uses as originally intended under the never adopted 4th round draft of the Housing Element.

The sites will be rezoned from R-R to Planned Residential (R-4). Under the current R-4 zoning, high-density development is not allowed and thus would be incompatible with the HHDR land use designation. To remedy this, the proposed project would change the provisions of the R-4 zone to accommodate projects up to 30 units per acre on parcels greater than 1 acre in size. This would allow for at least 30 units to the acre by right and also result in compatibility with the General Plan.

The purpose of the General Plan and Zoning Ordinance, to assign land uses in the community so that similar land uses can be located near each other and near required services such as roads, water, and sewer, would be achieved through the implementation of the proposed project. As discussed above, sites identified as viable options would be available with appropriate zoning and development standards and with public services and facilities needed to facilitate and encourage the development of a variety of housing types for households of all income levels, including the unaccommodated need of 364 from the previous planning period (2006–2013) and 1,036 RHNA units needed under the current planning period (2013–2021).

The proposed project would be consistent with the City of Wildomar General Plan and Zoning Ordinance through the adoption and implementation of an MU overlay district for sites 1 through 21 and amendment of land use designation and rezone of sites for sites 22 through 25. Therefore, impacts are **less than significant**.

Mitigation Measures

None required.

Conflict with Applicable Habitat Conservation Plan or Natural Communities Conservation Plan (Standard of Significance 3)

Impact 3.7.3 Development allowed under the proposed project could conflict with the Western Riverside County Multiple Species Habitat Conservation Plan effort. Therefore, conflicts with an applicable habitat conservation plan are considered **potentially significant**.

As discussed above, the MSHCP provides comprehensive species and ecosystem conservation and contributes to the recovery and protection of endangered species and habitat in Wildomar while also providing a more streamlined process for environmental review.

As discussed in Section 3.2, Biological and Natural Resources, development consistent with the proposed 2013–2021 Housing Element could result in adverse impacts to special-status species or essential habitat for special-status species. Both direct (to special-status species) and indirect (habitat modification, increased human/wildlife interactions, habitat fragmentation, encroachment by exotic weeds, and area-wide changes in surface water flows and general hydrology due to development of previously undeveloped areas) impacts have been identified.

Additionally, portions of Wildomar are within Mitigation Fee Areas, which are land areas that occur within the MSHCP and require a fee for development activities to occur. These fees are utilized to fund the minimization to certain endemic species. Portions of the City of Wildomar are located within the MSHCP Mitigation Fee Area (Riverside County Ordinance 810.2) and the Stephens's Kangaroo Rat Mitigation Fee Area (Riverside County Ordinance 663). However, implementation of mitigation measure **MM 3.2.1** includes the payment of these fees to comply with the overlying habitat conservation plan (the MSHCP) and therefore would reduce these impacts and impacts associated with direct and indirect impacts to special-status species and habitat covered under the MSHCP to levels **less than significant**.

Further, implementation of the proposed project could result in disturbance and degradation of riparian/riverine habitat, as defined in Section 6.1.2 of the MSHCP. However, implementation of mitigation measure **MM 3.2.8** would reduce impacts associated with riparian/riverine habitats to **less than significant**.

Mitigation Measures

Implementation of mitigation measures **MM 3.2.1** and **MM 3.2.8**, as discussed in Section 3.2, Biological and Natural Resources.

3.7.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

Land use impacts are typically isolated to a jurisdiction, except where land uses may interact or conflict with adjacent jurisdictions. The cumulative setting for land use includes existing, approved, proposed, and reasonably foreseeable development in Wildomar.

CUMULATIVE IMPACTS

Cumulative Impacts to Land Use

Impact 3.7.4 Development of the proposed project will be consistent with the planning policies of the City of Wildomar General Plan and Municipal Code while being consistent with the surrounding land uses. There would be **no Impact**.

The project would have the cumulative effect of reinforcing and supporting adopted land use policies for the area. The proposed project also has the effect of enhancing the development of the community by providing housing options for all income levels, particularly low-income categories, as required by the RHNA. As such, this is considered a beneficial cumulative effect.

Mitigation Measures

None required.

REFERENCES

City of Wildomar. 2003. *General Plan*

———. 2008. Municipal Code.

———. 2008. Zoning Map.

———. 2013. *Housing Needs Assessment*.

SCAG (Southern California Association of Governments). 2013. *Regional Transportation Plan 2012–2035: Sustainable Communities Strategy Towards a Sustainable Future.* Accessed June 2013. http://rtpscs.scag.ca.gov/Pages/default.aspx.

3.8 POPULATION AND HOUSING

This section discusses the potential environmental impacts of the proposed project associated with population and housing. Current and projected population trends and demographics are provided in this section, as well as characteristics and current conditions of the area's housing stock and projected needs.

3.8.1 EXISTING SETTING

REGIONAL SETTING

Wildomar is located in southwest Riverside County, the fourth most populated county in California. In addition to this distinction, **Table 3.8-1** demonstrates that of the ten largest counties in the state, Riverside County experienced the highest rate of growth. Most of this growth has been focused in the far western quarter of the county, which comprises the subregion of Western Riverside County.

Primarily identified by the parallel corridors of Interstates 15 and 215 (I-15 and I-215, respectively) and located west of the San Jacinto and Santa Rosa mountains, the Western Riverside County subregion contains as much as 81 percent of the population living in the unincorporated areas of the county and 80 percent of the population living in incorporated communities (WRCOG 2006). The result of this focused population growth has been the recent incorporation of many cities in the subregion, including the City of Wildomar.

Located along the I-15 corridor, south of the City of Lake Elsinore and north of the City of Menifee, the City of Wildomar was incorporated in 2008. Prior to incorporation, Wildomar was one of the fastest growing communities in the county. **Table 3.8-2** demonstrates that Wildomar's growth rate of nearly 129 percent from 2000 to 2010 trailed only the 133.7 percent growth rate of Murrieta and the 223.9 percent growth rate of Beaumont.

TABLE 3.8-1
GROWTH OF THE TEN MOST POPULATED COUNTIES IN CALIFORNIA

County	2000	2010	Population	
			Increase	Percentage Change
Los Angeles	9,519,338	9,818,605	299,267	3.10
San Diego	2,813,833	3,095,313	281,480	10.00
Orange	2,846,289	3,010,232	163,943	5.80
Riverside	**1,545,387**	**2,189,641**	**646,254**	**41.70**
San Bernardino	1,709,434	2,035,210	325,776	19.10
Santa Clara	1,682,585	1,781,642	99,057	5.90
Alameda	1,443,741	1,513,493	67,752	4.83
Sacramento	1,223,499	1,418,788	195,289	16.00
Contra Costa	948,816	1,049,025	100,209	10.60
Fresno	799,407	933,450	131,043	16.40

Source: DOF 2011

POPULATION GROWTH TRENDS

There are several methods of estimating population growth and demographic information for communities. Most of these methods rely on an analysis of historic population levels and projections based on assumptions of the future growth potential of the community. These projections are based on availability of vacant land, knowledge of building permit activity, and an understanding of the region within which the community is located.

The California Department of Finance (DOF) develops estimations of state, regional, and local populations each year based on the number of building permits issued, residential units, requests for new electrical connections, and other similar statistical indicators. These estimates are published annually each May.

TABLE 3.8-2
REGIONAL POPULATION

City	Total Population		Change in Population	
	2000	2010	Number	Percentage
Banning	23,562	29,603	6,041	25.6
Beaumont	11,384	36,877	25,493	223.9
Blythe	20,463	20,817	354	1.7
Calimesa	7,139	7,879	740	10.4
Canyon Lake	9,952	10,561	609	6.1
Cathedral City	42,647	51,200	8,553	20.1
Coachella	22,724	40,704	17,980	79.1
Corona	124,966	152,374	27,408	21.9
Desert Hot Springs	16,582	25,938	9,356	56.4
Hemet	58,812	78,657	19,845	33.7
Indian Wells	3,816	4,958	1,142	29.9
Indio	49,116	76,036	26,920	54.8
Lake Elsinore	28,928	51,821	22,893	79.1
La Quinta	23,694	37,467	13,773	58.1
Menifee	72,494[1]	77,519	5,025[1]	6.9[1]
Moreno Valley	142,381	193,365	50,984	35.8
Murrieta	44,282	103,466	59,184	133.7
Norco	24,157	27,063	2,906	12.0
Palm Desert	41,155	48,445	7,290	17.7
Palm Springs	42,807	44,552	1,745	4.1
Perris	36,189	68,386	32,197	89.0
Rancho Mirage	13,249	17,218	3,969	30.0
Riverside	255,166	303,871	48,705	19.1
San Jacinto	23,779	44,199	20,420	85.9
Temecula	57,716	100,097	42,381	73.4

City	Total Population		Change in Population	
	2000	2010	Number	Percentage
Wildomar	**14,064[1]**	**32,176**	**18,112[1]**	**128.8[1]**
Unincorporated Communities[2]	420,721	504,392	83,671	19.8
Riverside County Total	1,545,387	2,189,641	644,254	41.7

Sources: DOF 2011; US Census Bureau, 2006–2008 American Community Survey 3-Year Estimates (used for populations of unincorporated communities)
[1] Population or result of population prior to incorporation.
[2] Includes the populations of then-unincorporated Menifee and Wildomar for the year 2000 results.

In addition to California DOF estimates, the US Census Bureau administers the American Community Survey, which provides ongoing demographic reports and statistical data about communities in the United States. The American Community Survey compiles its data through ongoing statistical surveys that sample a small percentage of the population each year.

For this document, both resources were used to present historic, current, and forecast data. In instances where both resources were used to populate a table, annotations have been included to indicate the source of the data.

Prior to the 2008–2012 economic downturn, Wildomar experienced growth that was due to both the rising cost of development in the region and the strong housing market that affected much of the nation. The areas of the city that have experienced and which are projected to continue to experience the most growth are located adjacent to the transportation corridors leading to Interstate 15. This is because many Wildomar residents commute to employment centers that are, at least for now, predominantly located in and around San Diego County, Orange County, and Los Angeles County.

However, even as population growth in Wildomar slowed during the economic downturn, it did not stop. As **Table 3.8-3** shows, the city did not see a net loss of population, keeping pace with the growth of the county as a whole.

TABLE 3.8-3
RIVERSIDE COUNTY/CITY OF WILDOMAR POPULATION GROWTH

Year	Riverside County				City of Wildomar			
	Population	Percentage Growth	Dwelling Units	Percentage Growth	Population	Percentage Change	Dwelling Units	Percentage Growth
2007	2,030,054	–	753,286	–	23,554[2]	–	7,232[2]	–
2008	2,077,183	2.32	772,480	2.55	24,447[2]	3.79	7,455[2]	3.08
2009	2,109,882	1.57	779,077	0.85	31,374	28.33	10,630	42.59
2010	2,189,641	3.78	800,707	2.78	32,176	2.56	10,806	1.66
2011	2,205,731	0.73	804,913	0.53	32,414	0.74	10,840	0.31
2012	2,227,577	0.99	807,970	0.38	32,719	0.94	10,847	0.06

Sources: DOF 2012; US Census Bureau, 2006–2008 American Community Survey 3-Year Estimates

In Riverside County, forecasting of population and demographic trends is performed by the local council of governments, the Southern California Association of Governments (SCAG). For the specific subregion in which the proposed project site is located, Western Riverside County,

SCAG administers a subregional council of governments, the Western Riverside Council of Governments (WRCOG). As a component of its long-term planning responsibilities, the WRCOG publishes forecast data demographic and population data for the subregion.

This forecast data, which is included in **Table 3.8-4**, is derived from methods that are similar to the process used to create current estimates. Past population and birthrate patterns are analyzed and projected, as are instances of building permit issuance and income reporting, among many other factors.

Table 3.8-4 indicates that while growth for both the subregion and the city will exceed the current economically depressed figures, they are not predicted to reach the historic growth levels of the past decade. However, it is also important to note that the growth of Wildomar is still predicted to outpace the growth of the subregion as a whole.

TABLE 3.8-4
FORECAST POPULATIONS – WESTERN RIVERSIDE COUNTY AND CITY OF WILDOMAR

Year	Western Riverside County		City of Wildomar	
	Population	Percentage Growth	Population	Percentage Growth
2000	1,236,309	–	14,064	–
2010	1,733,694	40.23%	32,176	128.78%
2020	2,003,412	15.56%	42,475	32.01%
2035	2,466,332	23.11%	53,664	26.34%

Source: WRCOG 2012
[1] Population of the Western Riverside subregion, defined by the WRCOG as 80% of the unincorporated population and 81% of the incorporated population of Riverside County as a whole.

POPULATION CHARACTERISTICS

Housing

Table 3.8-5 summarizes the estimated characteristics of the existing regional and local housing in 2012. According to California Department of Finance estimates, there are currently 807,970 housing units in Riverside County. Single-family housing accounts for just over 72 percent of all housing units. Comparatively, of the total 10,857 housing units in Wildomar, 69 percent are single-family homes. In 2012, approximately 86 percent of the housing units in the county were occupied, leaving approximately 14 percent vacant. In Wildomar, approximately 92 percent of the housing units were occupied, with less than 8 percent of the city's housing inventory vacant. Slightly more than three persons on average resided in each occupied housing unit in both Riverside County and Wildomar; the average is slightly higher in Wildomar.

Based on the results of the 2010 US Census, **Table 3.8-6** provides the tenure characteristics of housing in both Riverside County and Wildomar. Of the total 686,260 occupied housing units in the county in 2010, approximately 67 percent were owner-occupied and the remaining 33 percent were renter-occupied. At the same time, of the total 9,992 occupied housing units in the city in 2010, just over 73 percent were owner-occupied, while nearly 27 percent were occupied by renters.

TABLE 3.8-5
EXISTING REGIONAL AND LOCAL HOUSING CHARACTERISTICS – OCCUPANCY/TYPE (YEAR 2010)

Area	Total Units	Occupied Units	Vacant Units	Persons Per Household	Single-Family Units[1]	Multi-Family Units[2]	Mobile Homes
City of Wildomar	10,857	10,039	818	3.255	7,492	513	2,852
Riverside County	807,970	692,520	115,450	3.165	599,723	129,326	78,921

Source: DOF 2012
[1] Single-Family includes Single Detached and Single Attached categories
[2] Multi-Family contains Two to Four and Five Plus categories

TABLE 3.8-6
EXISTING REGIONAL AND LOCAL HOUSING CHARACTERISTICS – TENURE (YEAR 2010)

Area	Total Occupied Units	Owner-Occupied	Renter-Occupied
City of Wildomar	9,992	7,329	2,663
Riverside County	686,260	462,212	224,048

Source: DOF 2012; US Census Bureau 2010

3.8.2 REGULATORY FRAMEWORK

LOCAL

City of Wildomar Housing Element

Upon incorporation, the City of Wildomar adopted the Riverside County General Plan. This General Plan provides goals and policies related to population, housing, and employment. California Government Code Section 65302(c) mandates that each city include a housing element in its general plan. The housing element is required to identify and analyze existing and projected housing needs, and include statements of the city's goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. State law (Government Code Sections 65580–65589.8) mandates the content of the City's Housing Element and requires an analysis of:

- Population and employment trends;
- The city's fair share of the regional housing needs;
- Household characteristics;
- An inventory of land suitable for residential development;
- Governmental and non-governmental constraints on the improvement, maintenance, and development of housing;
- Special housing needs;
- Opportunities for energy conservation; and

- Publicly assisted housing developments that may convert to non-assisted housing developments.

The purpose of these requirements is to demonstrate adequate housing resources to meet the assigned Regional Housing Needs Allocation for all housing categories, but especially housing for very low-income and low-income housing.

The California Department of Housing and Community Development (HCD) allocates regional housing needs numbers to the Southern California Association of Governments, which in turn allocates to cities and the unincorporated county their "fair share" of the region's projected housing needs, also known as the Regional Housing Needs Allocation (RHNA). The housing needs are assigned based on household income groupings over the planning period for each specific jurisdiction's housing element.

After the City incorporated in 2008, the City, Riverside County, the Western Riverside Council of Governments, and SCAG entered into negotiations to determine the number of RHNA units that should be assigned to Wildomar from the County's RHNA allotment for the 2006-2014 planning period. It was determined that the City would receive 1,471 RHNA units for the 2006–2014 planning period. Of the 1,471 units, the City was not able to accommodate 364 units for lower-income households with its existing inventory of vacant land. Therefore, those 364 units have carried over to the 2013–2021 planning period. Table 3.8-7 shows the resulting RHNA for the City of Wildomar.

TABLE 3.8-7
WILDOMAR 2013–2021 REGIONAL HOUSING NEEDS ALLOCATION (RHNA)

Income Category	Income Range*	2013–2021 RHNA
Extremely Low	$0–$20,100	310
Very Low	$20,101–$33,500	311
Low	$33,501–$53,600	415
Unaccommodated Need from 2006–2014 Housing Element		**364**
Subtotal Extremely Low-, Very Low-, and Low-Income Units		***1,400***
Moderate	$53,601–$78,000	461
Above Moderate	$78,001 or more	1,038
Total		**2,899**

Source: SCAG 2012
**Based on a four-person household*

To demonstrate housing resources for the extremely low-income, very low-income, and low-income housing categories, HCD requires that the City provide enough vacant land to accommodate at least 1,400 units. Further, the vacant land must have a permitted use at a density of at least 30 dwellings/housing units per acre. Currently, the City of Wildomar does not have sufficient vacant land zoned to meet the need for 1,400 housing units in the extremely low-income, very low-income, and low-income categories as shown in **Table 3.8-7**. The purpose of the proposed project is to update the Housing Element and provide associated land use and Zoning Code revisions to accommodate the RHNA assignment.

3.8.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance, which indicate that the proposed project would have a significant impact if it would:

1) Induce substantial growth or concentration of population in an area, either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure).

2) Displace substantial numbers of existing housing, necessitating the construction or replacement housing elsewhere.

3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

METHODOLOGY

Potential housing growth is directly related to the objectives of the proposed project to enable increased housing development opportunities in Wildomar. As discussed in Section 2.0 Project Description, the proposed project revises the City's land use plan and Zoning Code to allow for a potential increase of 1,678 additional housing units on 25 potential development sites.

For the purposes of determining population and housing impacts, a factor of 3.3 persons per household, as established by the DOF and SCAG for the City of Wildomar in 2013, was used to determine the potential growth in population as a result of the proposed project. Growth inducement and its associated environmental effects are discussed in **Section 5.0.**

IMPACTS AND MITIGATION MEASURES

Population and Housing Growth Inducement (Standard of Significance 1)

Impact 3.8.1 The proposed project would result in indirect housing and population growth through changes in land use and zoning designations. This impact is considered less than significant.

The proposed project will amend the City's land use and zoning regulations to allow 1,678 potential housing units to be added to the housing stock in Wildomar. Based on an average household size of 3.3 residents per home (SCAG 2012), the additional 1,678 housing units would result in an increase in population of approximately 5,537. SCAGs household growth forecast is projected to result in an increase of 2,620 households for the 5th cycle RHNA, which would yield a population increase of 8,646 new residents (based on an average household size of 3.3 residents) (SCAG 2012). As such, the estimated increase in population generated by the project is well within and below the anticipated population increase projected by SCAG.

Additionally, the proposed project's indirect effect on population and housing growth is in direct response to the RHNA for Wildomar that indicated a need to identify development sites and develop associated implementing land use designations and ordinances to foster the development of new housing, especially for low-income population groups. While the land use amendments and zoning revisions may indirectly induce growth by changing the land use

designations and zoning on certain sites, the project will not directly cause new housing to be developed.

Further, indirect effects of growth, such as on transportation and the demand for public services and utilities, are analyzed in Sections 3.10, Transportation and Circulation, and 3.9, Public Services, Utilities, and Recreation, respectively. As shown in those sections, potential growth generated as a result of the project would not result in direct physical impacts. Therefore, the proposed project would result in **less than significant** population and housing growth inducement impacts.

Mitigation Measures

None required.

Displacement of Population and Housing (Standards of Significance 2 and 3)

Impact 3.8.2 The proposed project would not result in the displacement of people or housing. To the contrary, the proposed project would indirectly allow for the development of additional housing to meet the needs of a growing population. No impact would occur.

As discussed above under Impact 3.8.1, the proposed project could result in the development of an additional 1,678 housing units beyond what would currently be allowed under existing land use and zoning designations in Wildomar. Furthermore, none of the 25 sites identified for land use and zoning changes under the proposed project currently contain housing. Thus, no homes or persons would be displaced and **no impacts** would occur.

Mitigation Measures

None required.

3.8.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The CEQA Guidelines require that other reasonably foreseeable development projects that are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario. The cumulative setting with regard to population and housing growth is the total amount of population and housing expected to occur over the long term in the city and, to some extent, the region. The best measure of this is the City's 2035 General Plan that identifies long-term development expectations, patterns, and policies.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Impact 3.8.3 Buildout of the 2035 General Plan plus implementation of the proposed project would not result in population and housing growth in such substantial amounts or concentrations so as to result in significant cumulative impacts on population and housing. Cumulative population and housing impacts would be **less than cumulatively considerable**.

While the proposed project may indirectly induce population and housing growth as described in the discussion of Impact 3.8.1 above, this growth is necessary to meet population growth and housing needs in Wildomar because the current supply of vacant land in the city zoned and designated for residential development is not adequate to meet the City's projected need for housing, as determined by SCAG. Implementation of the proposed project would remedy this situation to designate and zone enough vacant land to accommodate the projected need for housing. The projected need for housing will exist regardless of whether this project is approved. Therefore, this project is not catalyzing growth; it is planning for growth that is projected to occur nonetheless. Accordingly, cumulative population and housing impacts would be **less than cumulatively considerable**.

Mitigation Measures

None required.

REFERENCES

California Employment Development Department. 2012. *Labor Market Information.* http://www.calmis.ca.gov/file/lfmonth/countyur-400c.pdf.

DOF (California Department of Finance). 2010. *Interim Population Projections for California and Its Counties 2010–2050.*

———. 2011. *Demographic Research Unit, Redistricting Data Summary File, 3/8/2011.*

———. 2012. *E-5 City/County Population and Housing Estimates for Cities, Counties, and the State, 2011 and 2012, with 2019 Benchmark.* http://www.dof.ca.gov/research/demographic/reports/view.php.

SCAG (Southern California Association of Governments). 2012. Regional Housing Needs Assessment. Accessed June 2013. http://rtpscs.scag.ca.gov/Pages/Regional-Housing-Needs-Assessment.aspx

US Bureau of the Census. 1990. 1990 Census.

———. 2000. 2000 Census.

———. 2006–2008 American Community Survey 3-Year Estimates.

———. 2010. 2010 Census.

WRCOG (Western Riverside Council of Governments). 2006. *Indicators Report.*

———. 2012. "Western Riverside County Growth Forecasts 2010–2035." Accessed July 30, 2012. http://www.wrcog.cog.ca.us/downloads/Revised%20WRCOG%20GF%20From%20SCAG%20092211.pdf.

3.9 Public Services, Recreation, and Utilities

This section describes the public services and utilities that would serve buildout of the proposed project. Specifically, this section includes an examination of fire protection and emergency medical services, law enforcement services, public schools, water supply and service, wastewater services, solid waste services, and parks and recreation. Each subsection includes a description of existing facilities and infrastructure, applicable service goals, potential environmental impacts resulting from implementation of the proposed project, and cumulative impacts.

Impacts associated with the following public service and utility issues are addressed in other sections of this Draft EIR, as listed below.

- Storm drainage system, including potential overflow and downstream flooding impacts – Section 3.6, Hydrology and Water Quality
- Groundwater impacts, including water quality – Section 3.6, Hydrology and Water Quality
- Energy use, including energy demands associated with the proposed project – Section 3.3, Climate Change and Greenhouses Gases

3.9.1 FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

3.9.1.1 EXISTING SETTING

RIVERSIDE COUNTY FIRE DEPARTMENT

The Riverside County Fire Department (RCFD) provides fire protection and emergency medical services to an approximate 7,000-square-mile service area that includes Wildomar. RCFD services include providing fire suppression, emergency medical, rescue, and fire prevention services while serving as the operational area coordinator for the California Fire and Rescue Mutual Aid System for all fire service jurisdictions in Riverside County. The department consists of 1,200 career firefighters, 200 administrative support personnel, and 300 volunteer reserve firefighters who responded to 121,059 incidents in 2011, averaging 325 emergency responses per day (RCFD 2013b).

The RCFD currently operates 95 fire stations in 17 battalions. These 95 fire stations are divided into two operational divisions: East Operations and West Operations. Across both divisions there are six subdivisions: Bautista, Indio, Moreno, Northwest, Oak Glen, and Southwest. Wildomar is located within Battalion 2 of the Southwest Division, which includes eight fire stations. Fire Station 61 serves the City of Wildomar.

Local Facilities, Personnel, and Demand

Station 61 is located at 32637 Gruwell Street in Wildomar; however, this station may be relocated to a more central location. Station 75, located at 38900 Clinton Keith Road in Murrieta, Station 68, located at 26020 Wickard Road in Menifee, and Station 95, located at 22770 Railroad Canyon Road in Lake Elsinore, provide support to Station 61 (LAFCo 2009).

Station 61 has one Type 1 engine with three full-time employees. In 2011, Station 61 had a total of 1,723 calls, of which 1,286 were medical aid calls, 63 were fires (19 wildland fires), 96 were public service assistance, 122 were traffic collisions, 1 was a hazard material call, 117 were false alarms, and 5 were miscellaneous calls (RCFD 2011).

The RCFD collects development fees to fund site acquisition, construction, improvement and equipping of fire protection buildings and facilities, and acquisition and improvement of fire protection equipment.

Mutual Aid

The RCFD operates under a Regional Fire Protection Program, which allows its fire stations to actively support one another regardless of geographic or jurisdictional boundaries. This provides the community with the most effective and efficient method of emergency response, and allows for the shared use of specialized equipment and personnel between neighboring communities. Automatic aid is not only predetermined, but one or more additional departments are automatically dispatched to certain locations or types of alarms at the same time as the home department. Stations located in Murrieta, Menifee, and Lake Elsinore also provide additional support on demand. In addition, the County of Riverside contracts with the State of California for fire protection.

3.9.1.2 REGULATORY FRAMEWORK

STATE

California Fire Code

The 2007 California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California (CBSC 2008). The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

California Health and Safety Code

Additional state fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations for building standards, fire protection and notification systems, fire protection devices such as extinguishers, smoke alarms, high-rise building and child-care facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with the California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Fighting Equipment, the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

LOCAL

Riverside County Fire Department Strategic Plan

The Riverside County Fire Department Strategic Plan covers fiscal years 2009–2029 (RCFD 2009). The plan describes the array of fire and rescue services provided to citizens, and it provides an evaluation of the current status of various commonly used service performance measures. The plan also makes recommendations for staffing, facilities, and station sites and remodels. The RCFD has a response time goal of 5 minutes within 1.5 miles, 7 minutes within 3 miles, 11 minutes within 5 miles, and 17 minutes within 8 miles.

Mutual Aid Agreements

Fire protection mutual aid is defined as an agreement between two fire agencies in which they commit to respond to calls for services in the other agency's jurisdiction when they are called, at no cost to the requesting agency. Automatic aid is not only predetermined, but one or more additional departments are automatically dispatched to certain locations or types of alarms at the same time as the home department.

3.9.1.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. A fire protection and emergency services impact is considered significant if implementation of the proposed project would:

1) Create substantial adverse physical impacts associated with the provision of new or physically altered fire-related facilities or services, the construction and/or provision of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services.

2) 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.

According to Ben Johnson, Planning and Development Supervisor for the California Department of Forestry and Fire Protection (Cal Fire) and the RCFD, the City of Wildomar meets the RCFD's definition of "urban" land use and has a total response time standard of 6 minutes 30 seconds (RCFD 2013b). In addition, the maximum service delivery/call volume threshold is 2,190 per year for each company, which is equivalent to 8,000 dwelling units or 23,000 persons. However, this threshold may vary depending on the demographics of the area served (i.e., older population equals greater demand for services) (RCFD 2013b).

METHODOLOGY

Evaluation of potential fire protection and emergency medical service impacts was based on information provided by the Riverside County Fire Department, as well as a review of the applicable fire codes and regulations, the existing Wildomar Municipal Code, and other relevant literature.

PROJECT IMPACTS AND MITIGATION MEASURES

Increased Demand for Fire Protection and Emergency Medical Services and Fire Flow (Standard of Significance 1)

Impact 3.9.1.1 Implementation of the proposed project would result in the need for additional fire protection and emergency services, which may result in the need for new or expanded facilities and infrastructure to provide adequate levels of service and fire flow through 2021. Since the timing and location of potential necessary improvements is unknown at this time, it would be too speculative to analyze the environmental impacts associated with those improvements at this time. The timing and need would be determined during periodic review of service contract agreements and review of housing development proposals. Future development on the identified sites would be required to pay development impact fees to contribute their fair share toward necessary improvements. In addition, any necessary fire protection facility improvements (facilities and/or infrastructure) would be subject to subsequent environmental review at the time improvements are proposed, which would identify and mitigate any site-specific environmental effects. Therefore, this impact is considered **less than significant**.

Increased Demand for Fire Protection and Emergency Medical Services

Implementation of the proposed project may result in the development of 1,678 housing units and approximately 5,537 new residents by 2021 (assuming an average of 3.3 persons per household as reported for 2012 by the Southern California Association of Governments (SCAG)). Fire protection and emergency medical services for the proposed project will be provided by the RCFD. Development of the identified sites would represent a 17 percent increase in the population and housing or an annual growth rate of 2.1 percent within Wildomar.

According to the RCFD (2013b), the City of Wildomar meets the total response time standard of 6 minutes 30 seconds; the maximum service delivery/call volume standard is 2,190 calls per year for each engine company, which is equivalent to 8,000 dwelling units (du) or 23,000 persons. At the time this document was written, current response times were not available; however, using the maximum call volume threshold and equivalents, maximum calls per dwelling unit and/or person ratios could be established to estimate the proposed project's impact on demand. Based on a maximum call volume of 2,190 calls being equivalent to 8,000 dwelling units, a maximum service call per dwelling unit ratio of 0.274 (2,190 calls/8,000 du) and a maximum service call per person ratio of 0.095 calls per person (2,190 calls/23,000 persons) were determined. Based on these maximum service call ratios, the proposed project may result in an additional 470 (0.274 calls/du x 1,678 new units) to 526 (0.095 calls/person x 5,537 new residents) service calls by 2021. As previously noted above, Station 61 had a total of 1,723 calls in 2011, which was 467 calls below the delivery/call volume standard. Since the proposed project may result in 470 to 535 additional service calls by 2021, implementation of the project may exceed the 467 remaining capacity. Therefore, it is possible that the proposed project would result in the need for an additional engine company, which may or may not require the expansion of or the addition of new fire department facilities by 2021. City of Wildomar General Plan Policy S 5.8 requires periodic review of inter-jurisdictional fire response agreements that shall identify the timing of any necessary expansions or the need for new facilities (City of Wildomar 2003). Future development associated with the proposed project would be subject to subsequent environmental review and required to pay development impact fees that help fund necessary new public service facilities. Since the timing and location of future new facilities is unknown at

this time, it would be speculative to analyze environmental impacts associated with construction of those facilities. Depending on the location and existing site conditions at future facility improvement sites, there is the potential for physical improvements to result in environmental impacts. However, any future fire department facility improvements would be subject to subsequent environmental review.

In addition, all future development would be required to comply with Chapter 8.28 of the Wildomar Municipal Code that adopts the California Fire Code (Title 24 California Code of Regulations, Part 9) standards, which would be consistent with Wildomar General Plan Policy S 5.1. Section 8.28.020 of the Wildomar Municipal Code includes amendments to the California Fire Code that are applicable to the proposed project.

In consideration of the incremental changes in population and housing that the proposed project represents, required periodic review of inter-jurisdictional fire response agreements, and subsequent environmental review of any new development and improvements to fire department facilities, the proposed project would result in a **less than significant** impact to fire protection and emergency medical services.

Mitigation Measures

None required.

Adequate Fire Flow

Implementation of the proposed project will result in the additional need for fire flow, which may require the creation of additional fire flow infrastructure**.** Section 8.28.020 of the Wildomar Municipal Code includes amendments to the California Fire Code that are applicable to the proposed project. Compliance with the Municipal Code requires that future development provide proof of an approved permanent water supply capable of supplying the required fire flow for fire protection prior to the commencement of construction. Water supplies for fire protection and hydrants must be in accordance with Appendix B and Appendix C of the California Fire Code.

Future housing developments associated with the proposed project will be subject to review and approval by the RCFD, to ensure that proposed development provides for fire flow and fire hydrant sizing and placement in compliance with Chapter 8.28 of the Wildomar Municipal Code and Title 24 of the California Fire Code during the building permit and site review processes. Future development will not be approved by the RCFD if it does not meet the standards outlined in Chapter 8.28 of the Wildomar Municipal Code and Title 24 of the California Fire Code. Fire flow will be provided at project sites via existing and future water lines and public hydrants. It would be too speculative to anticipate where and what type of infrastructure would be needed to meet the demand of future development allowed under the proposed project. Improvements necessary to provide adequate fire flow to future housing developments would be identified and incorporated into the design of those development proposals based on the type of structure and number units. Environmental impacts associated with construction of those facilities would be analyzed on a case-by-case basis as part of future development's subsequent CEQA environmental review, which will identify impacts and mitigation as necessary for those improvements. Upon review and the necessary permit processing by the Riverside County Fire Department and the Elsinore Valley Municipal Water District, this impact will be **less than significant**.

Mitigation Measures

None required.

Significant Risk of Loss Due to Wildland Fire (Standard of Significance 2)

Impact 3.9.1.2 While the proposed project is located in an area that is identified as being exposed to a very high risk of wildfire, it is more specifically located in an area which is developed and well served by fire prevention services. The close proximity to a fire station and the limited undeveloped land near the proposed development sites will result in a **less than significant** impact.

In November 2007, Cal Fire adopted Fire Hazard Severity Zone (FHSZ) maps for State Responsibility Areas. The current adopted map identifies the project area as a very high fire hazard severity (VHFHS) zone.

VHFHS zones are determined by the director of Cal Fire and are those real properties that are not deemed to be a state responsibility pursuant to Public Resources Code Section 4125 et seq. Identification of a VHFHS is based on consistent statewide criteria and on the severity of the fire hazard that is expected to prevail in those areas. VHFHS zones are based on fuel loading, slope, fire weather, and other relevant factors.

Cal Fire classifies real property in accordance with whether a very high fire hazard is expected to prevail in those areas so that public officials can identify measures that will retard the rate of spread and reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property and to require that those measures be implemented.

According to Government Code Section 51179, a local agency (defined as a city, county, city and county, or district responsible for fire protection within a VHFHS zone) may make changes to recommendations made by the director of Cal Fire pursuant to Government Code Section 51178. This provision allows a local agency, at its discretion, to make changes to the boundaries of VHFHS zones that may not be reflected on maps released by Cal Fire.

In June 2010, the City of Wildomar adopted Ordinance 52, which adopted the VHFHS zone established by Cal Fire. As previously noted, future development associated with the proposed project would be required to be designed in accordance with the California Fire Code, as amended under Section 8.28.020 of the Wildomar Municipal Code. Although Cal Fire and the City have identified the area as being within a VHFHS zone, the existing urban development within the city limits, as opposed to adjacent to vacant open space, reduces the potential for wildfire hazards. According to the RCFD (2013b), the community has a low-density, suburban planned character that falls under the RCFD's definition of "urban" land use.

In consideration of the proposed project resulting in residential development primarily within existing city limits, the size of the community and number of existing fire stations, compliance with the California Fire Code, and the existing urban characteristics, development allowed under the proposed project will not result in a significant risk of exposure of individuals or structures to the threat of wildfire. Therefore, the impact would be **less than significant.**

Mitigation Measures

None required.

3.9.1.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for fire protection and emergency medical services includes the proposed project area and the immediate surrounding areas served by RCFD Battalion 2. The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development in the immediate area that could potentially place demand on fire protection services or could be expected to place demand on services in the future.

In 2011, Battalion 2 responded to a total of 7,221 calls, of which 5,334 were medical, 256 were fires (70 wildland fires), and 490 were false alarms (RCFD 2011). The remaining calls were associated with hazardous materials, public services assistance, rescue, standby, and traffic collisions.

Cumulative Demand on Fire Protection Facilities and Fire Flow

Impact 3.9.1.3 Implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the RCFD Battalion 2 service area, may increase the demand for fire protection and emergency medical services, as well as fire flow, and increase the number of dwelling units within a wildfire hazard area. However, given the required periodic review of inter-jurisdictional fire response agreements and that all future development would be required to comply with the California Fire Code and subsequent CEQA environmental review, the proposed project's contribution to fire protection and emergency services, fire flow, and wildfire hazards would not be cumulatively considerable. This would be considered a **less than cumulatively considerable** impact**.**

Cumulative Demand for Fire Protection Facilities and Fire Flow

Development allowed by the proposed project, combined with existing, planned, proposed, approved, and reasonably foreseeable development within the service area of RCFD Battalion 2, would increase the demand on fire protection, which may result in the need for expanded or new facilities, increased requests for mutual aid from the RCFD and Cal Fire, and/or the additional need for fire flow.

The need for additional fire protection facilities to serve Battalion 2 would be limited to those facilities necessary to serve Wildomar, as the city is provided service under a contract agreement. As previously noted, periodic reviews of service agreements would identify the need for additional facilities proportional to incremental development proposed. Some additional demand for services may be provided under mutual aid, which would be provided by existing facilities, equipment, and personnel at the time of the mutual aid request. It is likely that future development within the service area of Battalion 2 would likely require the expansion of and/or the addition of new facilities. The timing and location of any necessary facilities would be identified through periodic reviews of service agreements and funded by development impact fees collected. Since the timing and location of any necessary future facility improvements is currently unknown, the analysis of construction impacts associated with those facilities would be speculative. However, the construction of those facilities would be subject to subsequent project-level CEQA review. The impacts associated with construction of those facility improvements would be analyzed based on site-specific conditions and combined with other

existing, planned, proposed, approved, and reasonably foreseeable development anticipated at the time construction of the new facility is proposed.

Likewise, all new development proposed would be required to be designed in accordance with the California Building Code and California Fire Code, which require adequate fire flow and design features that prevent and minimize the occurrences of fire, increasing the ability of the RCFD and Cal Fire to provide adequate fire protection services. Future development would be required to provide adequate fire flow, which may result in the construction of additional infrastructure. However, the environmental impacts associated with construction of those facilities would be addressed through project-specific environmental review. Therefore, the proposed project's cumulative impact on fire protection facilities and fire flow would not be cumulatively considerable. This would be considered a **less than cumulatively considerable** impact.

Mitigation Measures

None required.

Cumulative Risks Associated with Wildfire

Although the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development, would increase the number of structures and people located within an area subject to wildfire hazard, the area has been identified for urban development. Compliance with the California Fire Code would ensure that the potential risks related to loss of structures and life due to wildfires are minimized. Since future development would be located in areas planned for urban development and would be required to be designed in accordance with the California Fire Code, the proposed project's contribution to wildfire risks would not be cumulatively considerable. This impact would be considered **less than cumulatively considerable**.

Mitigation Measures

None required.

3.9.2 LAW ENFORCEMENT SERVICES

3.9.2.1 EXISTING SETTING

Riverside County Sheriff's Department

Police protection services in Wildomar are provided by the Riverside County Sheriff's Department (RCSD). The RCSD serves an area of approximately 7,300 square miles with a staff of over 4,000. There are ten Sheriff's Stations spread across the county. As of June 2013, there were 2,035 sworn personnel and 1,807 classified employees (RCSD 2013b). Many cities in the county contract with the RCSD for city police services, including the City of Wildomar. The Sheriff's Department maintains mutual aid agreements with county and state law enforcement agencies.

The City of Wildomar police department (RCSD) is housed at the Lake Elsinore Station, which is located at 333 Limited Avenue in Lake Elsinore. The Lake Elsinore Station serves the cities of Wildomar and Lake Elsinore as well as the unincorporated areas of Alberhill, El Cariso, Glen Eden, Glen Ivy Hot Springs, Good Hope, La Cresta, Lakeland Village, Meadowbrook, Ortega Hills, Temescal Canyon, and Warm Springs (RCSD 2013a). The City of Wildomar currently contracts for 40 hours of service per 24-hour day, which equates to one patrol officer on day shift, two patrol

officers on swing shift, and one patrol office on graveyard shift. Wildomar General Plan Policy 4.15.2C requires that a goal of 1.5 sworn officers per 1,000 population be met and maintained. Based on an existing population of 32,719 (SCAG 2013), the City is currently deficient 19 sworn officers to meet its goal of 1.5 sworn officers per 1,000 population. The City's contract for services is reviewed annually during the budgeting process.

Responses to calls for service are dispatched to the Lake Elsinore Station through the RCSD's central dispatch communication center located in Riverside. In 2012, there were 12,881 calls for service from Wildomar (RCSD 2013b). The average response times in 2012 were approximately 12 minutes for priority one calls, approximately 48 minutes for priority two calls, approximately 121 minutes for priority three calls, and approximately 248 minutes for priority four calls (RCSD 2013b).

3.9.2.2 REGULATORY FRAMEWORK

STATE

Emergency Response/Evacuation Plans

Government Code Section 8607(a) directs the California Emergency Management Agency (formerly the Governor's Office of Emergency Services) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. The program is intended to provide effective management of multi-agency and multijurisdictional emergencies in California. SEMS consists of five organizational levels, which are activated as necessary: (1) Field Response, (2) Local Government, (3) Operational Area, (4) Regional, and (5) State.

Local governments must use SEMS to be eligible for funding of their response-related personnel costs under state disaster assistance programs. The City of Wildomar is generally responsible for emergencies that occur within city boundaries and has adopted an Emergency Operations Plan that is consistent with the SEMS.

LOCAL

City of Wildomar Disaster Operation and Relief Plan

The objectives of the City of Wildomar Emergency Plan (Ordinance No. 44) are to prepare for and facilitate coordinated and effective responses to emergencies in Wildomar and to provide adequate assistance to other jurisdictions as needed. The plan specifies actions for the coordination of operations, management, and resources during emergencies; governmental responsibilities during emergency events; and a plan for the organization of nongovernmental organizations providing support assistance.

3.9.2.3 IMPACTS AND MITIGATION MEASURES

STANDARD OF SIGNIFICANCE

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G thresholds of significance. A law enforcement services impact is considered significant if implementation of the proposed project would:

1) Create substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services.

METHODOLOGY

Evaluation of potential law enforcement impacts was based on information provided by the Riverside County Sheriff's Department, as well as review of the RCSD's staffing report and facilities needs assessment. The impact analysis focuses on whether those impacts would have a significant effect on the physical environment.

PROJECT IMPACTS AND MITIGATION MEASURES

Increased Demand for Law Enforcement Services (Standard of Significance 1)

Impact 3.9.2.1 Implementation of the proposed project will not result in a significant increased demand for law enforcement services and will not result in the need for new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts. Therefore, this is a **less than significant** impact.

Development associated with the proposed project will occur on the identified sites, which are currently vacant and receiving law enforcement services from the RCSD Lake Elsinore Station. Because development associated with the proposed project is in an already developed area, the RCSD will not be required to expand its service area to accommodate the proposed project once development is complete.

Implementation of the proposed project may allow development of an additional 1,678 housing units, which may increase the city's population by approximately 5,537. If the identified sites are developed, the proposed project will represent an approximate 17 percent increase in the population and housing or a 2.1 percent growth rate for Wildomar. The increase in population associated with development of the identified sites would warrant the need for at least eight additional officers by the year 2021 based on the General Plan goal of 1.5 sworn officers per 1,000 population. This incremental increased demand for law enforcement services would be met through amendment of the contract service agreement during annual budget review. The costs associated with the hiring of additional officers would be funded through property taxes and development impact fees. The eight additional officers needed to serve development associated with the proposed project would not warrant the need for expanded facilities. However, Wildomar currently is served by a number of sworn officers that is not consistent with General Plan Policy 4.15.2C, which has resulted in increased response times. Therefore, any development associated with the proposed project would exacerbate these existing deficiencies, including response times. The proposed project itself would not warrant the need for expanded facilities; however, when combined with the need for additional officers under existing conditions, expanding or adding facilities may be warranted. The timing and location of new and/or expanded facilities would be determined by the RCSD and is unknown at this time. The construction of potential modifications to the existing RCSD facility would be subject to subsequent environmental review. Potential environmental impacts would likely be primarily generated by construction activities rather than operations of the modified facility. Potential construction activities may include, but not be limited to, the generation of air quality and greenhouse gas emissions, erosion, noise, and drainage. Depending on the location and nature of future modifications, biological resources may also be

impacted. However, it would be too speculative to determine these impacts at this time, and the proposed project itself would not warrant the need for additional facilities.

Since the incremental increase in population potentially generated by the proposed project alone would not directly result in the need for expanded facilities and future development (identified sites and future expansion of existing law enforcement facilities) would be subject to subsequent CEQA environmental review, the proposed project's potential impacts on law enforcement facilities would be considered **less than significant**.

Mitigation Measures

None required.

3.9.2.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for law enforcement services includes the service area boundaries of the Riverside County Sheriff's Department Lake Elsinore Station. The RCSD provides services within the cities of Wildomar and Lake Elsinore, as well as to unincorporated areas of Riverside County. The cumulative analysis includes all existing, planned, proposed, approved, and reasonably foreseeable development in the project area.

Cumulative Demand for Law Enforcement Services

Impact 3.9.2.2 Implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the service area of the RCSD's Lake Elsinore Station, would increase the demand for law enforcement services and thus require additional staffing, equipment, and facilities, the construction of which could cause significant environmental impacts. However, future development would be subject to subsequent project-level CEQA review, which would identify any future need for expanded services/facilities and provide mitigation for the construction of those facilities accordingly. The project's contribution to the need for expanded law enforcement services is considered **less than cumulatively considerable**.

Future development within the RCSD's Lake Elsinore Station's service area will increase the demand for law enforcement services, which may result in the need for new or expanded law enforcement facilities. As previously noted, future development associated with the proposed project and other planned, approved, and/or reasonably foreseeable development would be subject to subsequent CEQA review, which would identify any additional services/facilities necessary to serve future cumulative growth. Future development proposals would be subject to CEQA review, which would identify project-specific increased demands on law enforcement. Periodic review of service contract agreements would identify increased demands for each jurisdiction within each sheriff station's service area. The RCSD conducts programmed reviews of facilities needs and budget analysis to identify the timing, need, and funding for new or expanded facilities. Construction of any new or expanded facilities would be subject to subsequent CEQA environmental review, which would include an evaluation of the project-specific environmental effects at the time improvements are proposed. It would be too speculative to analysis those environmental effects at this time. All future development associated with the proposed project, as well as other existing, planned, proposed, approved, and reasonably foreseeable development, is required to pay development impact fees to contribute its fair share toward necessary public service facilities. Therefore, the proposed project's effect on the demand for law enforcement services would not be cumulatively considerable. This impact would be considered **less than cumulatively considerable**.

Mitigation Measures

None required.

3.9.3 PUBLIC SCHOOLS

3.9.3.1 EXISTING SETTING

LAKE ELSINORE UNIFIED SCHOOL DISTRICT

The Lake Elsinore Unified School District (LEUSD) was formed in 1989 and now serves a 131.78-square-mile area that includes Wildomar, the cities of Lake Elsinore and Canyon Lake, and several unincorporated communities, including Lakeland Village and Horsethief Canyon. The LEUSD operates 13 elementary schools, two K–8 schools, four middle schools, three comprehensive high schools, four alternative schools, and a virtual K–12 school. LEUSD schools are listed in **Table 3.9.3-1**.

TABLE 3.9.3-1
LEUSD SCHOOLS

Elementary Schools	
Cottonwood Canyon	Donald Graham
Earl Warren	Elsinore
Jean Hayman	Machado
Railroad Canyon	Rice Canyon
Ronald Reagan	Tuscany Hills
Wildomar	William Collier
Withrow	
K–8 Schools	
Luiseno	Lakeland Village
Middle Schools	
Canyon Lake	David A. Brown
Elsinore	Terra Cotta
High Schools	
Elsinore	Lakeside
Temescal Canyon	
Alternative Schools	
Gordon Kiefer Independent Study	Keith McCarthy Academy
Ortega High	Tri-Valley Community Day
Virtual K–12	
Southern California Online Academy	

Source: LEUSD 2013

Charter Schools

Charter schools are public schools that are created or organized by a group of teachers, parents, community leaders, or a community-based organization. Charter schools may provide instruction in any grades K–12 and are generally sponsored by a local public school board or county board of education. Specific goals and operating procedures for the charter school are detailed in an agreement (or "charter") between the sponsoring board and charter organizers. Public charter schools may not charge tuition and may not discriminate against any pupil on the

basis of ethnicity, national origin, gender, or disability (CCSA 2012). The State of California charters one school in the Wildomar area: Sycamore Academy. Sycamore Academy was established in 2009 and is located in Wildomar. Sycamore Academy offers grades K–6 and serves the Wildomar community and the surrounding area.

Enrollment

Existing and Historical Enrollment

For the 2011/12 academic year, the Lake Elsinore Unified School District had an enrollment of 22,171 students. During the past ten years, the LEUSD's enrollments have risen from 17,769 students for the 2001/02 school year to 22,137 students for the academic year of 2012/13, representing an overall increase of 24.5 percent or an annual average growth rate of 2 percent. As shown in **Table 3.9.3-2**, while the district was rapidly growing earlier in the decade, growth in recent years has significantly slowed, which is demonstrated by declining enrollment.

TABLE 3.9.3-2
LAKE ELSINORE UNIFIED SCHOOL DISTRICT ENROLLMENT 2001/02 THROUGH 2012/13

Academic Year	District Enrollment	Change from Previous Year	Percentage Change
2001/02	17,769	–	–
2002/03	18,933	+1,164	6.55%
2003/04	19,711	+778	4.11%
2004/05	20,203	+492	2.50%
2005/06	20,652	+449	2.22%
2006/07	21,525	+873	4.23%
2007/08	22,109	+584	2.71%
2008/09	21,756	-353	-1.60%
2009/10	22,216	+460	2.11%
2010/11	22,065	-151	-0.68%
2011/12	22,171	+106	0.48%
2012/13	22,137	-34	-0.15%

Source: California Department of Education 2013

Forecasting Enrollment

According to the LEUSD's School Facilities Needs Analysis, the generation rates for single-family homes include 0.2630 per unit for elementary school (K–5), 0.1340 per unit for middle school (grades 6–8), and 0.1756 per unit for high school (grades 9–12) (LEUSD 2013).

3.9.3.2 REGULATORY FRAMEWORK

STATE

Development Impact Fees/SB 50

Proposition 1A, the Kindergarten–University Public Education Facilities Bond Act of 1998, or Senate Bill (SB) 50, was approved by the voters in November 1998. This proposition provided $6.7 billion in general obligation bonds for K–12 public school facilities and provided the first funding for the new School Facility Program, which provides state funding assistance for new construction and modernization. A primary result of SB 50 was the creation of different levels of developer fees. The Lake Elsinore Unified School District currently levies development impact fees on development within the district's boundaries consistent with SB 50.

3.9.3.3 IMPACTS AND MITIGATION MEASURES

STANDARD OF SIGNIFICANCE

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G thresholds of significance. A public schools impact is considered significant if implementation of the proposed project would:

1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

METHODOLOGY

To determine the level of impact the proposed project will have on the local public school system, the schoolchildren generation rates published by the Lake Elsinore Unified School District were used to predict how many children will be housed in Wildomar as a result of the proposed project. The predicted numbers were then reviewed against both the current and historic enrollment numbers of the LEUSD to determine the significance of enrollment increases.

PROJECT IMPACTS AND MITIGATION MEASURES

Increased Demand for School Facilities (Standard of Significance 1)

Impact 3.9.3.1 The proposed project will not result in significant increased enrollment in the local school district ultimately resulting in the need for construction of additional school facilities. This is a **less than significant** impact.

Development of the identified sites may result in the development of 1,678 residential units by 2021. Conservatively estimating that all of the 1,678 dwelling units allowed under the proposed project would be single-family residences, the proposed project will generate 441 elementary school students, 225 middle school students, and 295 high school students, for a total of 961 additional students by 2021, or an average of 120 additional students per year. As of the 2012/13 academic year, the LEUSD enrolled 22,137 students. The proposed project represents a 4 percent increase in students over eight years or an annual increase in enrollment of less than 1 percent, which would not be sufficient growth to warrant the construction of new facilities.

Current state law requires that impacts to current school facilities be mitigated though mandatory development impact fees. The fees enacted within the LEUSD for residential development will be collected for future development allowed by the proposed project and will act to mitigate the incremental impact the proposed project may have on the LEUSD's facilities. Therefore, this impact will be **less than significant**.

Mitigation Measures

None required.

3.9.3.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for public school impacts includes the district boundaries for the LEUSD for grade school services. The Lake Elsinore Unified School District serves a 131.78-square-mile area that includes Wildomar. Any existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting could result in cumulative impacts.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Schools Impacts

Impact 3.9.3.2 Population growth associated with implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, will not result in a significant cumulative increase in student enrollment. This is a **less than cumulatively considerable** impact.

As discussed above, implementation of the proposed project is expected to result in population growth that would increase student enrollment in the Lake Elsinore Unified School District. Current state law requires that the environmental impact of new development on grade school facilities be considered fully mitigated through the payment of required development impact fees. All new development associated with the proposed project would be required to pay the applicable development impact fees. Furthermore, any significant expansion of school facilities or development of new school facilities would be subject to the appropriate CEQA environmental review, which would identify any site-specific impacts and provide mitigation to reduce those impacts. Therefore, cumulative impacts on school facilities are considered **less than cumulatively considerable**.

Mitigation Measures

None required.

3.9.4 WATER SUPPLY AND SERVICE

3.9.4.1 EXISTING SETTING

ELSINORE VALLEY MUNICIPAL WATER DISTRICT

Water service in Wildomar is provided by the Elsinore Valley Municipal Water District (EVMWD), which is a nonprofit public utility supplying water, wastewater, and agricultural service connections in the region (EVMWD 2013a). The EVMWD is a subagency of the Western Municipal Water District, a member agency of the Metropolitan Water District of Southern California. The EVMWD serves a 96-square-mile area that includes the cities of Lake Elsinore, Canyon Lake, Murrieta, and Wildomar and the surrounding areas in unincorporated Riverside County. According to the Urban Water Management Plan (2011), the EVMWD served a population of 123,375 persons, 19,411 employees, and 41,757 dwelling units in 2010.

Demand

The EVMWD serves a total of 37,250 potable service connections (EVMWD 2011). In 2010, the total water use was 39,287 acre-feet per year (afy). The total water use includes the total water deliveries (25,057 afy), sales to other water agencies (Farm Mutual Water Company and Elsinore Water District) (780 afy), and additional water uses and losses (13,450 afy). Total water deliveries represent water that was used by the population. Additional water uses and losses (13,450 afy), which include groundwater recharge (4,600 afy), recycled water used for irrigation (449 afy), and recycled water used, maintain lake levels in Lake Elsinore and environmental enhancement of Temescal Wash (8,401 afy) (EVMWD 2011).

Supply

The EVMWD obtains its potable water supplies from local surface water from Canyon Lake, local groundwater from the Elsinore Basin, and imported water from the Metropolitan Water District of Southern California (EVMWD 2011). The EVMWD has access to groundwater resources in the Elsinore Basin, Coldwater Basin, San Bernardino Bunker Hill Basin, Rialto-Colton Basin, and Riverside-North Basin. However, most of the potable water supply comes from the Elsinore Basin. The EVWMD is the largest pumper in the Elsinore Basin, accounting for 95 percent of production. Wells do not pump regularly during the winter months of normal years. Imported water is purchased from the Metropolitan Water District of Southern California via the Eastern Municipal Water District and Western Municipal Water District (EVMWD 2011).

In 2010, the total potable water supply was 43,078 afy, of which 35,200 afy was purchased from the Metropolitan Water District, 2,978 afy was supplied from groundwater resources, and 4,900 afy was supplied from surface water resources. The recycled water supply from tertiary treated wastewater generated at the Regional Water Recycling Facility, Railroad Canyon Water Recycling Facility, and Horsethief Water Recycling Facility. In 2010, the supply capacity for recycled water was 8,850 afy (26,000 million gallons per day (mgd)) (EVMWD 2011).

Supply Resources

The EVWMD obtains its water from 12 groundwater wells, surface water from Canyon Lake, and imported water from the Metropolitan Water District through the Auld Valley Pipeline and the Temescal Valley Pipeline.

Groundwater Resources

Twelve wells draw water from the deep aquifer of the Elsinore Basin. Groundwater rights in the basin have not been adjudicated. The three Temescal Division Wells (Mayhew Well, Station 71 Well, and Station 72 Well) are in the Coldwater Basin, which is separated by a fault from the Temescal Basin. Six wells in the Back Basin have been converted to dual-purpose use (injection-extraction) to recharge the aquifers with imported water during the winter months and to pump water from the basin during the summer months and dry years. One additional well (Terra Cotta) is located on the north side of the basin.

Surface Water Resources

The EVWMD owns Railroad Canyon Reservoir (Canyon Lake), which has approximately 1,500 million gallons of useful storage. The EVMWD also owns diversion rights for natural drainage into the reservoir. In addition, untreated Colorado River water or State Water Project water can be purchased from the Western Municipal Water District and discharged upstream for storage in Canyon Lake; however, due to transit losses in the San Jacinto River channel, the EVMWD minimizes this importation.

Imported Water Resources

The EVMWD purchases imported water from the Metropolitan Water District of Southern California, supplied from two sources—the Auld Valley Pipeline and the Temescal Valley Pipeline. The Auld Valley Pipeline water is Colorado River water and State Water Project water that has been treated at the Skinner Filtration Plant (located south of Hemet in Riverside County). The water is conveyed through the pipeline and pumped into the EVMWD system via the California Oaks Pumping Station.

The EVMWD purchases the water from the Eastern Municipal Water District, which in turn purchases water from the Western Municipal Water District. The EVMWD has rights to a maximum flow of 24.2 mgd through this connection. The Temescal Valley Pipeline conveys water from the Mills Filtration Plant (located in the city of Riverside) to the Woodcrest Vault in Corona. The design capacity of the pipeline is 26.5 mgd, which is equivalent to the EVMWD's water right through this connection; however, the current hydraulic capacity is 12.7 mgd. The full capacity will be achieved upon completion of a booster pumping station, the Temescal Valley Pipeline Pump Station, which is included in the Water Distribution System Master Plan.

Infrastructure

Canyon Lake Water Treatment Plant

The Canyon Lake Water Treatment Plant is located near the southwest dam abutment of Canyon Lake and provides conventional water treatment (coagulation, flocculation, sedimentation, filtration, and disinfection) of surface water impounded in the lake. The plant has a treatment capacity of 9 million gallons per day (EVMWD 2010).

Distribution System

The water distribution system includes 33 pressure zones with the following infrastructure: approximately 580 miles of pipelines ranging in diameter from 3 inches to 42 inches, 68 storage reservoirs on 51 sites with an approximate total storage capacity of 83 million gallons, 49 booster

pump stations, 12 wells plus 53 pressure regulation stations, 14,324 valves, 35,816 fire hydrants, 1,504 air/vacuum stations, 6 hydropneumatic pumps, 100 sample stations, and 492 blow-offs.

Planned improvements include those identified in the 2008 Water Distribution System Master Plan, which included new, expanded, or replaced storage reservoirs, pump stations, pipelines, pressure regulating valves, and groundwater wells (EVMWD 2008). In addition, the EVMWD planned on the construction and operation of the Temescal Valley Pipeline Pump Station and the Alberhill Transmission Pipeline, a 4.28-mile-long pipeline, 48, 36, and 24 inches in diameter, to provide additional water supply to the Castle & Cooke Alberhill Ridge development. Between 1993 and 2009, annual flows to the water treatment plant averaged 2,530 afy during a normal year, 750 afy during a single dry year, 6,550 afy during a wet year, and 1,930 afy during a three-dry-year period. Planned improvements would meet the 2030 average annual water demand of 55,197 afy, or 49.3 mgd, and a maximum water demand of 98 mgd.

3.9.4.2 REGULATORY FRAMEWORK

LOCAL

Elsinore Valley Municipal Water District

Water Distribution System Master Plan and EIR

The EVMWD prepared the Water Distribution System Master Plan in 2008 to identify various water infrastructure improvements needed to meet needs in the EVMWD service area through the year 2030. The EVMWD Water and Wastewater Master Plans EIR evaluated the environmental effects of implementing those improvements (EVMWD 2010).

Prohibition of Water Waste Ordinance

The Prohibition of Water Waste Ordinance (Ordinance 185) prohibits the waste or unreasonable use of water and encourage water conservation practices, established permanent water conservation regulations intended to alter behavior related to water use during non-shortage conditions, and adopts regulations to reduce waste and conservation practices consistent with the goals of the Metropolitan Water District of Southern California's Water Supply Allocation Plan.

3.9.4.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. A water service impact is considered significant if implementation of the proposed project would:

1) Result in the need for new entitlements or a substantial expansion or alteration to local or regional water supplies that would result in a physical impact to the environment.

2) Result in the need for new systems or a substantial expansion or alteration to the local or regional water treatment or distribution facilities that would result in a physical impact to the environment.

3) 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).

As previously mentioned, water quality impacts are discussed in Section 3.6, Hydrology and Water Quality.

METHODOLOGY

To determine the potential impact the proposed project may have on local water supplies and potable water distribution facilities, the Urban Water Management Plan (UWMP) and Development Standards and Standard Drawings for the Elsinore Valley Municipal Water District were reviewed and used to determine the potential water demand of the proposed project. Documents and planning criteria of the local water agency, the Elsinore Valley Municipal Water District, were also reviewed and used to determine impacts.

PROJECT IMPACTS AND MITIGATION MEASURES

Water Supply Demand and Environmental Effects (Standards of Significance 1 and 3)

Impact 3.9.4.1 Implementation of the proposed project will increase the amount of allowable development in the city, thereby increasing demand for water supply that could result in significant effects on the physical environment. However, adequate water supply and delivery infrastructure exists to accommodate the increased demand associated with the proposed project actions. This is considered a **less than significant** impact.

The proposed project would allow the development of 1,678 additional housing units, which may result in an increase in population of approximately 5,537. According to the Urban Water Management Plan (2011), the EVMWD will serve a population of 149,852 persons, 27,458 employees, and 51,297 dwelling units in 2020. The additional housing and subsequent increase in population associated with the proposed project would represent 3.2 percent of the housing and 3.7 percent of the EVMWD's population projections by 2020.

The EVMWD's Urban Water Management Plan projected future potable water demands based on population projections and the water use target of 240 gallons per capita per day (gpcd). The plan projected total water use to be 55,244 afy by 2020, of which 39,796 afy would be water deliveries, 542 afy would be sales to other water agencies, and 14,906 afy would be additional water uses and losses. By 2020, the total water supply is projected to be 70,056 afy, of which 59,750 afy is potable water and 10,306 afy is recycled water. Of the 59,750 afy of potable water supply, 48,100 afy is anticipated to be purchased from the Metropolitan Water Districtof Southern California, 6,750 afy is anticipated to be supplied from groundwater resources, and 4,900 afy is anticipated to be supplied from surface water resources.

Based on a water use target of 240 gpcd and an increase in population of 5,537, the proposed project would increase the future water demand by 1,328,880 gallons per day (gpd) (1.3 million gallons per day or approximately 1,488 afy) by 2021. The 1,488 afy of increased water demand generated by the proposed project would represent approximately 2.7 percent of the projected water demand and 2.1 percent of the potable water supply projected for 2020.

Pursuant to Section 17.276.070 of the Wildomar Municipal Code, future development allowed by the proposed project would be subject to the requirements of the EVMWD's Ordinance 185, which prohibits the waste or unreasonable use of water and encourages water conservation practices. Compliance with this ordinance will ensure that future development reduces water demand to meet target demands.

According to the EVMWD's Urban Water Management Plan, the district has adequate existing and planned supplies to meet the future water demand under normal, single dry year, and multiple dry year conditions. During normal conditions, the EVMWD projects a surplus of 14,812 afy, which would represent 21.1 percent of their supply and 26.8 percent of the forecast demand for 2020.

After three years of dry conditions, the district is projected to have a surplus of 17,329 afy, which would represent 22.3 percent of the EVMWD's supply and 28.7 percent of the forecast demand for 2020. The proposed project's water demand of 1,488 afy would represent approximately 10.0 percent of the surplus during normal year conditions and 8.5 percent of the average surplus during three dry years. Since the proposed project would not exceed projected surplus in 2020, there would be adequate supplies to meet the demand of the proposed project.

Because the proposed project would result in an incremental increase in water demand that would exceed projected surplus volumes, the proposed project would not require additional entitlements or a substantial expansion or alteration of water supplies that would result in a physical impact to the environment, nor would the project substantially deplete groundwater supplies. Therefore, this impact is **less than significant**.

Mitigation Measures

None required.

Water Supply Infrastructure (Standard of Significance 2)

Impact 3.9.4.2 Implementation of the proposed project would increase demand for water supply and thus require additional water supply infrastructure that could result in a physical impact to the environment. This is considered a **less than significant** impact.

If the identified sites are developed, the demand for water would increase by approximately 1.3 million gallons per day or approximately 1,488 acre-feet per year. This would increase the demand on the existing distribution and treatment infrastructure. Future development would be required to be designed in accordance with EVMWD Development Standards and Standard Drawings, which provide water demand rates based on the particular land use in order to determine infrastructure needs. These water demand rates vary based on the type of housing (i.e., single-family versus multiple-family) and typically result in lower demand rates than estimated using a water demand rate based on population. A single-family or duplex unit would generate the highest average daily water demand at 500 gallons per unit. The average daily water demand for multi-family units would be 400 gallons per low-rise unit. The number of various types of units is unknown at this time. Based on the mixed-use and high-density land uses anticipated on the identified sites, water demand was projected under the assumption that all of the total projected units (1,678) would be developed as low-rise multi-family units to use a conservative estimate of 450 gallons per unit to calculate water demand. Based on the EVMWD's water demand rates, the proposed 1,678 additional housing units would result in an increased water demand of 755,100 gpd (0.76 mgd) or approximately 831 afy.

According to the Water and Wastewater Master Plans EIR, planned infrastructure improvements would meet the average annual water demand of 55,197 afy or 49.3 mgd and a maximum water demand of 98 mgd projected through year 2030. According to the EVWMD's Water Distribution System Master Plan, the forecast average annual water demand is 47,020 afy or 42 mgd, with a maximum demand of 84 mgd in 2020. The increased water demand (831 afy [0.76 mgd]) potentially generated by the proposed project would represent less than 2.0 percent of the projected average annual water demand and less than 1.0 percent of the maximum daily water demand projected for 2020. The incremental increase in water demand alone would not be substantial enough to warrant improvements to the infrastructure; therefore, the impacts of the proposed project are **less than significant**.

Mitigation Measures

None required.

3.9.4.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for water services, including supplies and related infrastructure, consists of Elsinore Valley Municipal Water District boundaries, as well as other areas obtaining water from the Western Municipal Water District. The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development in the EVMWD service area and the larger service area of the Western Municipal Water District.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Water Supply Impacts

Impact 3.9.4.3 Implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, would increase the cumulative demand for water supplies. However, this increased demand will not be sufficient to lead to a requirement for new water facilities and related infrastructure. The project's contribution to cumulative water supply and infrastructure impacts is considered **less than cumulatively considerable**.

Significant regional growth could result in the need for new water supply. The EVMWD's Urban Water Management Plan and Water and Wastewater Master Plans have identified and evaluated the effects of constructing improvements necessary to meet the future demands anticipated by 2030.

The EVMWD's Urban Water Management Plan forecasts future total water demand (potable and recycled water) to be 65,258 afy by 2035. According to the plan, the district has adequate existing and planned supplies to meet the future water demand under normal, single dry year, and multiple dry year conditions. During normal conditions, the EVWMD would have a surplus of 5,323 afy, which would represent 7.5 percent of the district's supply and 8.2 percent of the forecast demand for 2035.

After three years of dry conditions, the district would have a surplus of 6,919 afy, which would represent 8.9 percent of its supply and 9.7 percent of the forecast demand for 2035. The proposed project's increased demand of 1,488 afy represents approximately 28 percent of the

forecast surplus during normal year conditions and 21.5 percent of the forecast average surplus during three dry years.

The EVMWD's Water Distribution System Master Plan forecasts future total average annual water demand on the infrastructure to be 55,197 afy (49.3 mgd) by 2030 with a maximum daily demand of 98.6 mgd. The proposed project's increased demand on the infrastructure of 938 afy represents approximately 1.7 percent of the forecast average annual water demand and 0.85 percent of the forecast maximum daily demand for 2030.

It is anticipated that all future development would be reviewed on a project-by-project basis to determine necessary infrastructure improvements, which would be required to be installed by developers as part of individual developments. Regular maintenance and improvements are programmed into the EVMWD's capital improvement program and funded through development impact fees collected. Implementation of the proposed project, as well as subsequent project-level CEQA review for future development, will require that new development not proceed without adequate water supply and necessary infrastructure. In consideration of the review and analysis future projects will undergo, this impact is considered **less than cumulatively considerable**.

Mitigation Measures

None required.

3.9.5 WASTEWATER SERVICES

3.9.5.1 EXISTING SETTING

The Elsinore Valley Municipal Water District (EVMWD) maintains facilities to convey, treat, and dispose of municipal wastewater over 21,000 accounts within a 96-square-mile area of western Riverside County. The service area includes Wildomar, among other jurisdictions. The existing wastewater collection system consists of approximately 358 miles of sewer mains up to 54 inches in diameter. Wastewater that is collected is conveyed to one of three wastewater treatment plants (WWTP) for treatment.

The wastewater service area includes six drainage basins: Horsethief Canyon, Canyon Lake, Regional, Southern Section, Alberhill, and Southwestern. The project area lies within the Regional and Southern Section drainage basins. Effluent generation within the Regional drainage basin is conveyed and treated at the EVMWD's Regional WWTP. Flow generated in the Southern Section of the EVMWD's service area is treated at the Santa Rosa Water Reclamation Facility operated by the Rancho California Water District (RCWD) or is on individual septic systems.

There are 22 lift stations within the Regional drainage basin. The collection system consists of 8- to 15-inch-diameter collector and trunk sewer lines. There are two major interceptor sewers: the A-series interceptor and the B-series interceptor. The interceptors convey wastewater from the receptive lift stations to the Regional WWTP. The EVMWD's system also contains 30 force mains, ranging in size from 4 inches to 16 inches in diameter.

The Regional WWTP has a capacity to treat an average flow of 8.0 mgd. In 2008, the Regional drainage district generated 5.39 mgd of wastewater, which was treated at the Regional WWTP. In 2008, the Southern Section drainage basin generated 1.50 mgd of wastewater, which was treated at the RCWD's Santa Rosa Water Reclamation Facility. There are approximately 8,534

parcels with individual septic systems, which are anticipated to be connected to the sanitary sewer system by 2030.

The National Pollutant Discharge Elimination System (NPDES) permit for the EVMWD's Regional WWTP was renewed in March 2005 (Regional Board Order No. R8-2005-0003 NPDES CA8000027). The renewed permit allows the EVWMD to discharge effluent to the Temescal Wash and to Lake Elsinore as needed for lake level stabilization, and incorporates elements of the EVMWD's compliance plan for the Lake Elsinore nutrient target maximum detection limits. The compliance plan identifies measures to offset the nutrient inputs from discharge of Regional WWTP effluent to Lake Elsinore, including the addition of a chemical phosphorus removal process to the Regional WWTP and in-lake aeration and mixing facilities to reduce the release of nutrients from the lake sediments to the water column.

3.9.5.2 REGULATORY FRAMEWORK

FEDERAL

Clean Water Act

The Clean Water Act (CWA) is the primary federal legislation governing surface water quality protection. The statute employs a variety of regulatory and nonregulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water.

Pollutants regulated under the CWA include "priority" pollutants, including various toxic pollutants; "conventional" pollutants, such as biochemical oxygen demand (BOD), total suspended solids (TSS), fecal coliform, oil and grease, and Ph; and "non-conventional" pollutants, including any pollutant not identified as either conventional or priority. The CWA regulates both direct and indirect discharges (EPA 2013a).

National Pollutant Discharge Elimination System

The NPDES program, Section 402 of the Clean Water Act, controls direct discharges into navigable waters. Direct discharges, or point source discharges, are from sources such as pipes and sewers. NPDES permits, issued by either the EPA or an authorized state/tribe, contain industry-specific, technology-based, and/or water-quality-based limits and establish pollutant monitoring and reporting requirements. (The EPA has authorized 40 states to administer the NPDES program.)

A facility that intends to discharge into the nation's waters must obtain a permit before initiating a discharge. A permit applicant must provide quantitative analytical data identifying the types of pollutants present in the facility's effluent and the permit will then set forth the conditions and effluent limitations under which a facility may make a discharge (EPA 2013a).

General Pretreatment Regulations

Another type of discharge that is regulated by the CWA is discharge that goes to a publicly owned treatment works (POTW). POTWs collect wastewater from homes, commercial buildings, and industrial facilities and transport it via a collection system to the treatment plant. At the plant,

the POTW removes harmful organisms and other contaminants from the sewage so it can be discharged safely into the receiving stream. Generally, POTWs are designed to treat domestic sewage only. However, POTWs also receive wastewater from industrial (nondomestic) users.

The General Pretreatment Regulations establish responsibilities of federal, state, and local government, industry, and the public to implement Pretreatment Standards to protect municipal wastewater treatment plants from damage that may occur when hazardous, toxic, or other wastes are discharged into a sewer system and to protect the quality of sludge generated by these plants. Discharges to a POTW are regulated primarily by the POTW itself, rather than by the state/tribe or the EPA (EPA 2013a).

STATE

Waste Discharge Requirements Program

In general, the Waste Discharge Requirements (WDR) Program (sometimes referred to as the Non Chapter 15 (Non 15) Program) regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the federal Water Pollution Control Act (Clean Water Act). Exemptions from Title 27 may be granted for nine categories of discharges (sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDR Program also includes the discharge of wastes classified as inert, pursuant to Section 20230 of Title 27. Several SWRCB programs are administered under the WDR Program, including the Sanitary Sewer Order and recycled water programs (SWRCB 2013).

Sanitary Sewer Overflow Program

A sanitary sewer overflow (SSO) is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease and can pollute surface water and groundwater, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. To provide a consistent, statewide regulatory approach to address sanitary sewer overflows, the SWRCB adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 (Sanitary Sewer Order) on May 2, 2006. The Sanitary Sewer Order requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Resources Control Board's online SSO database. All public agencies that own or operate a sanitary sewer system comprising more than 1 mile of pipes or sewer lines which convey wastewater to a publicly owned treatment facility must apply for coverage under the Sanitary Sewer Order (SWRCB 2013).

Recycled Water Policy

To establish uniform requirements for the use of recycled water, the SWRCB adopted a statewide Recycled Water Policy on February 3, 2009. The purpose of the policy is to increase the use of recycled water from municipal wastewater sources that meets the definition in Water Code Section 13050(n) in a manner that implements state and federal water quality laws. The policy describes permitting criteria that are intended to streamline the permitting of the vast majority of recycled water projects. The intent of this streamlined permit process is to expedite the implementation of recycled water projects in a way that implements state and federal water quality laws while allowing the Regional Water Quality Control Boards to focus on projects that require substantial regulatory review due to unique site-specific conditions (SWRCB 2013).

Statewide General Permit for Landscape Irrigation Uses of Recycled Water

In July 2009, the State Water Resources Control Board adopted General Waste Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water (General Permit). For those eligible, the General Permit allows the use of recycled water for landscape irrigation. Landscape irrigation uses include parks, greenbelts, and playgrounds; schoolyards; athletic fields; golf courses; cemeteries; residential landscaping and common areas; commercial landscaping, except eating areas; industrial landscaping, except eating areas; and freeway, highway, and street landscaping. An administrator may apply for coverage under the General Permit by filing a Notice of Intent, providing a complete Operation and Maintenance Plan, and submitting the appropriate fee to the SWRCB. The General Permit is consistent with the Recycled Water Policy and state and federal water quality laws, including the statewide water quality standards established by the California Department of Public Health. The General Permit facilitates the streamlining of the permitting process to reduce the overall costs normally incurred by producers, distributors, and users of recycled water (SWRCB 2013).

Department of Public Health

The California Department of Public Health (formerly the Department of Health Services) is responsible for establishing criteria to protect pubic health in association with recycled water use. The department's Water Recycling Criteria are found in the California Code of Regulations, Title 22, Division 4, Chapter 3. Commonly referred to as Title 22 criteria, they contain treatment and effluent quality requirements that vary based on the proposed type of water reuse. Title 22 sets bacteriological water quality standards on the basis of the expected degree of public contact with recycled water. For water reuse applications with a high potential for the public to come into contact with reclaimed water, Title 22 requires disinfected tertiary treatment. For applications with a lower potential for public contact, Title 22 requires three levels of secondary treatment, basically differing by the amount of disinfectant required (SWRCB 2013).

Title 22 also specifies the reliability and redundancy for each recycled water treatment and use operation. Treatment plant design must allow for efficiency and convenience in operation and maintenance and provide the highest possible degree of treatment under varying circumstances. For recycled water piping, the department has requirements for preventing backflow of recycled water into the public water system and for avoiding cross-connection between the recycled and potable water systems (SWRCB 2013).

The Department of Public Health does not have enforcement authority for the Title 22 criteria; instead, the Regional Water Quality Control Boards (RWQCBs) enforce the criteria through enforcement of their permits containing the applicable criteria.

LOCAL

Elsinore Valley Mutual Water District

The EVMWD issues will-serve letters outlining the conditions of water and sewer service to a particular parcel. The will-serve letter serves as conditional commitment to serve new customers and is required to ensure that sufficient capacity is available to serve new development. A completed will-serve application form must be submitted along with the appropriate connection fees. These fees fund maintenance of wells, reservoirs, and treatment plants.

After a will-serve letter application is submitted and the water connection fee is paid, a water meter can be installed at the property line and connected to an existing sewer lateral if service

is available. If the structure is farther than 200 feet from a sewer line, the developer may be required to extend the sewer line.

Water Distribution System Master Plan and Wastewater Master Plan EIR

The EVMWD prepared the Wastewater Distribution System Master Plan in 2008 to identify various water infrastructure improvements needed to meet needs in the EVMWD service area through the year 2030. The EVMWD Water and Wastewater Master Plans EIR evaluated the environmental effects of implementing those improvements (EVMWD 2010).

3.9.5.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The following standards are based on State CEQA Guidelines Appendix G. A significant impact to wastewater service would occur if implementation of the proposed project would:

1) Require or result in the construction of new water or wastewater treatment facilities or expansion or existing facilities, the construction of which could cause significant environmental effects.

2) 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.

METHODOLOGY

Evaluation of potential impacts on wastewater facilities and services was based on the Elsinore Valley Municipal Water District's Urban Water Management Plan (2011), the Water Distribution Master Plan and Wastewater Master Plan EIR (2010), and other relevant literature. Wastewater demand projections, as well as infrastructure conditions and needs, discussed in these documents were compared to potential impacts resulting from development associated with the proposed project.

PROJECT IMPACTS AND MITIGATION MEASURES

Wastewater Discharge Requirements (Standard of Significance 1)

Impact 3.9.5.1 Implementation of the proposed project will not result in wastewater discharge that would exceed wastewater treatment requirements of the Regional Water Quality Control Board. This impact is considered **less than significant.**

The proposed project will allow the development of 1,678 additional housing units, which will increase the demand for wastewater treatment at the EVMWD's Regional WWTP. The NPDES permit for the EVMWD's Regional Plant (Regional Board Order No. R8-2005-0003 NPDES CA8000027) allows the EVWMD to discharge effluent to the Temescal Wash and to Lake Elsinore. The existing permit would need to be amended in the future to accommodate anticipated growth in the service area. Any expansion of the WWTP would be subject to subsequent environment review.

The EVMWD is not exceeding any limits established in its current Urban Water Management Plan and will be required by the RWQCB to remain in compliance after any future expansion of flow capacity. Therefore, the proposed project is not expected to exceed wastewater treatment requirements. Impacts are considered **less than significant**.

Mitigation Measures

None required.

Wastewater Conveyance and Treatment (Standards of Significance 1 and 2)

Impact 3.9.5.2 The proposed project will slightly increase wastewater flows. However, the increase represented by the proposed project will not require any additional infrastructure or treatment capacity. This impact is considered **less than significant**.

The proposed project will allow the development of 1,678 additional housing units and result in an increase in population of approximately 5,537. According to the Water Distribution System Master Plan and Wastewater Master Plan EIR, the EVMWD will serve a population of 151,901 persons, 31,797 employees, and 51,961 dwelling units by 2020. The proposed project would represent a 3.6 percent increase in population and 3.2 percent of the housing projected in the service area by 2020. This increase in population and housing would generate an increased demand for wastewater conveyance and treatment.

The EVMWD is projected to have an average dry weather wastewater flow of 15.3 mgd based on population, which equates to a wastewater generation rate of 109 gallons per day per capita. Based on this wastewater generation rate, the proposed project would increase the wastewater generated within the EVMWD's service area by 614,106 gallons per day or 0.61 mgd (5,537 persons X 109 gallons per day) by 2020.

The 0.61 mgd wastewater demand generated by the proposed project would represent approximately 3.9 percent of the projected average dry weather flow for 2020. Since the existing WWTP has the capacity to treat 8.0 mgd, future expansion of the EVMWD's Regional WWTP would be necessary to meet the projected demand with or without the proposed project. Future development would be required to pay development impact fees and connection fees, which would fund future expansion of the WWTP.

Actual expansion of the WWTP would be subject to subsequent project-level environmental review. It is anticipated that future expansion of the facility would occur within the existing footprint, which would result in limited environmental effects. No increase in discharge is anticipated since much of the future increased demand for wastewater treatment would provide increased recycled water supply, which would reduce the demand for potable water. According to the EVMWD's Urban Water Management Plan, the future demand for recycled water is projected to be 10,831afy by 2035 with a supply capacity of 25,166 afy (38,500 mgd) by 2030.

According to the EVMWD's Water Distribution System Master Plan and Wastewater Master Plan EIR, the district is planning several improvements to the wastewater collection system, including but not limited to the following within the Regional drainage basin: replacing six gravity mains, replacing 5 of 14 existing force mains, and installing 9 new force mains by 2030. The impacts associated with these planned improvements were evaluated and disclosed in the Water Distribution System Master Plan and Wastewater Master Plan EIR prepared by the EVMWD in 2010.

The proposed project's increase in population will result in an incremental increase in wastewater flows that would need to be collected, conveyed, and treated at the Regional WWTP. Future development would be required to obtain a will-serve letter prior to connecting to the sewer collection system, which would ensure that there is adequate capacity to serve the proposed development. Therefore, the proposed project is not expected to exceed wastewater treatment requirements or orders of the Regional Water Quality Control Board, and impacts are considered **less than significant**.

Mitigation Measures

None required.

3.9.5.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

As wastewater services are provided by the EVMWD, the cumulative setting for wastewater services includes all areas served by the district. According to the Urban Water Management Plan, it is anticipated that the district will serve a population of 179,437 persons, 39,706 employees, and 61,775 dwelling units by 2030 (EVMWD 2011).

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Wastewater Service Impacts (Standards of Significance 1 and 2)

Impact 3.9.5.3 Development associated with the proposed project, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, would contribute to an increased cumulative demand for wastewater service. However, continued implementation of EVMWD standards would ensure adequate wastewater facilities are provided. This impact is considered to be **less than cumulatively considerable**.

The EVMWD is projected to have an average dry weather wastewater flow of 19.5 mgd by 2030. The proposed project may increase the wastewater generated within the EVMWD's service area by 614,106 gallons per day or 0.61 mgd by 2020, which would represent approximately 3.1 percent of the projected average dry weather flow for 2030. Additional wastewater treatment capacity would be needed to serve future development with or without the proposed project.

Any future proposed development within the EVMWD service area would be required to obtain a will-serve letter from the EVMWD, which will confirm adequate facilities are available to serve the proposed development. The continued collection of connection fees help to maintain and expand existing facilities to meet the demand for treatment and recycled water. In addition, future development would be required implement conservation measures, including the use of recycled water, which would serve to reduce future discharge to the Temescal Wash and to Lake Elsinore. Therefore, the wastewater generated by the proposed project would be **less than cumulatively considerable**.

Mitigation Measures

None required.

3.9.6 SOLID WASTE

3.9.6.1 EXISTING SETTING

Solid waste services for the identified sites are provided by contract by Waste Management of the Inland Empire and CR&R. Waste Management serves the portion of Wildomar located east of Interstate 15, while CR&R Waste and Recycling Services serves the portion of the city located west of Interstate 15.

Waste Management currently serves over 220,000 residents in the Inland Empire (including the cities of Banning, Beaumont, Chino, Corona, Eastvale, Menifee, Moreno Valley, Murrieta, Norco, and Wildomar, and Riverside and Bernardino counties) by disposing of over 17,000 tons of waste on a weekly basis (WM 2013). Solid waste collected by Waste Management is trucked to the Moreno Valley Transfer Station, which is owned and operated by Waste Management and also serves as a component of the Riverside County Waste Management Department's (RCWMD) network of solid waste facilities. The transfer station is located in Moreno Valley, approximately 23 miles from Wildomar. Solid waste collected by Waste Management is then deposited at the El Sobrante Landfill in Corona, which is owned and operated by Waste Management of the Inland Empire. This waste disposal facility has a processing capacity of 16,054 tons of waste per day with a maximum capacity of 184,930,000 tons (CalRecycle 2013). As of April 2009, there was remaining capacity to accommodate 145,530,000 tons with an anticipated closure date of January 2045 (CalRecycle 2013).

CR&R Waste and Recycling Services provides solid waste collection services to more than 2.5 million people and 5,000 businesses throughout Orange, Los Angeles, San Bernardino, Imperial, and Riverside counties (CR&R 2013a). Solid waste collected by CR&R is processed at the transfer station in Perris, then waste disposed of at the Lamb Canyon Landfill (CR&R 2013b), which is owned and operated by the RCWMD. The Lamb Canyon Landfill has a processing capacity of 3,000 tons of waste per day with a maximum capacity of 34,282,000 cubic yards (or 10,284,600 tons based on 0.30 tons of solid waste per cubic yard) (CalRecycle 2013). As of January 2009, there was remaining capacity to accommodate 18,955,000 cubic yards (or 5,686,500 tons based on 0.30 tons of solid waste per cubic yard) with an anticipated closure date of April 2021 (CalRecycle 2013).

Solid waste collection and disposal is funded through monthly service fees paid by service users. Funding options support disposal sites, diversion activities, public education programs, hazardous waste collection, and transportation programs, along with other requirements of state and federal laws. Other fees are provided by a surcharge on residential collection bills for recycling programs, tipping fees, the sale of recyclables, waste hauler franchise fees, special programs (recycling and hazardous materials), and grants (RCWMD 2013).

3.9.6.2 REGULATORY FRAMEWORK

FEDERAL

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), an amendment to the Solid Waste Disposal Act of 1965, was enacted in 1976 to address the huge volumes of municipal and industrial solid waste generated nationwide. The RCRA gives the US Environmental Protection Agency (EPA) the authority to control hazardous waste from "cradle to grave." This includes the

generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of nonhazardous solid wastes.

The federal Hazardous and Solid Waste Amendments are the 1984 amendments to the RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. Amendments to the RCRA in 1986 enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances (EPA 2013a).

STATE

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Public Resources Code Sections 42900–42927) requires all California cities and counties to reduce the volume of waste deposited in landfills by 50 percent by the year 2000 and continue to remain at 50 percent or higher for each subsequent year. The purpose of this act is to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible.

The act requires each California city and county to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element (SRRE) that demonstrates how the jurisdiction will meet the act's mandated diversion goals. Each jurisdiction's SRRE must include specific components, as defined in Public Resources Code Sections 41003 and 41303. In addition, the SRRE must include a program for management of solid waste generated in the jurisdiction that is consistent with the following hierarchy: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. Included in this hierarchy is the requirement to emphasize and maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste that must be disposed of by transformation and land disposal (Public Resources Code Sections 40051, 41002, and 41302) (CalRecycle 2013).

REGIONAL

Riverside County Waste Management Department

The RCWMD is responsible for the landfilling of nonhazardous waste. In this effort, the RCWMD operates six landfills, has a contract agreement for waste disposal with an additional private landfill, and administers several transfer station leases. The RCWMD ensures that Riverside County has a minimum of 15 years of capacity, at any time, for future landfill disposal. The RCWMD is organized so that nearly all functions of designing, permitting, operating, maintaining, and supporting the landfill system are performed within the department (RCWMD 2013).

LOCAL

Wildomar Municipal Code

Chapter 8.104 of the City of Wildomar Municipal Code sets forth the city's solid waste provisions, including restrictions on disposing of any garbage, rubbish, or waste matter in the city other than at a disposal site established by the City Council or designated by the City Manager, prohibitions

on solid waste collectors disposing of recyclable materials, and restrictions on accumulation of solid waste on residential properties.

3.9.6.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G. A solid waste impact is considered significant if implementation of the proposed project would:

1) Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs.

2) Fail to comply with federal, state, and local statutes and regulations related to solid waste.

METHODOLOGY

Evaluation of potential solid waste service impacts was based primarily on information from CalRecycle. The capacity of landfills and other solid waste facilities was evaluated, as well as compared to the proposed project's specific solid waste service–related impacts. The impact analysis focuses on whether or not impacts would have a significant impact on the physical environment. Residential and mixed-use development on any of the identified development sites will be required to comply with all federal, state, and local laws regarding the proper disposal of waste. Any potential impact of violations occurring at facilities that receive waste produced by the proposed project would be identified and analyzed by the facility's owner or administrator. Analysis of the proposed project's conformance with federal, state, and local laws will not be discussed further.

PROJECT IMPACTS AND MITIGATION MEASURES

Increased Solid Waste Disposal (Standard of Significance 1)

Impact 3.9.6.1 Implementation of the proposed project will generate increased amounts of solid waste that will need to be disposed of in landfills or recycled. This impact is considered **less than significant**.

Implementation of the proposed project could result in the construction of 1,678 residential units and increase the population by 5,537. New homes and residents will generate solid waste, which will require disposal and recycling. Solid waste services in Wildomar are currently provided by Waste Management of the Inland Empire and CR&R. Based on a solid waste generation rate of 2 pounds per person per day, development of the identified sites may generate approximately 4.5 tons of waste per week or 235 tons per year. Approximately two-thirds of the identified sites are located west of Interstate 15; therefore, solid waste generated at those sites would be collected and processed by CR&R. The solid waste generated by the other one-third of the identified sites, located east of Interstate 15, would be collected and processed by Waste Management of the Inland Empire.

Of the 235 tons per year of solid waste generated by future development associated with the proposed project, approximately 157 tons per year would be processed at the Perris Transfer

Station and disposed of at the Lamb Canyon Landfill, whereas 78 tons per year would be processed at the Moreno Valley transfer station and disposed of at the El Sobrante Landfill.

The Lamb Canyon Landfill has a permit capacity to process 3,000 tons per day (CalRecycle 2013). The 157 tons of solid waste collected and processed by CR&R would represent an increase in processing/disposal demand of approximately 0.43 tons per day or 0.014 percent of the daily processing capacity.

The El Sobrante Landfill has a permit capacity to process 16,054 tons of mixed solid waste per day (CalRecycle 2013). The 78 tons of solid waste collected and processed by Waste Management of the Inland Empire would represent an increase in processing/disposal demand of approximately 0.21 tons per day or 0.0013 percent of the daily processing capacity.

The proposed project's projected 0.0.14 and 0.0013 percent increase in solid waste processing/disposal demand at the Lamb Canyon Landfill and El Sobrante Landfill, respectively, would not be substantial enough to exceed capacity. There would be adequate landfill capacity to serve the identified sites. Additionally, all residential and mixed-use development on any of the identified development sites will be required to comply with federal, state, and local laws regarding the proper disposal of waste and recycling. Therefore, this impact would be considered **less than significant**.

Mitigation Measures

None required.

3.9.6.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for solid waste includes all existing, planned, proposed, approved, and reasonably foreseeable development in the Inland Empire, which includes Riverside and San Bernardino counties. There are seven landfills in the two counties. Future development associated with the proposed project, as well as in the surrounding region, would result in an incremental cumulative demand for solid waste collection and disposal in regional landfills.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Solid Waste Impacts (Standard of Significance 1)

Impact 3.9.6.2 Implementation of the proposed project, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the region, would result in increased demand for solid waste services. This impact is **less than cumulatively considerable**.

Implementation of the proposed project, in combination with other existing, approved, proposed, or reasonably foreseeable development, will increase the amount of residential and commercial development in the region. This growth would result in increased generation of solid waste that would need to be processed at various landfills throughout Riverside and San Bernardino counties.

Future development in the region would be subject to subsequent environmental review to evaluate potential increased demand on solid waste facilities. In addition, the RCWMD ensures

that Riverside County has a minimum of 15 years of capacity, at any time, for future landfill disposal. The incremental development associated with the proposed project would represent less than a 1 percent increase in solid waste disposal at two of the landfills in the region. This increase would not be cumulative considerable. Therefore, the proposed project will not contribute significantly to cumulative solid waste impacts, and this impact is considered **less than cumulatively considerable**.

Mitigation Measures

None required.

3.9.7 PARKS AND RECREATION

3.9.7.1 EXISTING SETTING

Wildomar owns and manages three public parks: Marna O'Brien Park, Regency Heritage Park, and Windsong Park, which encompass approximately 14 acres.[1] In addition to the 14 acres of public parks, the city has approximately 307 acres of land dedicated to open space recreation and 221 acres of land dedicated to open space conservation. A summary of the park and open space acreages in Wildomar is shown in **Table 3.9.7-1.**

TABLE 3.9.7-1
PARK AND OPEN SPACE FACILITIES

Parks/Open Space	Acreage
Marna O'Brien Park	8.94
Regency Heritage Park	3.26
Windsong Park	2.07
Public Park Subtotal	*14.27*
Open Space – Recreation	307
Park and Recreation Subtotal	*321.27*
Open Space – Conservation	221
Open Space Subtotal	*528*
Total Parks/Open Space	**542.27**

Source: City of Wildomar 2012

Upon incorporation in 2008, the City of Wildomar adopted the Riverside County Municipal Code. The code includes a requirement of 3 acres of neighborhood and community park and recreational facilities per 1,000 residents. According to Section 16.20.020.D of the Wildomar Municipal Code, a park is defined as a parcel or parcels of land, exclusive of natural open space, which is open and available for use by the general public and which serves the

[1] In August 2012, the City stopped funding Regency Heritage and Windsong Park, making both facilities nonoperational. However, on November 6, 2012, Wildomar residents approved a $28 annual parcel tax (Measure Z) to assist in the funding of park operations and related park activities as noted in the measure. The special tax went into effect July 1, 2013. The City is in the process of restoring and reopening the parks.

recreational needs of the public. As of 2012, Wildomar's estimated population is 32,719 (SCAG 2013), which would result in a parkland demand of approximately 98 acres. As demonstrated in **Table 3.9.7-1**, the city currently has approximately 321 acres of parkland and recreational open space, which exceeds the amount of parkland required per the Municipal Code by approximately 223 acres.

3.9.7.2 REGULATORY FRAMEWORK

STATE

Quimby Act

The goal of the 1975 Quimby Act (California Government Code Section 66477) was to require developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The act gave authority for passage of land dedication ordinances only to cities and counties, thus requiring special districts to work with cities and/or counties to receive parkland dedication and/or in-lieu fees. The fees must be paid and land conveyed directly to the local public agencies that provide parks and recreation services community-wide. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities (Westrup 2002).

Originally, the Quimby Act was designed to ensure "adequate" open space acreage in jurisdictions adopting Quimby Act standards (e.g., 3–5 acres per 1,000 residents). In some California communities, the acreage fee was very high where property values were high, and many local governments did not differentiate on their Quimby fees between infill projects and greenbelt developments.

In 1982, the act was substantially amended via Assembly Bill (AB) 1600. The amendments further defined acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. In other words, AB 1600 requires agencies to clearly show a reasonable relationship between the public need for the recreation facility or park land and the type of development project upon which the fee is imposed (Westrup 2002).

Cities or counties with a high ratio of parkland to inhabitants can set a standard of 5 acres per 1,000 residents for new development. Cities or counties with a lower ratio can only require the provision of up to 3 acres of parkland per 1,000 residents. The calculation of a city's or county's parkland-to-population ratio is based on a comparison of the population count of the last federal census to the amount of city- or county-owned parkland.

LOCAL

Wildomar Community Services Department

The City of Wildomar Community Services Department oversees the development and maintenance of local parks.

City of Wildomar Municipal Code

Section 3.44.070 of the City of Wildomar Municipal Code sets forth provisions to collect development impact fees to acquire or construct facilities, purchase regional parkland, and preserve habitat and open space. Section 16.20.020 requires "that three acres of land for each 1,000 persons residing within the City shall be devoted to neighborhood and community park and recreational facilities unless a community parks and recreation plan, as approved by the City Council, determines that the amount of existing neighborhood and community park area exceeds that limit, in which case the Council determines that the public interest, convenience, health, welfare and safety requires that a higher standard, not to exceed five acres of land per 1,000 persons residing within the City, shall be devoted to neighborhood and community park and residential purposes." However, Section 16.20.020 only applies to residential subdivisions.

3.9.7.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G thresholds of significance. A park and recreation impact is significant if implementation of the proposed project would:

1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

2) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

METHODOLOGY

Evaluation of the proposed project was based on review of the current facilities, the City's Municipal Code, and other relevant literature. This material was compared to the proposed project's specific park and recreation service–related impacts. The impact analysis below focuses on whether those impacts would have a significant effect on the physical environment.

PROJECT IMPACTS AND MITIGATION MEASURES

Increased Demand for Parks and Recreation Facilities (Standards of Significance 1 and 2)

Impact 3.9.7.1 Implementation of the proposed project would increase the population that will be served by parks and recreation facilities. This impact is considered to be **less than significant**.

Development of the identified sites may result in a population increase of approximately 5,537 residents to Wildomar. According to Section 16.20.020 of the City of Wildomar Municipal Code, 3 acres of land for each 1,000 persons residing in the city are to be devoted to neighborhood and community park and recreational facilities, unless a community parks and recreation plan determines that the amount of existing neighborhood and community park area exceeds that limit, in which case a higher standard not to exceed 5 acres of land per 1,000 persons city residents may apply. Since there currently is no community parks and recreation plan determining that the existing park facilities exceed the required standard, 3 acres for each 1,000

persons would remain applicable to future development. Based on a park demand of 3 acres per 1,000 population, development associated with the proposed project would result in a demand for approximately 17 acres of parkland by 2021.

Future development would be required to comply with Section 3.44.070 of the City of Wildomar Municipal Code, which requires payment of development impact fees to acquire or construct facilities, purchase regional parkland, and preserve habitat and open space. Payment of the development impact fee would mitigate the future increased demand for park and recreation facilities generated by implementation of the proposed project. Where and when those collected development impact fees would be applied is unknown at this time. Since the timing, location, and site conditions where future park improvements would be funded by development impact fees are unknown at this time, it would be too speculative to determine the environmental impacts associated with those improvements. Future park facilities developed in the city would be subject to subsequent project-level environmental review. In addition, future residential subdivisions would be conditioned to provide parkland within the developments, which be incorporated into the subdivision design and subject to subsequent environmental review. Therefore, the incremental demand for parks associated with the proposed project would be considered a **less than significant** impact.

Mitigation Measures

None required.

3.9.7.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for parks and recreation consists of the City of Wildomar's jurisdictional boundary, which encompasses 13.2 square miles. Any existing, planned, proposed, approved, and reasonably foreseeable development in the city could contribute to cumulative impacts.

Cumulative Park and Recreation Demands (Standards of Significance 1 and 2)

Impact 3.9.7.2 Implementation of the proposed project, along with other existing, planned, proposed, approved, and reasonably foreseeable development, would increase the use of existing parks and would require additional parks and recreation facilities in the cumulative setting, the provision of which could have an adverse physical effect on the environment. This would be a **less than cumulatively considerable** impact.

Future development, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the region, would increase the use of existing parks and would contribute to the cumulative demand for regional and local parks and recreational facilities and services in Wildomar. Development associated with the proposed project would likely pay development impact fees pursuant to Section 3.44.070 of the Wildomar Municipal Code due to the size and density of identified sites. Future subdivision developments would be required to provide adequate park facilities to meet the demand of proposed development. Environmental impacts resulting from the provision of park and recreational facilities would be identified by subsequent project-level environmental review in conjunction with the individual subdivision development projects.

Existing, planned, proposed, approved, and reasonably foreseeable development would have or will be required to pay development impact fees to fund the provision of physical parkland, community recreation, and other public purposes. These fees and policy provisions would ensure that the City would adequately provide for the park and recreation needs of residents. Subsequent environmental review required for new subdivision development and/or stand-alone park facility improvements would identify and mitigate any environmental impacts associated with construction of park and recreation facilities. Therefore, the proposed project would have a **less than cumulatively considerable** impact on parks and recreation services.

Mitigation Measures

None required.

REFERENCES

California Department of Education. 2013. DataQuest. Accessed June 2013. http://www.cde.ca.gov/ds/sd/cb/dataquest.asp.

CalRecycle (California Department of Resources Recycling and Recovery). 2013. Website. Accessed June 2013. http://www.calrecycle.ca.gov/.

CBSC (California Building Standards Commission). 2008. *2007 California Building Code*.

CCSA (California Charter Schools Association). 2013. Website. Accessed June 2013. http://www.calcharters.org/.

City of Wildomar. 2003. *General Plan.*

———. 2012. City Council Study Session – Development Impact Fee. November 28.

CR&R (CR&R Waste and Recycling Services). 2013a. Website. Accessed July 22, 2013.

_____. 2013b. Personal communication between Dolores Badillo, CR&R, and Pamela Lapham, PMC. July 23.

EPA (United States Environmental Protection Agency). 2013a. Website. Accessed June 2013. http://www.epa.gov.

———. 2013b. GHG Summary Report – El Sobrante Landfill. Accessed June 2013. http://ghgdata.epa.gov/ghgp/service/html/2011?id=1007693&__utma=111775312.1110565692.1370471366.1370474135.1370899194.3&__utmb=111775312.8.9.1370899236471&__utmc=111775312&__utmx=-&__utmz=111775312.1370899194.3.3.utmcsr=epa-sites.findthedata.org|utmccn=(re.

EVMWD (Elsinore Valley Municipal Water District). 2008. *2008 Water Distribution System Master Plan and Wastewater Distribution System Master Plan.*

———. 2010. *Water Distribution Master Plan and Wastewater Master Plan EIR* (SCH # 2008111100).

———. 2011. *Urban Water Management Plan, Public Review Draft*.

———. 2012. *Comprehensive Annual Report*.

———. 2013a. Website – Welcome to the Elsinore Valley Municipal Water District. Accessed June 2013. http://www.evmwd.com/.

———. 2013b. *Design Standards and Standard Drawings.* Volume I.

LAFCo (Local Agency Formation Commission for Riverside County). 2009. *Wildomar Municipal Service Review*.

LEUSD (Lake Elsinore Unified School District). 2013. *Facilities Master Plan 2012 – A comprehensive analysis of existing facilities, present condition & future needs*.

RCFD (Riverside County Fire Department). 2009. *Riverside County Strategic Plan 2009–2029*.

———. 2011. *Annual Report.*

———. 2013a. "Fire Stations." Accessed May 31, 2013. http://www.rvcfire.org/stationsandfunctions/firestations/Pages/default.aspx.

_____. 2013b. Written correspondence from Ben Johnson, Planning Development Supervisor, Strategic Planning Bureau, Cal Fire and Riverside County Fire Department. June 20.

RCSD (Riverside County Sheriff's Department). 2013a. "Cabazon Sheriff's Station." Accessed June 3, 2013. http://www.riversidesheriff.org/stations/cabazon.asp.

———. 2013b. Written communication from Shelley A. Kennedy-Smith, Chief of Police, City of Wildomar. June 10.

RCWMD (Riverside County Waste Management Department). 2013. Website. Accessed June 2013. http://www.rivcowm.org/opencms/.

RWQCB (San Diego Regional Water Quality Control Board). 2013. *Santa Ana Region Basin Plan*. Accessed June 2013. http://www.swrcb.ca.gov/rwqcb8/water_issues/programs /basin_plan/index.shtml.

SCAG (Southern California Association of Governments). 2013. *Profile of Wildomar.*

SWRCB (State Water Resources Control Board). 2013. Website. Accessed June 2013. http://www.swrcb.ca.gov/.

US Census Bureau. 2010. *American Fact Finder: Profile of General Population and Housing Characteristics: 2010 Demographic Profile Data*. Accessed June 2013.

USDOE (United States Department of Energy). 2013. *Porter-Cologne Water Quality Control Act.* Accessed June 2013. http://www.etec.energy.gov/About/Regulations.html.

Westrup, Laura. 2002. Planning Division, California Department of Parks and Recreation. *Quimby Act 101: An Abbreviated Overview***.**

WM (Waste Management of the Inland Empire). 2013. Website: Waste Management – Wildomar. Accessed June 2013. http://www.wm.com/location/california/inland-empire/wildomar/index.jsp.

WMWD (Western Municipal Water District). 2013. Website. Accessed June 2013. http://www.wmwd.com/.

3.10 TRANSPORTATION AND CIRCULATION

This section represents the results of the traffic impact analysis (TIA) prepared by Urban Crossroads (2013) for the proposed project. The TIA evaluated the potential impacts to traffic and circulation associated with the implementation of the proposed project and compared them to established regulatory thresholds. The analysis and conclusions found in this section are based on the TIA.

3.10.1 EXISTING SETTING

STUDY AREA INTERSECTIONS

The traffic assessment analyzed a total of 15 existing and future intersections that have potential to be adversely affected by development that may occur as a result of the approval of the proposed project (**Figure 3.10-1**). Intersections 14 and 15 have not yet been constructed, but are planned to be in operation by 2035.

Traffic operations of roadway facilities are described using the term "level of service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined, ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

Existing peak-hour traffic operations for the study intersections are shown in **Table 3.10-1**. The data indicates that all of the existing study intersections in the study area are currently operating at acceptable LOS during the peak hours, with the exception of the following two:

- #6: I-15 Southbound Ramps/Baxter Road – LOS F AM peak hour; LOS E PM peak hour
- #10: I-15 Southbound Ramps/Clinton Keith Road – LOS E PM peak hour only

TABLE 3.10-1
EXISTING CONDITIONS PEAK-HOUR INTERSECTION LEVEL OF SERVICE (LOS)

ID #	Intersection	Traffic Control[1]	Jurisdiction	Delay (Seconds)		LOS	
				AM	PM	AM	PM
1	Grand Avenue/Corydon Street	TS	Wildomar	19.9	24.6	B	C
2	Mission Trail/Corydon Street	TS	Wildomar	19.0	17.3	B	B
3	I-15 SB Ramps/Bundy Canyon Road	TS	Caltrans	21.3	22.0	C	C
4	I-15 NB Ramps/Bundy Canyon Road	TS	Caltrans	24.6	22.4	C	C
5	Palomar Street/Central Street	TS	Wildomar	36.1	29.2	D	C
6	I-15 SB Ramps/Baxter Road	AWS	Caltrans	**75.5**	**49.3**	**F**	**E**
7	I-15 NB Ramps/Baxter Road	AWS	Caltrans	13.0	21.9	B	C
8	Grand Avenue/Clinton Keith Road	TS	Wildomar/ Murrieta	15.4	16.4	B	B
9	Palomar Street/Clinton Keith Road	TS	Wildomar	44.5	42.9	D	D
10	I-15 SB Ramps/Clinton Keith Road	TS	Caltrans	44.1	**57.1**	D	**E**
11	I-15 NB Ramps/Clinton Keith Road	TS	Caltrans	40.2	28.6	D	C

ID #	Intersection	Traffic Control[1]	Jurisdiction	Delay (Seconds)		LOS	
				AM	PM	AM	PM
12	George Avenue/Clinton Keith Road	TS	Wildomar	23.4	26.5	C	C
13	Inland Valley Drive/Clinton Keith Road	TS	Wildomar	18.0	20.3	B	C
14	*Inland Valley Drive/Wyman Road*	*–*	*Wildomar*	*Future Intersection*			
15	*Inland Valley Drive/Jefferson Avenue*	*–*	*Wildomar*	*Future Intersection*			

Source: Urban Crossroads 2013
1. TS = traffic signal; AWS = all-way stop

As the I-15/Baxter Road interchange is currently unsignalized at both the Interstate 15 (I-15) northbound and southbound ramps, it is anticipated that the I-15 southbound ramps at Baxter Road would operate at acceptable LOS during both peak hours with the implementation of traffic signals at both the I-15 northbound (Intersection #7) and I-15 southbound (Intersection #6) ramps at Baxter Road. The traffic analysis includes a traffic signal warrant study, which identified four intersections, including these two, as requiring a traffic signal to meet LOS criteria.

It should also be noted that the I-15/Clinton Keith Road interchange is currently undergoing construction to increase capacity at the I-15 northbound and southbound off-ramps and along Clinton Keith Road in the vicinity of the interchange. It is anticipated that the intersection of the I-15 southbound ramps and Clinton Keith Road will operate at an acceptable level of service during the PM peak hour as a result of the ongoing improvements, which are anticipated to be completed in the winter of 2013.

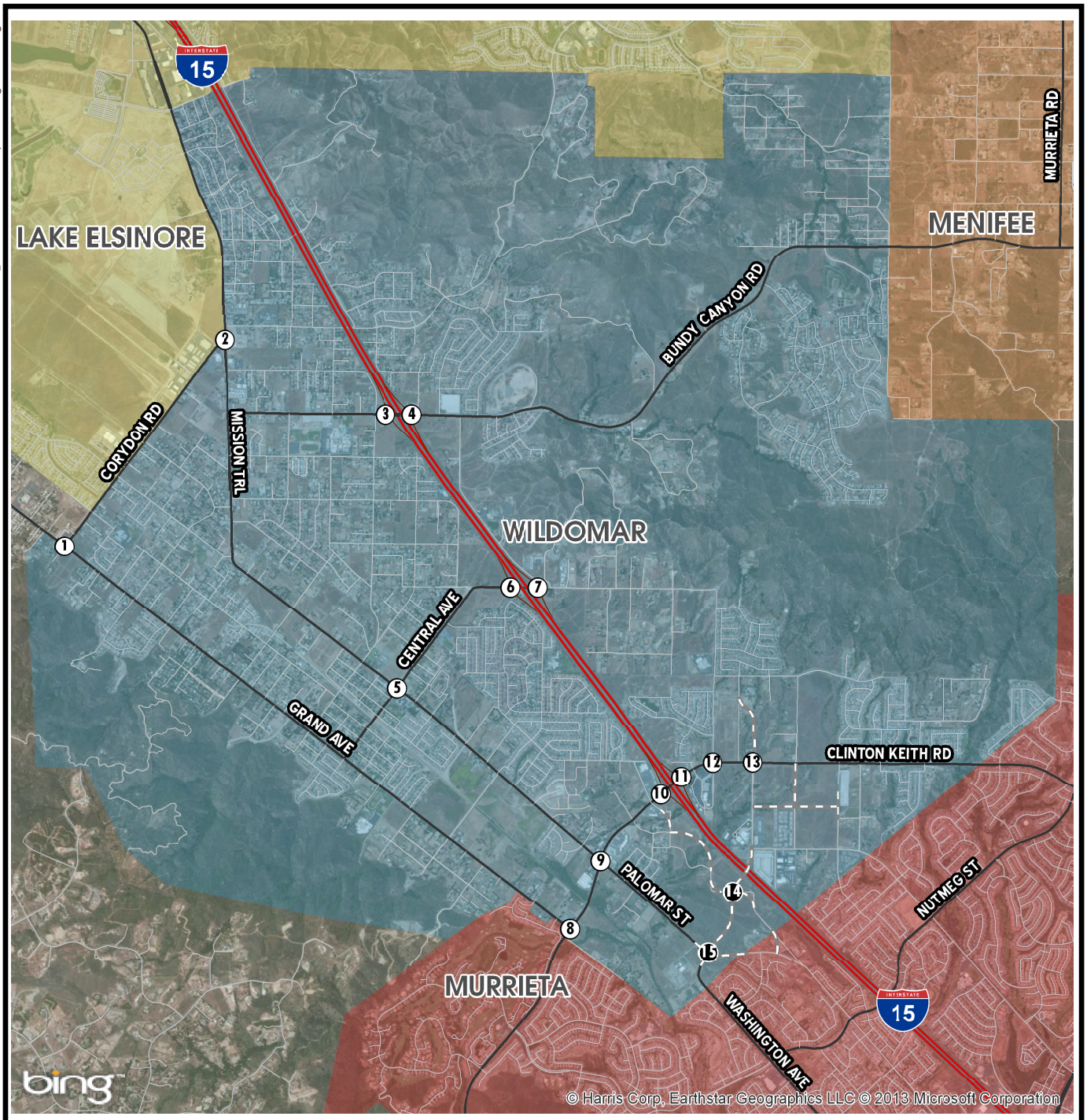
ROADWAY SEGMENTS

The study also analyzed 42 existing and future roadway segments that could be affected by the proposed project. **Table 3.10-2** provides a summary of existing traffic volumes (average daily trips [ADT]) at the study area roadway segments.

Based on the analysis of existing conditions, the following study area roadway segments were found to be at or potentially exceeding capacity:

- #1: Grand Avenue, north of Corydon Street
- #22: Bundy Canyon Road, east of I-15 northbound Ramps
- #36: Clinton Keith Road, east of George Avenue
- #37: Clinton Keith Road, west of Inland Valley Drive

T:_CS\Work\Wildomar, City of\Housing Element\Figures



Legend

○ = Existing Intersection Analysis Location

● = Future Intersection Analysis Location

= Future Road

Source: City of Wildomar, CA

Not to Scale

N

Figure 3.10-1
Study Area Intersections

PMC®

This page intentionally left blank.

TABLE 3.10-2
EXISTING (2013) CONDITIONS ROADWAY VOLUMES CAPACITY ANALYSIS

ID #	Roadway Name	Segment Limits	Roadway Section	LOS Capacity	Existing Volume (2013)	Volume-to-Capacity (V/C) Ratio	Average Daily Vehicle Capacity Threshold
1	Grand Avenue	North of Corydon Street	2D	18,000	18,200	1.01	**Potentially Exceeds**
2		South of Corydon Street	2D	12,950	9,400	0.73	Acceptable
3		North of Clinton Keith Road	2U	12,950	4,100	0.32	Acceptable
4	Palomar Street	North of Central Street	2U	18,000	9,400	0.52	Acceptable
5		South of Central Street	2U	18,000	10,700	0.59	Acceptable
6		North of Clinton Keith Road	2U	18,000	12,300	0.68	Acceptable
7		South of Clinton Keith Road	2D	18,000	16,800	0.93	Approaching
8	Mission Trail	North of Corydon Street	4U	35,900	16,900	0.47	Acceptable
9		South of Corydon Street	4D	35,900	12,800	0.36	Acceptable
10	George Avenue	North of Clinton Keith Road	2U	12,950	3,900	0.30	Acceptable
11	Inland Valley Drive	North of Clinton Keith Road	*Future Roadway Segment*				
12		South of Clinton Keith Road	2U	12,950	9,700	0.75	Acceptable
13		North of Wyman Road	*Future Roadway Segment*				
14		South of Wyman Road	*Future Roadway Segment*				
15		North of Jefferson Avenue	*Future Roadway Segment*				
16		South of Jefferson Avenue	*Future Roadway Segment*				
17	Corydon Street	West of Grand Avenue	2U	12,950	36	0.00	Acceptable
18		East of Grand Avenue	2D	18,000	10,900	0.61	Acceptable
19		West of Mission Trail	2D	18,000	15,700	0.87	Approaching
20	Bundy Canyon Road	West of I-15 SB Ramp	4D	35,900	19,200	0.53	Acceptable
21		I-15 SB Ramp to I-15 NB Ramp	4D	35,900	19,800	0.55	Acceptable
22		East of I-15 NB Ramp	2D	18,000	20,400	1.13	**Potentially Exceeds**

ID #	Roadway Name	Segment Limits	Roadway Section	LOS Capacity	Existing Volume (2013)	Volume-to-Capacity (V/C) Ratio	Average Daily Vehicle Capacity Threshold
23	Central Street	West of Palomar Street	2U	13,000	9,700	0.75	Acceptable
24		East of Palomar Street	2U	18,000	10,300	0.57	Acceptable
25	Baxter Road	West of I-15 SB Ramp	2U	18,000	16,100	0.89	Approaching
26		I-15 SB Ramp to I-15 NB Ramp	2U	18,000	11,200	0.62	Acceptable
27		East of I-15 NB Ramp	2U	12,950	5,100	0.39	Acceptable
28	Clinton Keith Road	West of Grand Avenue	4D	34,100	10,800	0.32	Acceptable
29		East of Grand Avenue	4U	34,100	12,300	0.36	Acceptable
30		West of Palomar Street	4D	34,100	10,300	0.30	Acceptable
31		East of Palomar Street	4D	35,900	8,200	0.23	Acceptable
32		West of I-15 SB Ramp	4D	35,900	21,600	0.60	Acceptable
33		I-15 SB Ramp to I-15 NB Ramp	3D	26,900	20,900	0.78	Acceptable
34		East of I-15 NB Ramp	4D	35,900	22,200	0.62	Acceptable
35		West of George Avenue	4D	35,900	17,400	0.48	Acceptable
36		East of George Avenue	2D	18,000	19,200	1.07	**Potentially Exceeds**
37		West of Inland Valley Drive	2D	18,000	18,900	1.05	**Potentially Exceeds**
38		East of Inland Valley Drive	2U	18,000	13,000	0.72	Acceptable
39	Wyman Road	West of Inland Valley Drive	*Future Roadway Segment*				
40		East of Inland Valley Drive	*Future Roadway Segment*				
41	Jefferson Avenue	West of Inland Valley Drive	*Future Roadway Segment*				
42		East of Inland Valley Drive	*Future Roadway Segment*				

Source: Urban Crossroads 2013

The roadway segment analysis is used as a planning tool to evaluate the adequacy of existing roadway segment capacities. A volume-to-capacity (V/C) ratio of 1.01 to 1.25 suggests that additional review is required; however, if adjacent intersections provide the lanes needed to achieve acceptable peak-hour LOS, segment capacity improvements between key intersections may not be needed.

BICYCLE AND PEDESTRIAN FACILITIES

Field observations conducted as part of the TIA in May 2013 indicate nominal pedestrian and bicycle activity in the study area. There is a combination trail planned on Grand Avenue just north of Wildomar (Urban Crossroads 2013, p. 15). Community trails and open space trails are located outside of the city to the west, south, and east. The City is planning for a Regional Community Multi-Use Adopt-A-Trail System, which includes many trails located throughout the city (see **Figure 3.10-2**). The system includes regional roadside, countryside, and creekside multi-use trails; community roadside multi-use trails; and historic trails.

TRANSIT SERVICE

The Riverside Transit Agency (RTA) was established as a Joint Powers Agency on August 15, 1975, and began operating bus service on March 16, 1977. The RTA is the Consolidated Transportation Service Agency for western Riverside County and is responsible for coordinating transit services throughout the approximate 2,500-square-mile service area, providing driver training, assistance with grant applications, and development of Short-Range Transit Plans.

The RTA provides both local and regional services throughout the region with 36 fixed routes, 8 CommuterLink routes, and Dial-a-Ride services using 261 vehicles. The RTA serves the unincorporated Riverside County region near Wildomar, with bus service along Grand Avenue, Mission Trail, Palomar Street, and Clinton Keith Road through various routes. Wildomar is served by Route 7, which heads north to the City of Lake Elsinore; Route 8, which runs from Lake Elsinore, into Wildomar, and back out to Lake Elsinore again; and Route 23, which heads toward the City of Murrieta. All three routes include connections to other routes into and beyond Riverside County.

Transit service is reviewed and updated by the RTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments, which may lead to either enhanced or reduced service where appropriate.

3.10.2 REGULATORY FRAMEWORK

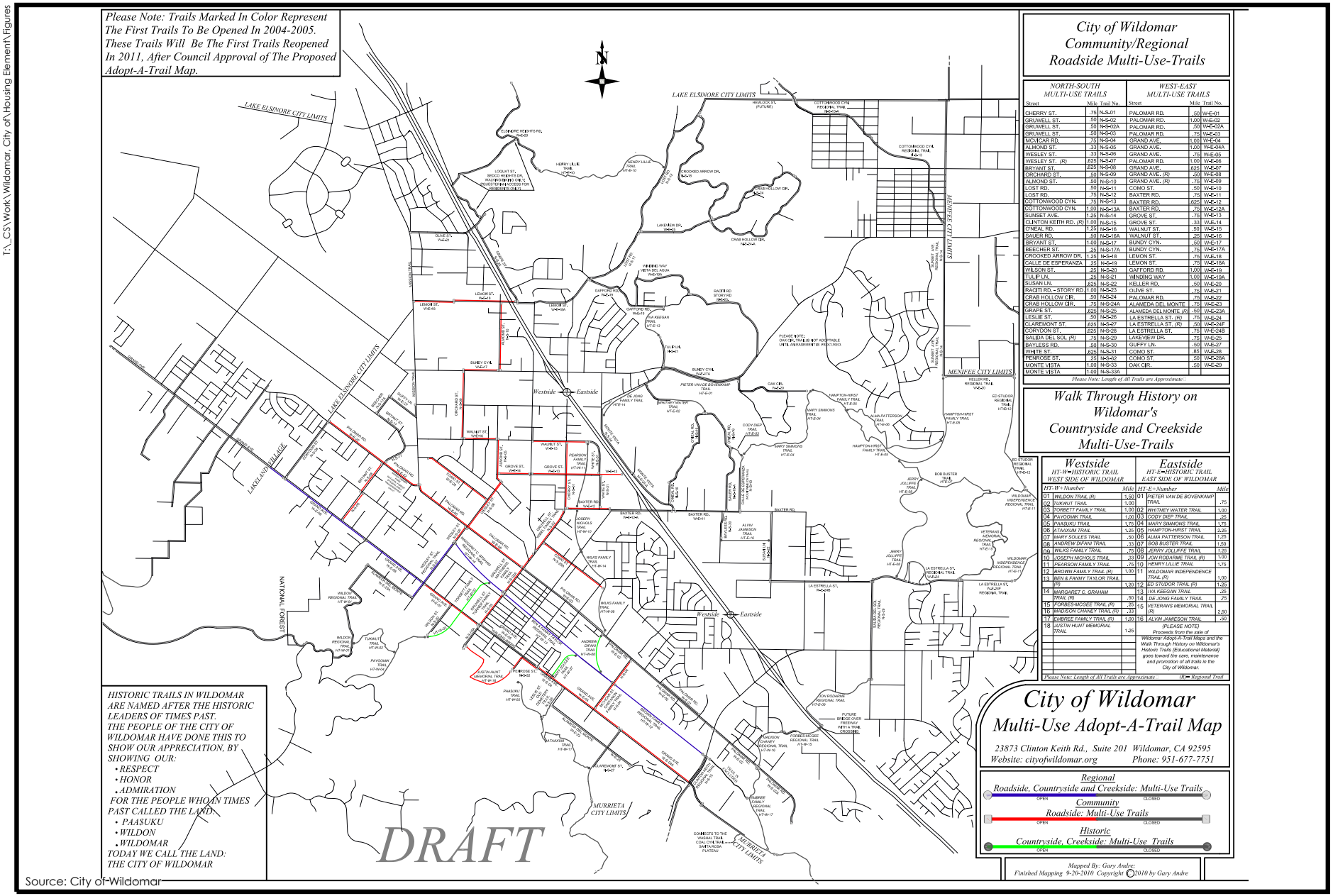
STATE

Caltrans Traffic Operation Standards

The California Department of Transportation (Caltrans) *Guide for the Preparation of Traffic Impact Studies* (2012) includes criteria for evaluating the effects of land use development and changes to the circulation system on state highways. Caltrans maintains a target level of service at the transition between LOS C and LOS D for freeway facilities.

This page intentionally left blank.

T:_CS\Work\Wildomar, City of\Housing Element\Figures



Source: City of Wildomar

Figure 3.10-2

Approved Trail Map for the City of Wildomar Adopt a Trail 2011

PMC®

This page intentionally left blank.

REGIONAL

Riverside County Congestion Management Program

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California, including Riverside, to prepare a Congestion Management Program (CMP). The CMP, which was prepared by the Riverside County Transportation Commission (RCTC) in consultation with the County and the cities in Riverside County, is an effort to more directly align land use, transportation, and air quality management efforts, to promote reasonable growth management programs that effectively use statewide transportation funds, while ensuring that new development pays its fair share of needed transportation improvements.

The latest version of the CMP was adopted in December 2011 and focuses on the development of an Enhanced Traffic Monitoring System in which real-time traffic count data can be accessed by the RCTC to evaluate the condition of the Congestion Management System (CMS) as well as meet other monitoring requirements at the state and federal levels. Per the adopted level of service (LOS) standard of E, when a CMS segment falls to LOS F, a deficiency plan must be required. Preparation of a deficiency plan will be the responsibility of the local agency where the deficiency is located. Other agencies identified as contributors to the deficiency will also be required to coordinate with the development of the plan. The plan must contain mitigation measures, including Transportation Demand Management strategies and transit alternatives, and a schedule for mitigating the deficiency. To ensure that the CMS is appropriately monitored to reduce the occurrence of Congestion Management Program deficiencies, it is the responsibility of local agencies, when reviewing and approving development proposals, to consider the traffic impacts on the CMS.

Non-Motorized Transportation

Bicycling occurs throughout the county, but is more concentrated in the cities and urbanized portions of unincorporated areas, and is more recreational than commute-oriented. Although the County's current bicycle plan provides for connections between major urban and recreational facilities in the county, implementation of the plan has occurred only to a limited extent. There is no comprehensive bicycle or trail system that links Wildomar to the rest of Riverside County.

LOCAL

City of Wildomar General Plan

The General Plan establishes LOS C as a target for all City-maintained roadways and conventional state highways, except that LOS D could be allowed in urban areas at intersections of any combination of Major Streets, Arterials, Expressways, or conventional state highways within 1 mile of a freeway interchange and also at freeway ramp intersections. Current policy requires development projects to mitigate impacts on roadways based on the LOS C standard. Current General Plan policy also permits allowing development projects to mitigate to LOS D, subject to City Council approval, in those instances where mitigation to LOS C is deemed to be impractical.

3.10.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. Transportation impacts are considered significant when the project would:

1) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

2) Conflict with an applicable congestion management program, including, but not limited to, level of service standard and travel demand measure or other standards established by the county congestion management agency for designated roads or highways.

3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

5) Result in inadequate emergency access.

6) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

METHODOLOGY

As there is no physical development proposed at this time, the traffic attributed to the proposed project, and the subsequent project impacts, are assessed at the General Plan level using development assumptions and assumed traffic volumes based on the Institute of Transportation Engineers (ITE) manual and the Riverside County Transportation Model (RivTAM). Each new development will require separate approval that will require site-specific analysis when proposed.

Without detailed project design information, it is not possible to evaluate the individual site traffic impacts on existing conditions. Project design features, such as the physical location of the project, the number, size, and location of driveways, and the number of dwelling units, all affect the traffic analysis. To conduct a site-specific analysis using assumed development possibilities that may or may not reflect what is actually constructed on the site would be too speculative to provide meaningful results and could mislead the public by suggesting certain traffic impacts would or would not occur from the development of a particular site. In addition, there is no timeline for development of any of the proposed housing units. An analysis comparing buildout of the proposed project to existing conditions would be unrealistic, as it would assume full buildout of all of the potential units in a short period of time. Both Wildomar's historic growth rate and the physical limitation of development shows that immediate buildout of the total potential units is unlikely to occur. Therefore, any such analysis would be uninformative and misleading.

Moreover, an analysis that assumes the housing units are built over the course of the eight-year planning period would be uninformative and misleading because development over time (of both trip-generating uses and traffic improvements) changes how the circulation system works. As trip-generating uses and traffic improvements are constructed, they change the existing conditions against which the traffic impacts for subsequent projects must be measured. An analysis that assumes the housing units are built over the planning period would involve assumptions as to what sites are developed before others, when improvements are constructed, and what other development occurs within the city over the course of the eight-year period. As there are no development proposals for these sites at this time, any such analysis would be based on sheer speculation and would not provide the public with a meaningful analysis of the potential traffic impacts associated with the approval of this project.

In addition, the mixed-use component of the proposed project is intended to result in reduced trips by placing homes near commercial uses. The extent of any trip reduction associated with a mixed-use development is dependent on the design of the proposal.

Intersection Capacity Analysis

The definitions of LOS for interrupted traffic flow differ slightly depending on the type of traffic control, such as a traffic signal or other traffic control device. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The *Highway Capacity Manual* (HCM) (Transportation Research Board 2000) methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

The intersection LOS analysis is based on the traffic volumes observed during the peak-hour conditions using traffic count data collected in May 2013. The following peak hours were selected for analysis:

- Weekday AM peak hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM peak hour (peak hour between 4:00 PM and 6:00 PM)

Signalized Intersections

The City of Wildomar requires signalized intersection operations analysis based on the methodology described in Chapter 16 of the HCM. Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS definitions for signalized intersections are shown in **Table 3.10-3**. These levels of service were used in the analysis to determine whether implementation of the proposed project would result in significant impacts on Wildomar's traffic system.

TABLE 3.10-3
SIGNALIZED INTERSECTION LOS THRESHOLDS

Level of Service	Description	Average Control Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up

Source: Transportation Research Board 2000 (Chapter 17)

Per the Caltrans *Guide for the Preparation of Traffic Impact Studies* (2012), the traffic modeling and signal timing optimization software package Synchro (Version 8 Build 804) was used to analyze signalized intersections under Caltrans' jurisdiction, which include interchange-to-arterial ramps (i.e., I-15 ramps at Bundy Canyon Road, Baxter Road, and Clinton Keith Road). Synchro is a macroscopic traffic software program based on the signalized intersection capacity analysis as specified in Chapter 16 of the HCM. Macroscopic-level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network. All other study area intersections were analyzed using the software package Traffix (Version 8.0 R1, 2008).

The peak-hour traffic volumes were adjusted using a peak-hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [hourly volume] / [4 x peak 15-minute flow rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs were used for existing (2013) traffic conditions for the purposes of this analysis. A PHF of 0.92 or higher was used for all study area intersections for City of Wildomar General Plan Buildout (Post-2035) Without and With Project traffic conditions.

Unsignalized Intersections

The City of Wildomar requires that the operations of unsignalized intersections be evaluated using the methodology described in Chapter 17 of the HCM. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle, as shown in **Table 3.10-4**.

TABLE 3.10-4
UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Level of Service	Description	Average Control per Vehicle (Seconds)
A	Little or no delays	0 to 10.00
B	Short traffic delays	10.01 to 15.00
C	Average traffic delays	15.01 to 25.00
D	Long traffic delays	25.01 to 35.00
E	Very long traffic delays	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded	>50.00

Source: Transportation Research Board 2000 (Chapter 17)

For all-way stop-controlled intersections, LOS is computed for the intersection as a whole. Both unsignalized study area intersections used the Synchro software package (Version 8 Build 804), as they are Caltrans facilities.

Roadway Segment Daily Capacity Analysis

An LOS analysis was prepared on existing roadway segments in the study area using daily roadway capacities. The roadway segment capacities are approximate figures only and are many times used to assist in determining the roadway functional classification (number of through lanes) needed to meet future traffic demand. In most cases, roadway segment analysis is performed for planning purposes and is affected by such factors as intersections (spacing, configuration, and control figures), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distances, vehicle mix (truck and bus traffic), and pedestrian and bicycle traffic. **Table 3.10-5** presents roadway segment capacities and LOS thresholds for each facility type. The roadway segment vehicle capacity thresholds represent the maximum two-way average daily traffic volume for LOS E conditions and are based on the City of Wildomar Link Volume Capacities/Level of Service for City of Wlldomar Roadways (City of Wildomar 2003).

TABLE 3.10-5
ROADWAY SEGMENT VEHICLE CAPACITY THRESHOLDS

Roadway Classification	Number of Through Lanes	Roadway Capacity (Average Daily Traffic)
Collector	2	13,000
Secondary	4	25,900
Major	4	34,100
Arterial	2	18,000
Arterial	4	35,900
Urban Arterial	4	35,900
Urban Arterial	6	53,900
Urban Arterial	8	71,800

Source: City of Wildomar 2003

The roadway segment analysis compares the ADT volume with the capacity to arrive at a volume-to-capacity ratio. Based on the V/C ratio, each study area roadway segment is classified into one of four categories: acceptable (V/C 0.00–0.79), approaching capacity (V/C 0.80–1.00), potentially exceeds capacity (V/C 1.01–1.25), and exceeds capacity (V/C >1.26).

The roadway segment daily capacity analysis is used to identify those roadway facilities that potentially exceed the estimated traffic volume for LOS E conditions. Since the level of service for each roadway segment is largely a function of the adjacent intersection operations, it is also important to consider the adjacent intersection LOS in combination with the roadway segment V/C ratios. If the adjacent intersections are operating at acceptable LOS during peak-hour conditions, it is likely that the roadway segment will also operate at an acceptable LOS even if the volume-to-capacity ratio indicates that the ADT may approach or exceed the "planning-level" roadway capacity. Moreover, if both the roadway segment is experiencing capacity constraints and the adjacent intersections are also operating at unacceptable LOS, additional capacity is likely required for the roadway segment and the adjacent intersection locations.

The roadway segment analysis is presented as a planning tool to assess the adequacy of the existing and City of Wildomar General Plan Circulation Element functional roadway classifications. This information is used in combination with a review of the expected traffic demands, access restrictions, and physical constraints.

Traffic Signal Warrant Analysis

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to determine whether or not there is a potential need to install a traffic signal at an otherwise unsignalized intersection. The traffic impact analysis uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)* (2012), as amended by the *MUTCD 2012 California Supplement*, for all study area intersections. The signal warrant criteria for existing (2013) conditions are based on several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. Future intersections and existing unsignalized intersections have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning-level ADT-based signal warrant analysis worksheets. Traffic signal warrant analyses were performed for the following unsignalized study area intersections and future intersections:

- #6: I-15 Southbound Ramps/Baxter Road
- #7: I-15 Northbound Ramps/Baxter Road
- #14: Inland Valley Drive/Wyman Road
- #15: 15 Inland Valley Drive/Jefferson Avenue

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at an acceptable level of service or conversely operate below an acceptable level service and not meet a signal warrant.

LOS Criteria

The definition of an intersection deficiency in Wildomar is based on the City of Wildomar General Plan Circulation Element. General Plan Policy C 2.1 states that the City will maintain the following citywide target level of service: LOS C on all City-maintained roads and conventional state highways. As an exception, LOS D may be allowed in Community Development areas, as designated in the General Plan, at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways, or conventional state Highways. The entire city is a designated Community Development area, per the General Plan. As such, LOS D has been considered acceptable at any intersection in Wildomar. LOS E may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. There are four designated Community Center areas in Wildomar, and it is assumed that LOS E is considered acceptable in these areas:

- Vicinity of Corydon Road, Mission Trail, Bundy Canyon Road, and Walnut Street
- Vicinity of Central Street, Palomar Street, and Como Street
- Area generally bound by Palomar Street, Clinton Keith Road, I-15, and the city boundary
- Vicinity of Bundy Canyon Road, Orange Street, Canyon Drive, and Monte Vista Drive

Regarding Caltrans' ramp-to-arterial intersections and other Caltrans-maintained facilities, the published Caltrans traffic study guidelines (2012) state the following: "Caltrans endeavors to maintain a target LOS at the transition between LOS 'C' and LOS 'D' on state highway facilities; however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS." As such, LOS D is also considered to be the limit of acceptable traffic operations during the peak hour at intersections maintained by Caltrans.

PROJECT IMPACTS AND MITIGATION MEASURES

Substantial Increase in Traffic (Standard of Significance 1)

Impact 3.10.1 The project will not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The proposed project would result in no new impacts over what has already been identified. This is a **significant** impact.

Intersection Operations

Under existing conditions, two intersections (I-15 SB Ramps/Baxter Road and I-15 SB Ramps/ Clinton Keith Road) currently experience unacceptable peak-hour LOS. The intersection at the I-15 SB Ramps and Clinton Keith Road only experiences unacceptable LOS during the PM peak hour, whereas the I-15 SB Ramps/Baxter Road intersection has unacceptable intersection LOS during both the AM and PM peak hours. The traffic study prepared for the proposed project determined that under General Plan Buildout (Post-2035) Without Project conditions, peak-hour traffic at all study area intersections would be anticipated to operate at acceptable LOS during both peak hours with the future lane and roadway configurations identified in the General Plan. Under General Plan Buildout (Post-2035) With Project conditions, peak-hour traffic at all study area intersections are anticipated to operate at acceptable LOS during both peak hours with

the future lane and roadway configurations identified in the General Plan. This would be an improvement over existing conditions. In the case of the I-15 SB Ramps/Baxter Road intersection, traffic control there is currently provided by an all-way stop. It is anticipated that a traffic signal will be placed at the intersection prior to buildout of the General Plan, as well as at the intersection of the I-15 NB Ramps and Baxter Road. That would improve intersection operations.

LOS operations would be reduced from existing conditions at the following intersections: I-15 SB Ramps/Bundy Canyon Road (AM and PM peak), I-15 NB Ramps/Bundy Canyon Road (PM peak only), Palomar Street/Central Street (PM peak only), I-15 NB Ramps/Baxter Road (AM and PM peak), Grand Avenue/Clinton Keith Road (PM peak only), I-15 NB Ramps/Clinton Keith Road (AM peak only), George Avenue/Clinton Keith Road (AM and PM peak), and Inland Valley Drive/Clinton Keith Road (AM and PM peak), but all intersections would continue to operate under acceptable LOS. The intersection analysis results and future lane configurations are summarized in **Table 3.10-6** for existing conditions, General Plan Buildout Without Project conditions, and General Plan Buildout With Project conditions. As shown in the table, the expected level of service is consistent under both conditions.

TABLE 3.10-6
GENERAL PLAN BUILDOUT (2035) PEAK-HOUR INTERSECTION LOS

ID #	Intersection	Traffic Control	Jurisdiction	Delay (Seconds)		LOS		Delay (Seconds)		LOS		Delay (Seconds)		LOS	
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
				Existing Conditions				2035 Without Project				2035 With Project			
1	Grand Avenue/ Corydon Street	TS	Wildomar	19.9	24.6	B	C	19.3	27.3	B	C	19.3	27.3	B	C
2	Mission Trail/ Corydon Street	TS	Wildomar	19.0	17.3	B	B	20.1	20.0	C	B	20.0	20.0	B	B
3	I-15 SB Ramps/Bundy Canyon Road	TS	Caltrans	21.3	22.0	C	C	35.3	41.3	D	D	35.8	42.4	D	D
4	I-15 NB Ramps/Bundy Canyon Road	TS	Caltrans	24.6	22.4	C	C	24.6	34.9	C	C	24.9	41.5	C	D
5	Palomar Street/Central Street	TS	Wildomar	36.1	29.2	D	C	42.3	43.6	D	D	42.2	44.4	D	D
6	I-15 SB Ramps/Baxter Road	TS[1]	Caltrans	**75.5**	**49.3**	**F**	**E**	23.7	17.5	C	B	23.8	17.6	C	B
7	I-15 NB Ramps/Baxter Road	TS[1]	Caltrans	13.0	21.9	B	C	26.2	43.3	C	D	26.4	43.4	C	D
8	Grand Avenue/ Clinton Keith Road	TS	Wildomar/ Murrieta	15.4	16.4	B	B	16.7	29.7	B	C	16.4	29.1	B	C
9	Palomar Street/Clinton Keith Road	TS	Wildomar	44.5	42.9	D	D	40.9	54.1	D	D	41.1	54.8	D	D

ID #	Intersection	Traffic Control	Jurisdiction	Delay (Seconds)		LOS		Delay (Seconds)		LOS		Delay (Seconds)		LOS	
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
				Existing Conditions				2035 Without Project				2035 With Project			
10	I-15 SB Ramps/Clinton Keith Road	TS	Caltrans	44.1	**57.1**	D	**E**	28.1	32.5	C	C	28.1	33.4	C	C
11	I-15 NB Ramps/Clinton Keith Road	TS	Caltrans	40.2	28.6	D	C	22.4	37.7	C	D	22.4	38.0	C	D
12	George Avenue/Clinton Keith Road	TS	Wildomar	23.4	26.5	C	C	38.7	55.0	D	D	38.6	53.7	D	D
13	Inland Valley Drive/Clinton Keith Road	TS	Wildomar	18.0	20.3	B	C	43.5	48.4	D	D	42.7	49.1	D	D
14	Inland Valley Drive/Wyman Road	TS	Wildomar	*Future Intersection*				20.3	29.1	C	C	20.5	29.9	C	C
15	Inland Valley Drive/Jefferson Avenue	TS	Wildomar	*Future Intersection*				36.9	46.0	D	D	37.0	46.5	D	D

Source: Urban Crossroads 2013
1. Intersection has all-way stop (AWS) for traffic control under existing conditions.

Roadway Segment Operations

Under existing conditions, the following roadway segments appear to potentially provide unacceptable roadway capacity:

- #1: Grand Avenue, north of Corydon Street (1.01 V/C ratio)
- #22: Bundy Canyon Road, east of I-15 Northbound Ramps (1.13 V/C ratio)
- #36: Clinton Keith Road, east of George Avenue (1.07 V/C ratio)
- #37: Clinton Keith Road, west of Inland Valley Drive (1.05 V/C ratio)

As shown on **Table 3.10-7**, the following study area roadway segments appear to potentially provide unacceptable roadway capacity under General Plan Buildout With Project conditiions:

- #13: Inland Valley Drive, north of Wyman Road (1.08 V/C ratio)
- #34: Clinton Keith Road, east of I-15 Northbound Ramps (1.00 V/C ratio)
- #35: Clinton Keith Road, west of George Avenue (1.00 V/C ratio)

The roadway segment analysis is used as a planning tool to evaluate the adequacy of existing roadway segment capacities. A V/C ratio of 1.01 to 1.25 suggests that additional review is required; however, if adjacent intersections provide the lanes needed to achieve acceptable peak-hour LOS, segment capacity improvements between key intersections may not be needed.

As indicated previously in **Table 3.10-6**, the adjacent intersections to these three roadway segments are anticipated to operate at acceptable LOS, which would suggest that adjacent

roadway segment capacity would not be an issue during the AM and PM peak hours. As such, additional roadway capacity improvements do not appear to be necessary.

The traffic analysis also analyzed potential impacts associated with reductions in service capacity along the 42 roadway segments identified above under "Roadway Segments" for both General Plan Buildout Without Project and General Plan Buildout With Project conditions. **Table 3.10-7** shows the result of the roadway volume and capacity analysis for both conditions.

TABLE 3.10-7
GENERAL PLAN BUILDOUT (POST-2035) ROADWAY VOLUME/CAPACITY ANALYSIS

ID #	Roadway Name	Segment Limits	Roadway Section (Existing)	LOS Capacity (Existing)	Existing Volume (2013)	Volume-to-Capacity (V/C) Ratio (Existing)	Average Daily Vehicle Capacity Threshold (Existing)	Roadway Section	LOS Capacity (2035)	2035 Volume Without Project	V/C Ratio Without Project	Average Daily Volume Capacity Threshold (Without Project)	2035 Volume With Project	V/C Ratio With Project	Average Daily Volume Capacity Threshold (With Project)
1	Grand Avenue	North of Corydon Street	2D	18,000	18,200	1.01	**Potentially Exceeds**	4D	35,900	26,000	0.72	Acceptable	26,000	0.72	Acceptable
2		South of Corydon Street	2D	12,950	9,400	0.73	Acceptable	4U	25,900	11,000	0.42	Acceptable	11,000	0.42	Acceptable
3		North of Clinton Keith Road	2U	12,950	4,100	0.32	Acceptable	4U	25,900	7,000	0.27	Acceptable	7,000	0.27	Acceptable
4	Palomar Street	North of Central Street	2U	18,000	9,400	0.52	Acceptable	4D	35,900	34,000	0.95	Approaching	34,000	0.95	Approaching
5		South of Central Street	2U	18,000	10,700	0.59	Acceptable	4D	35,900	32,000	0.89	Approaching	31,000	0.86	Approaching
6		North of Clinton Keith Road	2U	18,000	12,300	0.68	Acceptable	4D	35,900	35,000	0.97	Approaching	35,000	0.97	Approaching
7		South of Clinton Keith Road	2D	18,000	16,800	0.93	Approaching	4D	35,900	32,000	0.89	Approaching	32,000	0.89	Approaching
8	Mission Trail	North of Corydon Street	4U	35,900	16,900	0.47	Acceptable	4D	35,900	35,000	0.97	Approaching	35,000	0.97	Approaching
9		South of Corydon Street	4D	35,900	12,800	0.36	Acceptable	4D	35,900	28,000	0.78	Acceptable	28,000	0.78	Acceptable
10	George Avenue	North of Clinton Keith Road	2U	12,950	3,900	0.30	Acceptable	4U	25,900	19,000	0.73	Acceptable	19,000	0.73	Acceptable
11	Inland Valley Drive	North of Clinton Keith Road	*Future Roadway Segment*					4U	25,900	11,000	0.42	Acceptable	11,000	0.42	Acceptable
12		South of Clinton Keith Road	2U	12,950	9,700	0.75	Acceptable	4U	25,900	22,000	0.85	Approaching	22,000	0.85	Approaching
13		North of Wyman Road	*Future Roadway Segment*					4U	25,900	28,000	**1.08**	**Potentially Exceeds**	28,000	**1.08**	**Potentially Exceeds**
14		South of Wyman Road	*Future Roadway Segment*					4U	25,900	22,000	0.85	Approaching	22,000	0.85	Approaching
15		North of Jefferson Avenue	*Future Roadway Segment*					4U	25,900	17,000	0.66	Acceptable	17,000	0.66	Acceptable
16		South of Jefferson	*Future Roadway Segment*					4U	25,900	7,000	0.27	Acceptable	7,000	0.27	Acceptable

ID #	Roadway Name	Segment Limits	Roadway Section (Existing)	LOS Capacity (Existing)	Existing Volume (2013)	Volume-to-Capacity (V/C) Ratio (Existing)	Average Daily Vehicle Capacity Threshold (Existing)	Roadway Section	LOS Capacity (2035)	2035 Volume Without Project	V/C Ratio Without Project	Average Daily Volume Capacity Threshold (Without Project)	2035 Volume With Project	V/C Ratio With Project	Average Daily Volume Capacity Threshold (With Project)
		Avenue													
17	Corydon Street	West of Grand Avenue	2U	12,950	36	0.00	Acceptable	2U	13,000	3,000	0.23	Acceptable	3,000	0.23	Acceptable
18		East of Grand Avenue	2D	18,000	10,900	0.61	Acceptable	4D	35,900	17,000	0.47	Acceptable	17,000	0.47	Acceptable
19		West of Mission Trail	2D	18,000	15,700	0.87	Approaching	4D	35,900	14,000	0.39	Acceptable	14,000	0.39	Acceptable
20	Bundy Canyon Road	West of I-15 SB Ramp	4D	35,900	19,200	0.53	Acceptable	6D	53,900	53,000	0.98	Approaching	53,000	0.98	Approaching
21		I-15 SB Ramp to I-15 NB Ramp	4D	35,900	19,800	0.55	Acceptable	6D	53,900	49,000	0.91	Approaching	49,000	0.91	Approaching
22		East of I-15 NB Ramp	2D	18,000	20,400	1.13	**Potentially Exceeds**	6D	53,900	51,000	0.95	Approaching	51,000	0.95	Approaching
23	Central Street	West of Palomar Street	2U	13,000	9,700	0.75	Acceptable	4U	25,900	6,000	0.23	Acceptable	6,000	0.23	Acceptable
24		East of Palomar Street	2U	18,000	10,300	0.57	Acceptable	4D	35,900	17,000	0.47	Acceptable	17,000	0.47	Acceptable
25	Baxter Road	West of I-15 SB Ramp	2U	18,000	16,100	0.89	Approaching	4D	35,900	32,000	0.89	Approaching	32,000	0.89	Approaching
26		I-15 SB Ramp to I-15 NB Ramp	2U	18,000	11,200	0.62	Acceptable	4U	35,900	20,000	0.56	Acceptable	20,000	0.56	Acceptable
27		East of I-15 NB Ramp	2U	5,100	0.39		Acceptable	4U	25,900	22,000	0.85	Approaching	22,000	0.85	Approaching
28	Clinton Keith Road	West of Grand Avenue	4D	34,100	10,800	0.32	Acceptable	4D	34,100	30,000	0.88	Approaching	30,000	0.88	Approaching
29		East of Grand Avenue	4U	34,100	12,300	0.36	Acceptable	4U	34,100	31,000	0.91	Approaching	31,000	0.91	Approaching
30		West of Palomar Street	4D	34,100	10,300	0.30	Acceptable	4D	34,100	32,000	0.94	Approaching	32,000	0.94	Approaching
31		East of Palomar Street	4D	35,900	8,200	0.23	Acceptable	6D	53,900	48,000	0.89	Approaching	48,000	0.89	Approaching
32		West of I-15 SB Ramp	4D	35,900	21,600	0.60	Acceptable	8D	71,800	61,000	0.85	Approaching	61,000	0.85	Approaching
33		I-15 SB Ramp to I-15 NB Ramp	3D	26,900	20,900	0.78	Acceptable	8D	71,800	63,000	0.88	Approaching	63,000	0.88	Approaching
34		East of I-15 NB Ramp	4D	35,900	22,200	0.62	Acceptable	6D	53,900	54,000	1.00	**Potentially Exceeds**	54,000	**1.00**	**Potentially Exceeds**
35		West of George Avenue	4D	35,900	17,400	0.48	Acceptable	6D	53,900	54,000	1.00	**Potentially Exceeds**	54,000	**1.00**	**Potentially Exceeds**

ID #	Roadway Name	Segment Limits	Roadway Section (Existing)	LOS Capacity (Existing)	Existing Volume (2013)	Volume-to-Capacity (V/C) Ratio (Existing)	Average Daily Vehicle Capacity Threshold (Existing)	Roadway Section	LOS Capacity (2035)	2035 Volume Without Project	V/C Ratio Without Project	Average Daily Volume Capacity Threshold (Without Project)	2035 Volume With Project	V/C Ratio With Project	Average Daily Volume Capacity Threshold (With Project)
36		East of George Avenue	2D	18,000	19,200	1.07	**Potentially Exceeds**	6D	53,900	37,000	0.69	Acceptable	37,000	0.69	Acceptable
37		West of Inland Valley Drive	2D	18,000	18,900	1.05	**Potentially Exceeds**	6D	53,900	37,000	0.69	Acceptable	37,000	0.69	Acceptable
38		East of Inland Valley Drive	2U	18,000	13,000	0.72	Acceptable	6D	53,900	41,000	0.76	Acceptable	41,000	0.76	Acceptable
39	Wyman Road	West of Inland Valley Drive	*Future Roadway Segment*					2U	13,000	8,000	0.62	Acceptable	8,000	0.62	Acceptable
40		East of Inland Valley Drive	*Future Roadway Segment*					2U	13,000	8,000	0.62	Acceptable	8,000	0.62	Acceptable
41	Jefferson Road	West of Inland Valley Drive	*Future Roadway Segment*					4D	35,900	22,000	0.61	Acceptable	22,000	0.61	Acceptable
42		East of Inland Valley Drive	*Future Roadway Segment*					4D	35,900	19,000	0.53	Acceptable	19,000	0.53	Acceptable

Source: Urban Crossroads 2013

According to **Table 3.10-7**, by 2035, adverse conditions at the four roadway segments determined to be potentially exceeding the average daily vehicle capacity threshold would be improved to acceptable conditions. In the case of all of the roadway segments that currently exceed capacity, for 2035 conditions, both Without Project and With Project, the roadway segments are expected to be widened and capacity would increase. This would alleviate the excess capacity on each of those roadway segments. One of the roadway segments anticipated to exceed capacity, Inland Valley Drive north of Wyman Road, does not yet exist. The other two intersections anticipated to exceed capacity, Clinton Keith Road east of I-15 Northbound Ramps and Clinton Keith Road west of George Avenue, currently operate under acceptable conditions. In the case of those roadway segments, the analysis for both the 2035 Without Project and 2035 With Project scenarios found that the projected volumes on those roadway segments would be exactly the same, so this is an impact resulting from buildout of the General Plan and would not be attributed to the proposed project.

Under General Plan Buildout With Project Conditions, the traffic analysis determined that the three roadway segments identified above would experience the same effects on roadway segment capacities as shown in **Table 3.10-7**. In addition, the projected future traffic volumes along each of the 42 study area roadway segments are the same under both 2035 Without Project and 2035 With Project conditions. Similar to the analysis for General Plan Buildout Without Project conditions, as indicated previously in **Table 3.10-6**, the adjacent intersections to these three roadway segments are anticipated to operate at acceptable LOS, indicating that additional roadway capacity improvements do not appear to be necessary as a result of implementation of the proposed project.

Signal Warrants Analysis

The traffic analysis determined that the following two future intersections would likely warrant the addition of a traffic signal under General Plan Buildout Without Project conditions, in addition to those intersections identified as currently needing a traffic signal based on existing conditions.

- #14: Inland Valley Drive/Wyman Road
- #15: Inland Valley Drive/Jefferson Avenue

Further, the TIA prepared for the proposed project did not identify any new intersections in need of a traffic signal under existing conditions. Under implementation of the proposed project, the same two intersections would require traffic signals. No additional traffic signals would be required.

Conclusion

All of the potential impacts on intersection capacity, roadway segment capacity, and traffic signal warrants are consistent with the impacts identified under the General Plan Buildout Without Project conditions. This indicates that the proposed project would not result in a substantial increase in demand on the circulation system over what has been analyzed and will be mitigated for as part of implementation of the General Plan, including the number of vehicle trips, the volume-to-capacity ratio on roads, or the congestion at intersections. However, there is no guarantee that there will be sufficient funding for any of the roadway improvements necessary to keep area roadways at an acceptable level of service. The City participates in the regional Transportation Uniform Mitigation Fee (TUMF) program and also has its own Development Impact Fee (DIF) requirement for new development. These programs are intended to provide funding for transportation improvements that benefit more than a single development. However, not all intersections or roadway segments are in these programs, and

new development will be required to mitigate for the impact to non-program facilities at the time of environmental review.

As the City must collect funds as development occurs and amass sufficient funding before the roadway improvement can be constructed, it is likely that one or more roadway segments will drop to an unacceptable level of service before the City can make the improvement. Finally, some of the roadway segments in **Table 3.10-7** are not wholly within the jurisdiction of the City of Wildomar and would require Caltrans approval before construction of the improvement. While the City expects the improvements to be constructed, the lack of certainty results in this impact being considered **significant and unavoidable**.

Mitigation Measures

None feasible.

Conflict with Congestion Management Program or Standards (Standard of Significance 2)

Impact 3.10.2 Implementation of the proposed project would not conflict with the Riverside County Congestion Management Program or with any other adopted congestion management plans or standards. There is **no impact**.

The proposed project will not result in any roadway segment included in the Riverside County Congestion Management Plan being reduced to an unacceptable level of service. As shown in **Table 3.10-7**, all study area roadways operate at an acceptable level of services in the 2035 Volume With Project condition. Therefore, there would be **no impact** resulting from such conflicts.

Mitigation Measures

None required.

Changes in Air Traffic Patterns (Standard of Significance 3)

Impact 3.10.3 Implementation of the proposed project would not affect airport traffic patterns. There is **no impact.**

The nearest major airport to Wildomar is the LA/Ontario International Airport, located approximately 43 miles away in Ontario. A small private airport called Skylark Field Airport is located adjacent to the northwest city boundary in Lake Elsinore.

The proposed project would modify zoning and General Plan designations to allow for the future development of high-density residential and mixed use on specific scattered parcels in Wildomar. No future development projects for these parcels are proposed at this time. In any case, implementation of proposed overlay zones or redesignation would not result in any new uses or activities that would affect airport operations and air traffic patterns. There is **no impact**.

Mitigation Measures

None required.

Hazardous Design Features and Incompatible Uses (Standard of Significance 4)

Impact 3.10.4 Implementation of the proposed project would not substantially increase hazards due to dangerous design features or incompatible uses. There would be **no impact**.

As mentioned above under the analysis of Impact 3.10.3, implementation of the proposed project would result in the modification of General Plan designations and zoning districts on several parcels in Wildomar, which would allow those parcels to be developed with mixed uses and high-density residential uses in the future. There are no development projects proposed for the parcels at this time, so implementation of the proposed project would not result in design hazards related to ingress or egress, and there would be no proposed changes to roadways or intersections. Therefore, there would be **no impact**.

Mitigation Measures

None required.

Inadequate Emergency Access (Standard of Significance 5)

Impact 3.10.5 Implementation of the proposed project would not result in inadequacies in emergency access. There would be **no impact**.

As mentioned above, the proposed project would result in the rezoning and redesignation of some parcels, which would enable the future development of high-density residential and mixed uses, although there are no such proposals for development at this time. The proposed project would not result in any changes that would affect future emergency access. Refer to Section 3.9, Public Services, Utilities, and Recreation, of this Draft EIR for a description of the potential impacts on emergency services such as police and fire. However, since the project would not result in any changes that would hinder emergency access, there is **no impact**.

Mitigation Measures

None required.

Conflict with Alternative Transportation (Standard of Significance 6)

Impact 3.10.6 The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation. This is a **less than significant** impact.

Wildomar contains limited formal facilities for bicycle and pedestrian use. Two bus routes connect the city to the larger Riverside Transportation Agency (RTA) system. These routes, 7 and 23, also provide access throughout the city linking the community on both sides of Interstate 15. Route 7 mainly serves areas of the community north of Clinton Keith Road and Route 23 serves the city south of Clinton Keith Road. As the routes are designed to capture as many potential riders as possible, the bus routes traverse higher-density residential and commercial areas. Most of the sites proposed for rezoning or redesignation are located in close proximity to the existing public transit lines.

The proposed project would redesignate and rezone several parcels to allow for the future development of high-density residential and mixed uses. The project does not alter routes or

include any components that would conflict with adopted policies, plans, and program supporting alternative transportation, and in fact, increases in densities may actually promote such policies. For this reason, this is a **less than significant** impact.

Mitigation Measures

None required.

3.10.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The CEQA Guidelines require that other reasonably foreseeable development projects that are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario. As this is a programmatic document that evaluates the impact of implementation of a policy to meet regional housing needs over the next eight years, the cumulative setting for the proposed project is buildout of the 2035 General Plan. Standards of significance with no impact could not contribute to cumulative impacts with impacts from other projects, so these are not analyzed in the cumulative context.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Substantial Increase in Traffic (Standard of Significance 1)

Impact 3.10.7 Buildout of the 2035 General Plan plus implementation of the proposed project will not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The proposed project, in combination with buildout of the General Plan and the uncertainty of future transportation system improvement projects, would result in a **cumulatively considerable and unavoidable** impact.

The proposed project consists of modifications to the City's Zoning Code (rezoning) and General Plan land use designations. The 2035 General Plan describes the City's long-term intentions for city development, which include all of the projects that are reasonably foreseeable by 2035.

The TIA analyzed cumulative traffic impacts that would be expected to occur as a result of buildout of the 2035 General Plan for both Without Project and With Project conditions. Based on the citywide land use data and the regional socioeconomic growth projections, future trip activity was estimated and assigned to the roadway circulation system. Model output is post-processed based on accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between existing (2013) conditions and the City of Wildomar General Plan buildout (post-2035) traffic conditions.

Based on the analysis of both the Without Project and With Project conditions, the TIA determined that the project-specific traffic impacts resulting from full buildout of the parcels slated for redesignation and/or rezoning plus buildout of the 2035 General Plan are consistent with the cumulative impacts that would occur as part of buildout of the 2035 General Plan alone.

Therefore, the proposed project does not result in a cumulatively considerable contribution to any of the possible traffic impacts that may occur as a result of buildout of the 2035 General Plan.

However, as discussed in **Impact 3.10.1**, there is no guarantee that there will be sufficient funding for any of the roadway improvements necessary to keep area roadways at an acceptable level of service. The City participates in the regional Transportation Uniform Mitigation Fee (TUMF) program and also has its own Development Impact Fee (DIF) requirement for new development. These programs are intended to provide funding for transportation improvements that benefit more than a single development. However, not all intersections or roadway segments are in these programs, and new development will be required to mitigate for the impact to non-program facilities at the time of environmental review.

As the City must collect funds as development occurs and amass sufficient funding before the roadway improvement can be constructed, it is likely that one or more roadway segments will drop to an unacceptable level of service before the City can make the improvement. Finally, some of the roadway segments in **Table 3.10-7** are not wholly within the jurisdiction of the City of Wildomar and would require Caltrans approval before construction of the improvement. While the City expects the improvements to be constructed, the lack of certainty results in this impact being considered **cumulatively considerable and unavoidable**.

Mitigation Measures

None feasible.

Conflict with Alternative Transportation (Standard of Significance 6)

Impact 3.10.8 Buildout of the 2035 General Plan plus implementation of the proposed project would not result in a cumulative adverse impact that would conflict with alternative transportation plans and policies. There would be **no cumulative impact.**

Buildout of the 2035 General Plan would result in implementation of policies intended to improve access to alternative transportation in Wildomar, including bicycle and pedestrian transportation and public transit services.

As described above under the analysis of Impact 3.10.6, implementation of the proposed project would enable the development of high-density residential and mixed uses on several sites located in the southern portion of Wildomar, with most sites located in close proximity to existing alternative transportation routes. By enabling the development of higher densities and mixed uses in proximity to modes of alternative transportation, implementation of the proposed project, in combination with other projects that would occur as part of buildout of the 2035 General Plan, would actually promote improvements and access to alternative transportation, which would not result in conflicts with plans and policies promoting alternative transportation. Therefore, there is **no cumulative impact**.

Mitigation Measures

None required.

REFERENCES

Caltrans (California Department of Transportation). 2012. *Guide for the Preparation of Traffic Impact Studies.*

City of Wildomar. 2003. *General Plan.*

FHWA (Federal Highway Administration). 2012. *Manual on Uniform Traffic Control Devices (MUTCD).*

Riverside County Transportation Commission. 2011. *2011 Riverside County Congestion Management Program.*

Transportation Research Board. 2000. *Highway Capacity Manual 2000.*

Urban Crossroads. 2013. *Wildomar Housing Element Update Traffic Impact Analysis.*

3.11 Effects Not Found Significant

The Notice of Preparation (NOP) for the proposed project was prepared as part of the scoping process to identify the potentially significant effects to be evaluated in the Draft EIR. The NOP was circulated for public review between May 2, 2013, and June 3, 2013 (see **Appendix 1.0**). In the course of this evaluation, it was concluded that the proposed project would not be expected to result in impacts in certain environmental categories included in the Appendix G Checklist of the CEQA Guidelines; specifically aesthetics, agricultural and forestry resources, hazards and hazardous materials, and noise.

3.11.1 AESTHETICS

The 25 sites identified for land use designation and zoning ordinance revisions are located in Wildomar on a total of approximately 148 acres. Several of the Mixed Use Planning Area (MUPA) sites are located directly adjacent to Interstate 15 (I-15), which is designated with an Eligible State Scenic Highway status by the California Scenic Highway Mapping System (managed by the California Department of Transportation (Caltrans)). However, the MUPA sites and the sites proposed for rezone would be built to conform to surrounding land uses and would be compatible with existing and proposed zoning and thus, would not visually degrade surrounding scenic uses.

Additionally, all of the identified sites are located within Zone B of the Mount Palomar Nighttime Lighting Policy Area. Zone B restricts the use of certain light fixtures that emit undesirable light rays into the night sky, which may have a detrimental effect on astronomical observation and research at the Mount Palomar Observatory. Development in this zone requires that any proposed project maintain preservation of the night sky. Any potential future development associated with the implementation of the Housing Element update would require the adherence of the proposed project to Chapter 8.64 (Light Pollution) of the Wildomar Municipal Code and the limitation of construction activities to daytime hours. Therefore, the proposed project would have no impact on aesthetics.

3.11.2 AGRICULTURAL AND FORESTRY RESOURCES

The 25 sites identified for land use designation and zoning ordinance revisions do not contain any active forestland or support trees that could be commercially harvested. These conditions preclude the possibility of the proposed project converting forestland to non-forest use. No impacts would occur.

3.11.3 HAZARDS AND HAZARDOUS MATERIALS

The proposed project would be zoned to allow for high-density residential development. As such, residential uses would not involve the routine transport, use, or disposal of hazardous materials that would result in a significant hazard to the public or to the environment. Potential hazardous materials associated with daily operation of the proposed rezone sites would be limited to small quantities of typical household cleaners, paint, or domestic landscape materials, such as fertilizers. Moreover, the proposed sites are not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the proposed project would not result in impacts to any nearby schools. Additionally, there are no airports in proximity to the MUPA sites or the sites for rezone; therefore, there would be no airport safety hazards associated with the proposed project sites. No impacts associated with this issue area would occur.

3.11.4 NOISE

The proposed project would have no direct effects on noise levels affecting noise-sensitive populations, often referred to as sensitive receptors. Noise impacts would be indirect, stemming from future development of the 25 identified sites. Short-term noise would be generated from housing construction activities but would not be out of the norm of what would be expected from typical construction. While construction noise may result in a short-term and intermittent nuisance to surrounding residential properties, construction noise limits and hours of construction regulated by the City's noise ordinance. Since there are no development plans for the 25 identified sites before the City, any noise impacts generated by construction are too speculative to quantify at this time.

Long-term noise impacts would also be indirect, related to traffic generation from future housing development, and the use of the sites as personal residences. As detailed in Section 3.10 Transportation and Circulation, significant traffic increases would not occur, and as such, noise would similarly not be expected to increase significantly. Generally, a change in noise levels is only perceptible at a minimum 3 decibel change and noticable by most at a minimum 5 decibel increase. In order for ambient traffic noise levels to increase by 3 decibels, the volume of traffic would need to roughly double. As this degree of change would not occur as a result of the proposed project, noise impacts generated by increased traffic would not be significant. In addition, as there are no development plans for the 25 sites, any noise impacts generated by the operation of the sites post-construction are too speculative to quantify at this time.

4.0 ALTERNATIVES

The alternatives analysis consists of the following components: an overview of California Environmental Quality Act (CEQA) requirements for alternatives analysis, descriptions of the alternatives evaluated, a comparison between the anticipated environmental effects of the alternatives and those of the proposed project, and identification of an "environmentally superior" alternative.

4.1 CEQA REQUIREMENTS FOR ALTERNATIVES

The CEQA Guidelines require that an environmental impact report (EIR) describe a reasonable range of alternatives to a project that would feasibly attain the basic project objectives but would avoid or substantially lessen one or more of the project's significant effects (CEQA Guidelines Section 15126.6(a)).

In addition, Sections 15126.6(a) and (b) of the CEQA Guidelines require the consideration of alternatives that could reduce or eliminate any significant adverse environmental effects of the proposed project, including alternatives that may be more costly or could otherwise impede the project's objectives. The range of alternatives considered must include those that offer substantial environmental advantages over the proposed project and may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors. The CEQA Guidelines also require analysis of a "No Project" alternative and identification of the environmentally superior alternative among those analyzed.

4.2 DEVELOPMENT OF PROJECT ALTERNATIVES

This section discusses the reasoning for selecting the alternatives and summarizes the assumptions identified for the alternatives. The range of alternatives included for analysis in an EIR is governed by the "rule of reason." The primary objective is formulating potential alternatives and choosing which ones to analyze to ensure that the selection and discussion of alternatives fosters informed decision-making and informed public participation. This is accomplished by providing sufficient information to enable readers to reach conclusions themselves about such alternatives. This approach avoids assessing an unmanageable number of alternatives or analyzing alternatives that differ too little to provide additional meaningful insights about their environmental effects. The alternatives addressed in this Draft EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative would accomplish most of the basic objectives of the project.
- The extent to which the alternative would avoid or reduce any of the identified significant effects of the project.
- The feasibility of the alternative, taking into account site suitability and parcel sizes, and consistency with applicable public plans, policies, and regulations.
- The appropriateness of the alternative in contributing to a reasonable range of alternatives necessary to permit a reasoned choice.

The alternatives analyzed in this DEIR were ultimately chosen based on each alternative's ability to feasibly attain the basic project objectives while avoiding or reducing one or more of the project's significant effects. The analysis provides readers with adequate information to compare the effectiveness of identified mitigation or significant adverse impacts and to enable readers to make decisions about the project. CEQA requires EIRs to address a reasonable range of reasonable alternatives, not all potential alternatives.

PROJECT OBJECTIVES

As noted above, an EIR must describe a reasonable range of alternatives to a project that would feasibly attain the basic project objectives while avoiding or reducing one or more of the project's significant effects (CEQA Guidelines Section 15126.6(a)). In identifying the range of alternatives for analysis in this EIR, the following objectives were considered:

- Meet the City of Wildomar's statutory obligations to address the need for low-income housing.
- Maintain the existing housing stock to serve housing needs.
- Ensure capacity for the development of new housing to meet the Regional Housing Needs Allocation (RHNA) at all income levels.
- Encourage housing development where supported by existing or planned infrastructure, while maintaining existing neighborhood character.
- Encourage, develop, and maintain programs and policies to meet projected affordable housing needs.
- Develop a vision for Wildomar that supports sustainable local, regional, and state housing and environmental goals.
- Provide new housing communities with substantial amenities to provide a high quality of life for residents.
- Present the California Department of Housing and Community Development with a Housing Element that meets the requirements of the development agreement.
- Adopt a Housing Element that substantially complies with California housing element law.

4.3 ALTERNATIVES DESCRIPTIONS AND ANALYSIS

DESCRIPTION OF ALTERNATIVES

Alternative 1: No Project

CEQA Guidelines Section 15126.6(e) requires that a No Project alternative be evaluated in an EIR. The No Project analysis must discuss the circumstance under which the project does not proceed. The comparison is that of the proposed project versus what can reasonably be expected to occur on the properties should the proposed project not be approved. The analysis allows decision-makers to compare the impacts of approving the project with the impacts of not approving the project (CEQA Guidelines Section 15126.6(e)(3)(B)).

Alternative 2: Increase Density on Sites 1 Through 13

Alternative 2 was developed to determine whether rezoning target sites 1 through 13 to allow high-density residential land uses (R-4/HHDR) and reducing the area of intensified development would reduce impacts. This alternative would allow the development at a density of 30 dwelling units per acre and allow up to 80 percent of the site to be developed, which would allow a total of 1,548 dwelling units on 65 acres. Alternative 2 would reduce the area that would experience

increased development density by approximately 83 acres (148 acres - 65 acres = 83 acres) and eliminate the need to add the Mixed Use overlay to target sites 14 through 21 and rezone target sites 22 through 25. Alternative 2 is illustrated in **Figure 4.0-1**.

ANALYSIS OF ALTERNATIVES

Each alternative is compared to the proposed project. The project alternatives are evaluated in less detail than those of the proposed project, and the impacts are described in terms of difference in outcome compared with implementing the proposed project. **Table 4.0-1** at the end of this section provides an at-a-glance comparison of the environmental benefits and impacts of each alternative.

Comparative Impacts of Alternative 1: No Project

1. Air Quality

The air quality analysis for the proposed project identified that subsequent land use activities associated with the project could result in short- and long-term emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and particulate matter, which was considered a significant and unavoidable impact and cumulatively considerable. Under Alternative 1, the 25 identified sites could be developed in accordance with the existing zoning and land use designations for the sites, which provide for less intense development of these sites (see **Table 2.0-4** and **Table 2.0-5** in Section 2.0, Project Description). Alternative 1 would likely have less construction activities and development, which would result in less short-term construction emissions and long-term operational and mobile source emissions. Therefore, Alternative 1 would result in a lesser degree of air quality impacts than the proposed project.

2. Biological and Natural Resources

The biological analysis determined that the proposed project could result in adverse effects to special-status plant and animal species and to critical habitat, loss of habitat for raptors and migratory birds, as well as active nesting sites for burrowing owls, disturb or degrade sensitive habitat (including riparian/riverine habitat as defined in the MSHCP), and result in the loss of jurisdictional waters of the United States and waters of the State. Implementation of mitigation measures MM 3.2.1, MM 3.2.2, MM 3.2.3a and 3.2.3b, MM 3.2.4, MM 3.2.5, and MM 3.2.8 would reduce these impacts to a less than significant level. Alternative 1 would have less land disturbance activities, which would result in fewer impacts to special-status species, critical and sensitive habitats, and nesting and migratory birds. Therefore, Alternative 1 would result in a lesser degree of impact to biological resources than the proposed project.

3. Climate Change and Greenhouse Gases

The proposed project will generate greenhouse gas emissions that would further contribute to effects on the environment. However, the proposed project would be consistent with the goals of Assembly Bill (AB) 32. Interim South Coast Air Quality Management District (SCAQMD) thresholds would not be surpassed and the emissions would not be cumulatively considerable. Alternative 1 would result in less construction activity and development, which would generate less greenhouse gas emissions. Therefore, Alternative 1 would result in a lesser degree of impact to climate change and greenhouse gases than the proposed project.

4. Cultural and Paleontological Resources

The proposed project could result in a substantial adverse change in the significance of an archaeological resource, undiscovered cultural resource, unique paleontological resource, or undiscovered human remains. Implementation of mitigation measures MM 3.4.2a through 3.4.2d, MM 3.4.3, and MM 3.4.4 would reduce these impacts to a less than significant level. Alternative 1 would result in less land disturbance activities, which would reduce the potential to affect archaeological resources, undiscovered cultural resources, unique paleontological resources, or undiscovered human remains. Therefore, Alternative 1 would result in a lesser degree of impact to cultural resources than the proposed project; however, mitigation measures would remain applicable to any development allowed under this alternative.

5. Geology, Soils, and Mineral Resources

The soil types in Wildomar are identified as being subject to strong seismic ground shaking and may be susceptible to seismic-related liquefaction or unstable soils. However, implementation of mitigation measure MM 3.5.1 would reduce these impacts to a less than significant level. In addition, the proposed project would potential adversely affect mineral resources. However, implementation of mitigation measure MM 3.5.9 would reduce this impact to a less than significant level by requiring a site-specific determination as to whether the project site would yield important or significant mineral resources. Alternative 1 would result in less land disturbance, which would reduce the potential for exposures to hazards associated with strong seismic ground shaking, seismic-related liquefaction, and unstable soils, as well as reducing the potential to adversely affect mineral resources. Therefore, Alternative 1 would result in a lesser degree of impact to geology, soils, and mineral resources than the proposed project; however, mitigation measures would remain applicable to any development allowed under this alternative.

6. Hydrology and Water Quality

The proposed project could result in erosion and water quality degradation downstream, alter drainage patterns which would increase runoff rates and volumes, and place housing within a 100-year floodplain. Implementation of mitigation measures MM 3.6.1 and MM 3.6.4 would reduce these impacts to a less than significant level. Alternative 1 would result in less housing development and land disturbance than the proposed project, which would reduce the potential for erosion and water quality degradation, reduce the alteration of drainage patterns and subsequently lessen the amount of runoff rates and volumes, and reduce risk of exposure to flooding hazards. Therefore, Alternative 1 would result in a lesser degree of impact to hydrology and water quality than the proposed project; however, mitigation measures would remain applicable to any development allowed under this alternative.

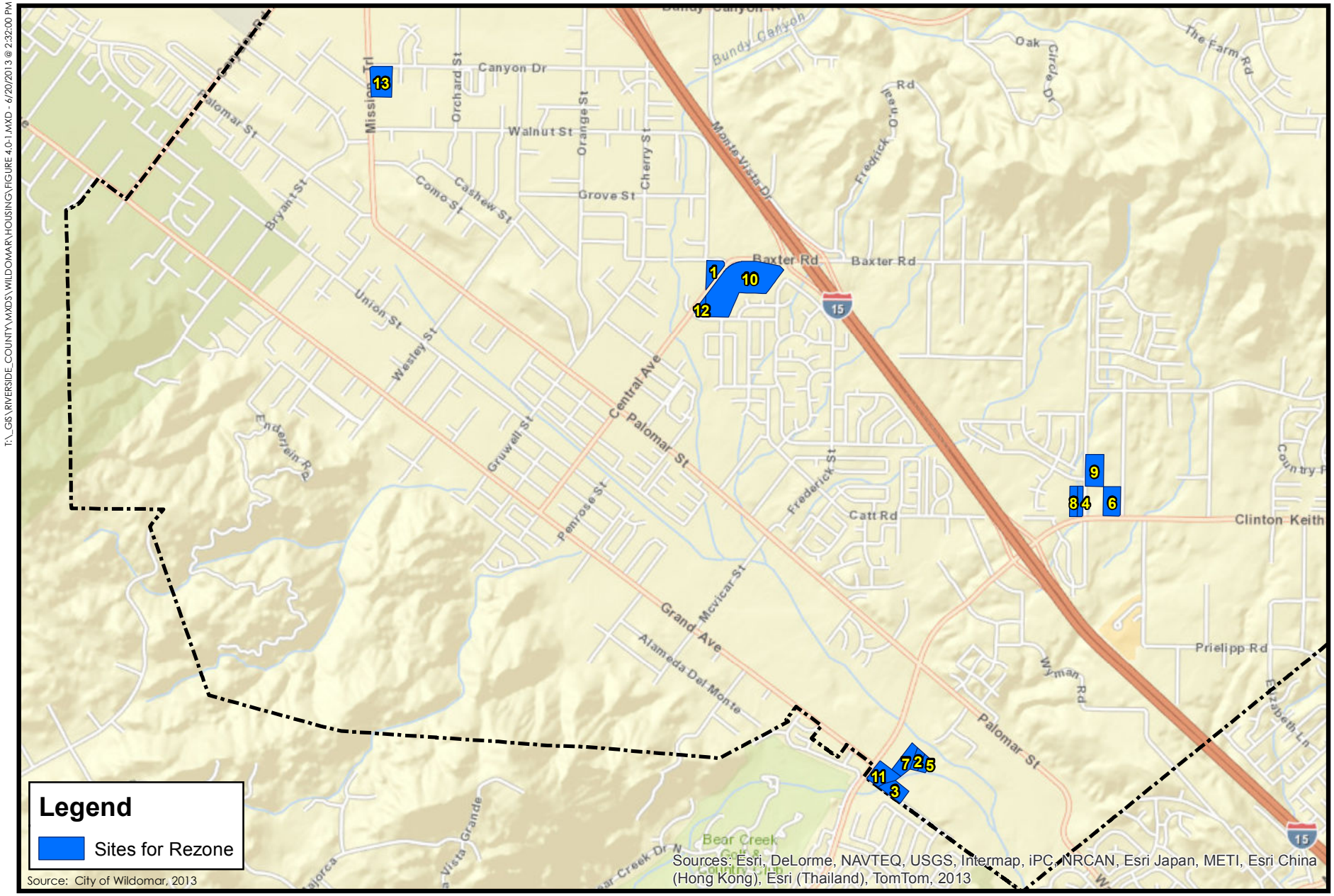


Figure 4.0-1

Alternative 2

This page intentionally left blank.

7. Land Use

The uses contemplated under the proposed project may conflict with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP); however, implementation of mitigation measures MM 3.2.1 and MM 3.2.8 (from Section 3.2, Biological and Natural Resources) would reduce this impact to a less than significant level. Alternative 1 would result in less land disturbance and development than the proposed project, which would reduce the potential to conflict with the MSHCP; however, mitigation measures would remain applicable to any development allowed under this alternative. In addition, the proposed project would prohibit the City of Wildomar from meeting its Regional Housing Needs Allocation, which would not be consistent with California housing element law requiring that each city and county develop local housing programs designed to meet its "fair share" of housing needs for all income groups, as determined by the jurisdiction's council of governments, when preparing the state-mandated housing element of its general plan. This alternative would result in the City failing to adopt a Housing Element as required by state law. Therefore, Alternative 1 would result in greater impacts than the proposed project.

8. Population and Housing

The proposed project would result in less than significant impacts to population and housing. The increase in population associated with Alternative 1 would be lower, and the alternative would not result in the displacement of people or housing. Therefore, Alternative 1 would result in lesser population and housing impacts than the proposed project.

9. Public Services, Utilities, and Recreation

The proposed project would result in an increase in population and housing, which would increase the demand for public services, utilities, and recreation. However, the demand would not result in the need for construction of new or expanded facilities that would result in adverse effects on the environment. Alternative 1 would result in less population and housing, which would decrease the demand for public services, utilities, and recreation compared to the proposed project. Therefore, Alternative 1 would result in a lesser degree of impact to public services, utilities, and recreation.

10. Transportation and Circulation

Alternative 1 would result in less traffic impacts, due mainly to less trip-generating development. Less residential development would result in fewer trips generated on the roadway network. Therefore, Alternative 1 would have lesser transportation and circulation impacts than the proposed project.

Comparative Analysis of Alternative 2: Increase Density on Sites 1 Through 13

1. Air Quality

The air quality analysis for the proposed project determined that development of 1,678 residential units would exceed long-term operational standards, which would violate air quality standards, and allow for an increase in population growth that was not considered in the Air Quality Management Plan (AQMP), both of which would be inconsistent with the 2012 AQMP. In addition, if more than 210 units were under construction simultaneously, construction emissions could surpass thresholds and impact air quality. Alternative 2 would allow the development of approximately 130 fewer residential units than the proposed project and reduce the area of

disturbance by 83 acres, which would reduce short- and long-term air quality emissions. However, it is likely that under Alternative 2 air quality emissions would still exceed thresholds and development under this alternative would still allow for an increase in population growth that was not considered in the AQMP. While Alternative 2 would result in a lesser degree of air quality impacts than the proposed project, it would continue to result in significant and unavoidable impacts.

2. Biological and Natural Resources

Alternative 2 would reduce the area of disturbance by 83 acres, which, when compared to the proposed project, would reduce the potential to result in adverse effects to special-status plant and animal species and to critical habitat, loss of habitat for raptors and migratory birds, as well as active nesting sites for burrowing owls, disturb or degrade sensitive habitat (including riparian/riverine habitat as defined in the MSHCP), and result in the loss of jurisdictional waters of the United States and waters of the State. Implementation of mitigation measures MM 3.2.1, MM 3.2.2, MM 3.2.3a and 3.2.3b, MM 3.2.4, MM 3.2.5, and MM 3.2.8 would reduce these impacts to a less than significant level. Therefore, Alternative 2 would result in a lesser degree of impact to biological resources than the proposed project. However, all mitigation measures for the proposed project would remain applicable to this alternative in order to ensure potential impacts to biological resources are reduced to a less than significant level.

3. Climate Change and Greenhouse Gases

The proposed project will generate greenhouse gas emissions that would further contribute to effects on the environment. However, the proposed project would be consistent with the goals of AB 32, and interim SCAQMD thresholds would not be surpassed and the emissions would not be cumulatively considered. Alternative 2 would result in less construction activity and allow for 130 fewer residential units than the proposed project, which would generate less greenhouse gas emissions. Therefore, Alternative 2 would result in a lesser degree of impact to climate change and greenhouse gases than the proposed project.

4. Cultural and Paleontological Resources

The proposed project could result in a substantial adverse change in the significance of an archaeological resource, undiscovered cultural resource, unique paleontological resource, or undiscovered human remains. Implementation of mitigation measures MM 3.4.2a through 3.4.2d, MM 3.4.3, and MM 3.4.4 would reduce these impacts to a less than significant level. Alternative 2 would result in land disturbance activities over 83 fewer acres, which would reduce the potential to affect archaeological resources, undiscovered cultural resources, unique paleontological resources, or undiscovered human remains. Therefore, Alternative 2 would result in a lesser degree of impact to cultural resources than the proposed project; however, mitigation measures would remain applicable to development allowed under this alternative.

5. Geology, Soils, and Mineral Resources

The soil types in Wildomar are identified as being subject to strong seismic ground shaking and may be susceptible to seismic-related liquefaction or unstable soils. However, implementation of mitigation measure MM 3.5.1 would reduce these impacts to a less than significant level. In addition, the proposed project would potential adversely affect mineral resources. However, implementation of mitigation measure MM 3.5.9 would reduce this impact to a less than significant level by requiring a site-specific determination as to whether the project site would yield important or significant mineral resources. Alternative 2 would result in the disturbance of 83

fewer acres than the proposed project, which would reduce the potential for exposure to hazards associated with strong seismic ground shaking, seismic-related liquefaction, and unstable soils, as well as reducing the potential to adversely affect potential mineral resources. Therefore, Alternative 2 would result in a lesser degree of impact to geology, soils, and mineral resources than the proposed project; however, mitigation measures would remain applicable to any development allowed under this alternative.

6. Hydrology and Water Quality

The proposed project may result in erosion and water quality degradation downstream, alter drainage patterns which would increase runoff rates and volumes, and place housing within a 100-year floodplain. Implementation of mitigation measures MM 3.6.1 and MM 3.6.4 would reduce these impacts to a less than significant level. Alternative 2 would result in less ground disturbance and development of 130 fewer residential units, which would reduce the potential for erosion and water quality degradation, the effects on existing drainage patterns and runoff, and the risk of exposure to flooding hazards. Therefore, Alternative 2 would result in a lesser degree of impact to hydrology and water quality than the proposed project; however, mitigation measures would remain applicable to any development allowed under this alternative.

7. Land Use

The proposed project may conflict with the MSHCP; however, implementation of mitigation of measures MM 3.2.1 and MM 3.2.8 (from Section 3.2, Biological and Natural Resources) would reduce this impact to a less than significant level. Alternative 2 would reduce the area of disturbance by 83 acres, which would reduce the potential to conflict with the MSHCP. Therefore, Alternative 2 would result in a lesser degree of land use impacts; however, mitigation measures would remain applicable to any development allowed under this alternative.

Under Alternative 2, sites 14 through 25 would continue to have inconsistent zoning and land use designations, while the proposed project would eliminate the zoning and land use designation inconsistencies on sites 1 through 25. Therefore, the proposed project would result in less conflict between the General Plan and zoning than Alternative 2.

8. Population and Housing

The proposed project would result in less than significant impacts to population and housing. Alternative 2 would reduce the number of homes that may be built on the identified sites, and the associated increase in population would be less than with the proposed project. Neither the proposed project nor Alternative 2 would result in the displacement of people or housing. Therefore, Alternative 2 would result in lesser population and housing impacts than the proposed project.

9. Public Services, Utilities, and Recreation

The proposed project would result in an increase in population and housing, which would increase the demand for public services, utilities, and recreation. However, the demand would not result in the need for construction of new or expanded facilities that would result in adverse effects on the environment. Alternative 2 would allow less residential development and concentrate development over a smaller area, which would decrease the demand for public services, utilities, and recreation compared to the proposed project. Therefore, Alternative 2 would result in a lesser degree of impact to public services, utilities, and recreation.

10. Transportation and Circulation

The proposed project would result in less than significant impacts to transportation and circulation. Alternative 2 would allow fewer residential units, which would reduce the overall trip generation. Because sites 1 through 13 are spread fairly evenly throughout the city, this alternative would not concentrate a high volume of trips in one location. Therefore, Alternative 2 would have lesser transportation and circulation impacts than the proposed project.

4.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 4.0-1 provides a summary of the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the proposed project. Based on the evaluation contained in subsection 4.3, Alternative 2 would be the environmentally superior alternative, as it would result in lesser impacts to all resources.

TABLE 4.0-1
ALTERNATIVES IMPACTS COMPARISON

Environmental Issue	Proposed Project Impact Finding (Mitigated)	Alternative 1: No Project	Alternative 2: Increased Density Sites 1–13
Air Quality	Significant and Unavoidable	-	-
Biological and Natural Resources	Less Than Significant	-	-
Cultural and Paleontological Resources	Less Than Significant	-	-
Climate Change and Greenhouse Gases	Less Than Significant	-	-
Geology, Soils, and Mineral Resources	Less Than Significant	-	-
Hydrology and Water Quality	Less Than Significant	-	-
Land Use	Less Than Significant	+	-
Population and Housing	Less Than Significant	-	-
Public Services, Utilities, and Recreation	Less Than Significant	-	-
Transportation and Circulation	Significant and Unavoidable	-	-

- Impacts less than those under proposed project

+ Impacts greater than those under proposed project

= Impacts the same as those under proposed project, or no better or worse

5.0 Other CEQA Findings

This section discusses additional topics statutorily required by the California Environmental Quality Act (CEQA), including growth-inducing impacts and significant irreversible environmental changes/irretrievable commitment of resources.

5.1 GROWTH-INDUCING IMPACTS

INTRODUCTION

CEQA Guidelines Section 15126.2(d) requires that an environmental impact report (EIR) evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by CEQA Guidelines Section 15126.2(d) as follows:

> *...the way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth... Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also...the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.*

A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. For example, a project providing an increased water supply in an area where water service historically limited growth could be considered growth inducing.

The CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

The CEQA Guidelines state that it is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment (CEQA Guidelines Section 15126.2[d]). However, growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service. A project that would induce "disorderly" growth (growth that conflicts with local land use plans) could indirectly cause additional adverse environmental impacts and other public services impacts. Thus, to assess whether a growth-inducing project would result in adverse secondary effects, it is important to assess the degree to which the growth accommodated by a project would or would not be consistent with applicable land use plans.

COMPONENTS OF GROWTH

The timing, magnitude, and location of land development and population growth in a community or region are based upon various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and nonresidential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions.

PROJECT-SPECIFIC GROWTH-INDUCING IMPACTS

Growth Inducement Potential

The proposed project would allow the development of 1,678 high-density residential units on a total of 25 parcels that could result in 146 acres of new residential development. In addition to the proposed development, the proposed project also includes the adoption of the 2013–2021 Housing Element and other text amendments to the City's Zoning Ordinance to comply with changes in state law and implementation of the Housing Element programs.

Wildomar has approximately 122 acres of land designated Mixed Use Planning Area (MUPA) in the Land Use Element of the General Plan. As defined in the General Plan, the MUPA land use designation is intended for areas where a mixture of residential, commercial, office, entertainment, educational, and/or recreation uses or other uses are planned. The City does not have an implementing zone district, and this EIR evaluates the adoption of a Mixed Use (MU) overlay zone district that would establish development parameters for property owners in the proposed overlay zone district. The approval of the MU overlay zone district would allow for the development of at least 30 dwelling units per acre, resulting in a total of 1,085 dwelling units. Additionally, four sites have been identified for a rezone (from Rural Residential [R-R] and Business Park [BP] to Planned Residential [R-4]) and a General Plan Amendment (from Medium High Density Residential [MHDR] to Highest Density Residential [HHDR]), which would allow development up to 30 units to the acre, resulting in a total of 623 units.

Allowing the development of 1,678 residential units would result in additional growth. However, to meet the needs of the California Department of Housing and Community Development's (HCD's) "fair share" housing needs (Regional Housing Needs Allocation [RHNA]), the City must demonstrate available housing resources for the extremely low-income, very low-income, and low-income housing categories. The allowed development amount would satisfy and exceed the unaccommodated need of 364 units from the 2006–2014 RHNA and the need for 1,036 units from the current 2013–2021 RHNA. Providing 146 acres of land, developed with the required permitted use of at least 30 dwelling units per acre, would provide enough vacant land to accommodate at least 1,400 units, satisfying HCD requirements for the City's provision of affordable housing. While implementation of the Housing Element would allow increased growth, it is not anticipated to directly or indirectly induce increased growth. The proposed project does not involve the construction of new residences or infrastructure that could serve future residences.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Public Resources Code Section 21100(b)(2), a part of CEQA, requires that certain EIRs must include a discussion of significant irreversible environmental changes of project implementation. CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes as follows:

> *Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.*

The following long-term, irreversible environmental changes have been identified for the proposed project:

Land Use

Many of the housing units that may be developed consistent with the programs and policies in the proposed Housing Element would be located on sites that are currently undeveloped. Once these sites are developed, it would be economically unfeasible to restore them to their predevelopment conditions. As such, future generations would be committed to this change in land use.

Nonrenewable Resources

Development consistent with the proposed programs and policies in the Housing Element would irretrievably commit building materials and energy to the construction and maintenance of buildings and infrastructure. Nonrenewable and limited resources that would likely be consumed as part of project site development would include, but are not limited to, oil, natural gas, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar materials.

New housing would require additional utility service, as well as resources for construction. However, the creation of new housing in the city is intended to address Wildomar's need for affordable housing. Thus, the construction of this housing is expected to increase the availability of low-income housing stock that would meet or exceed the Regional Housing Needs Allocation.

6.0 Acronyms

AB	Assembly Bill
ADT	average daily trips
afy	acre-feet per year
AQMP	Air Quality Management Plan
BAU	business as usual
BMP	best management practice
BP	Business Park
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CalEEMod	California Emissions Estimator Model
Cal Fire	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	climate action plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CGS	California Geological Survey
CH_4	methane
CHSC	California Health and Safety Code
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CPS	Scenic Highway Commercial
CR	Commercial Retail
CRHR	California Register of Historic Resources
CWA	Clean Water Act
DEIR	Draft Environmental Impact Report
DOF	California Department of Finance
EIR	environmental impact report
EO	Executive Order

EPA	US Environmental Protection Agency
ESA	Endangered Species Act
EVMWD	Elsinore Valley Municipal Water District
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FGC	Fish and Game Code
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
GHG	greenhouse gas
gpcd	gallons per capita per day
gpd	gallons per day
gpm	gallons per minute
GWP	global warming potential
HCD	California Department of Housing and Community Development
HCP	habitat conservation plan
HFC	hydrofluorocarbons
HHDR	Highest Density Residential
I-15	Interstate 15
lbs/day	pounds per day
kg	kilogram
LCFS	Low Carbon Fuel Standard
LEUSD	Lake Elsinore Unified School District
LOS	level of service
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
mg/L	milligrams per liter
MHDR	Medium High Density Residential
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	municipal separate storm sewer system
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MT	metric ton
MU	Mixed Use (as in overlay zone)
MUPA	Mixed Use Planning Area
MWD	Metropolitan Water District of Southern California
NAAQS	national ambient air quality standards
NCDC	National Clean Diesel Campaign
NFIP	National Flood Insurance Program

NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NOA	Notice of Availability
NOC	Notice of Completion
NOP	Notice of Preparation
NO_2	nitrogen dioxide
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
N_2O	nitrous oxide
OPR	Office of Planning and Research
O_3	ozone
PFC	perfluorocarbons
PHF	peak-hour factor
PM	particulate matter
$PM_{2.5}$	fine particulate matter
PM_{10}	coarse particulate matter
POTW	publicly owned treatment works
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
psi	pounds per square inch
R-3	General Residential
R-4	Planned Residential
R-R	Rural Residential
RCFD	Riverside County Fire Department
RCHCA	Riverside County Habitat Conservation Agency
RCRA	Resource Conservation and Recovery Act
RCSD	Riverside County Sheriff's Department
RCTC	Riverside County Transportation Commission
RCWD	Rancho California Water District
RCWMD	Riverside County Waste Management Department
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RHNP	Regional Housing Needs Plan
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
SARWQCB	Santa Ana Regional Water Quality Control Board

SAW	Santa Ana Watershed
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SEMS	Standard Emergency Management System
SF_6	sulfur hexafluoride
SKR	Stephens' kangaroo rat
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SMW	Santa Margarita Watershed
SoCalGas	Southern California Gas Company
SO_2	sulfur dioxide
SOx	sulfur oxide
SDRWQCB	San Diego Regional Water Quality Control Board
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act of 1975
SoCAB	South Coast Air Basin
SRA	source receptor area
SRRE	source reduction and recycling element
SSO	sanitary sewer overflow
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
T-BACT	Toxic Best Available Control Technology
TDS	total dissolved solids
TIA	traffic impact analysis
TMDL	total maximum daily load
USACE	US Army Corps of Engineers
UBC	Uniform Building Code
USC	United States Code
USFWS	US Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
V/C	volume-to-capacity ratio
VHFHS	very high fire hazard severity
WDR	Waste Discharge Requirements
WQMP	Water Quality Management Plan
WRCC	Western Regional Climate Center
WRCOG	Western Riverside Council of Governments
WWTP	wastewater treatment plant

7.0 Report Preparers

CITY OF WILDOMAR

Planning Director	Matthew C. Bassi
City Engineer	Dan York
Assistant City Attorney	Erica L. Vega

PMC – EIR CONSULTANT

Project Director	Mark Teague, AICP
Project Manager	Bob Stark, AICP
Deputy Project Manager	Yvette Noir
Environmental Planner	Seth Myers
Environmental Planner	Pam Lapham
Environmental Planner	Jessica Heuer
Graphics	Jonathan Faoro
Principal Biologist	Joyce Hunting
Technical Editor	Suzanne Wirth

TRAFFIC IMPACT ANALYSIS	**ARIC EVATT, URBAN CROSSROADS**
GRAPHICS	**MARK DUMFORD, INTERWEST**
GRAPHICS	**BRAD FINDLAY, INTERWEST**