

1. SUMMARY

The entire project site occupies 1,854.5 acres, including the 1,261.8-acre Mission Village tract map site and an additional 592.8 acres of off-site land primarily within the boundaries of the approved Specific Plan. The project site includes 277.9 acres of riparian vegetation, including 111.8 acres of riparian woodland (southern willow scrub, shrub tamarisk, and southern cottonwood-willow riparian) and 166.1 acres of other riparian vegetation communities. The project site includes 1,576.8 acres of upland vegetation communities and land covers, of which 1,430.4 acres occur outside the 100-year floodplain of the Santa Clara River. The project site includes 1.5 miles of the Santa Clara River mainstem; this represents 1.7 percent of the overall Santa Clara River mainstem (86 miles). The total Mission Village project area, inclusive of infrastructure improvements, includes approximately 5 miles of the Santa Clara River mainstem (6 percent of overall). The Mission Village project, including the necessary off-site project components, would result in the permanent conversion of, or temporary disturbance to, 1,493.1 acres of the following:

- 413.4 acres of California sagebrush scrub
- 16.1 acres of California sagebrush scrub–Artemisia
- 12.9 acres of California sagebrush scrub–black sage
- 83.2 acres of California sagebrush scrub–California buckwheat
- 13.9 acres of California sagebrush scrub–undifferentiated chaparral
- 127.0 acres of California sagebrush scrub–purple sage
- 0.1 acre of disturbed California sagebrush scrub
- 394.3 acres of disturbed lands
- 219.9 acres of land currently used for agricultural purposes
- 8.0 acres of developed land
- 19.7 acres of river wash
- 28.8 acres of southern cottonwood-willow riparian forest
- 66.1 acres of California annual grassland
- 34.3 acres of undifferentiated chaparral
- 7.8 acres of coast live oak woodland
- 22.3 acres of big sagebrush scrub
- 0.7 acre of southern willow scrub
- 6.9 acres of arrow weed scrub
- 5.6 acres of Mexican elderberry scrub
- 2.6 acres chamise chaparral
- 1.8 acres of chamise–hoaryleaf ceanothus chaparral
- 1.9 acres of valley oak/grass
- 1.6 acres of herbaceous wetlands

- 1.8 acres of mulefat scrub
- 1.1 acre of disturbed mulefat scrub
- 0.6 acre of eriodictyon scrub
- 0.1 acre of giant reed grassland
- 0.5 acre of alluvial scrub.

Development of the proposed project would preclude landscape level or regional wildlife movement between the Santa Clara River and undeveloped lands to the south. Dead-End Canyon, Middle Canyon, and Magic Mountain Canyon would be developed and eliminated as potential wildlife movement corridors. Lion Canyon and Exxon Canyon would not be developed, but would become dead-ends and preclude movement between large habitat areas. Although the Mission Village portion of the Specific Plan area would be developed and affect local wildlife movement, regional habitat connectivity would be maintained. The conceptual regional open space plan developed by Penrod et al.,¹ provides for landscape-scale habitat connectivity between the Santa Susana Mountains to the south and the Los Padres National Forest to the north encompasses the High Country SMA/SEA 20 and the Salt Creek area and the Santa Clara River west of Mission Village. The High Country SMA/SEA 20 and Salt Creek area comprise an important part of the “least cost (best potential route) path” linkage design identified by Penrod et al.² They provide a key part of the east–west linkage that crosses I-5 and connects with the Angeles National Forest in the San Gabriel Mountains to the east and with Ventura County SOAR open space to the southwest. They also provide a significant part of the north–south linkage between the Santa Susana Mountains and the “Fillmore Greenbelt” to the northwest that further links up with the Los Padres National Forest and the Angeles National Forest to the north.

In approving the Specific Plan and Conditional Use Permit No. 94-087-(5), the Board of Supervisors found that the Specific Plan contained sufficient natural vegetative cover and open space to buffer critical resources in the River Corridor SMA/SEA 23 from the development shown in the Specific Plan. The Board of Supervisors further found that the Specific Plan incorporated extensive buffer areas to protect critical resources within the Santa Clara River. The Specific Plan’s adopted Resource Management Plan requires a minimum 100-foot-wide setback adjacent to the Santa Clara River between (a) the river side of the top of bank stabilization and (b) development within certain specified land use designations (including those of the Mission Village project site). This requirement may be modified if the Planning Director, in consultation with the County staff biologist, determines that a smaller buffer would adequately protect the riparian resources within the River Corridor SMA/SEA 23, or that a 100-foot-wide

¹ K. Penrod et al., *South Coast Missing Linkages Project: A Linkage Design for the Santa Monica-Sierra Madre Connection* (Idyllwild, California: South Coast Wildlands, in cooperation with the National Park Service, Santa Monica Mountains Conservancy, California State Parks, and The Nature Conservancy, 2006).

² Ibid.

setback is infeasible for physical infrastructure planning. Again, these buffer criteria are consistent with the Buffer Study³ and CDFG recommendations described below in **subsection 9(b)(1)(b)(2)(c)**.

Significant impacts associated with the Specific Plan would occur with respect to the loss of mulefat scrub, coast live oak woodland, coastal sage scrub, Mexican elderberry scrub, southern willow scrub, southern cottonwood willow riparian forest, great basin scrub, scalebroom scrub, valley freshwater marsh, wildlife habitat, special-status bird nests, special-status plant species, protected oaks, special-status wildlife species, and California Department of Fish and Game (CDFG) and U.S. Army Corps of Engineers (Corps) jurisdictional resources. Significant indirect impacts would occur with respect to increased light and glare, increased non-native plant species, and increased human and domestic animal presence.

The direct and indirect impacts associated with development and operation of the Mission Village project are consistent with the findings of the Newhall Ranch Specific Plan Program EIR (March 1999)⁴ and Revised Additional Analysis (May 2003).⁵ Implementation of the mitigation measures required by the Newhall Ranch Specific Plan Program EIR and the Specific Plan Resource Management Plan (RMP), as well as the additional mitigation measures required by this EIR, would mitigate project-specific impacts to less than significant levels. Due to the incorporation of additional mitigation measures required by this EIR, those project-level significant unavoidable impacts identified in the Newhall Ranch Specific Plan Program EIR (i.e., loss of sensitive animal species, coastal sage scrub, and wildlife habitat, and the increase in human and domestic animal presence) would be mitigated to less than significant. The Mission Village project would contribute to a significant unavoidable cumulative impact related to regional impacts to coastal scrub and San Fernando Valley spineflower individuals.

The Mission Village Biological Resources Technical report was reviewed by the Significant Environmental Area Technical Advisory Committee (SEATAC) on three separate occasions: January 29, 2007, September 10, 2007, and April 7, 2008. This EIR section reflects comments received from the SEATAC.

2. INTRODUCTION

a. Relationship of Project to Newhall Ranch Specific Plan Program EIR

Section 4.6 of the Newhall Ranch Specific Plan Program EIR identified and analyzed the existing conditions, potential impacts, and mitigation measures associated with biological resources for the entire Newhall Ranch Specific Plan. Subsequent to certification of the Newhall Ranch Specific Plan Program

³ Impact Sciences, *North Valencia Annexation Buffer Study*, prepared for Newhall Land and Farming Company. April 28, 1997.

⁴ County of Los Angeles, *Environmental Impact Report (EIR) for the Newhall Ranch Specific Plan and Water Reclamation Plant* (1999).

⁵ Impact Sciences, Inc., *Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Program EIR, Volume VIII* (2003).

EIR, a more detailed review was conducted of the Specific Plan's biological effects caused by changes to the hydrology and hydraulics of the Santa Clara River in the Newhall Ranch Revised Additional Analysis (2003),⁶ Section 2.3, Floodplain Modifications. The Revised Additional Analysis (Sections 2.2 and 2.4) also examined in greater depth the Salt Creek Corridor and Specific Plan consistency against Los Angeles County (County) General Plan policies pertaining to Significant Ecological Areas (SEA).

This project-level EIR is tiering from the previously certified Newhall Ranch Specific Plan Program EIR. Section 4.3 assesses the Mission Village project's existing biological conditions, the project's potential environmental impacts on biological resources, and the biology mitigation measures from the Newhall Ranch Specific Plan Program EIR, and additional mitigation measures recommended by this EIR for the Mission Village project.

All subsequent project-specific development plans and tentative subdivision maps must be consistent with the Newhall Ranch Specific Plan and the County of Los Angeles General Plan and Santa Clarita Valley Areawide Plan.

b. Newhall Ranch Specific Plan

The approved Newhall Ranch Specific Plan guides future development of the Newhall Ranch community, located in northern Los Angeles County. The Santa Clara River and SR-126 traverse the northern portion of the Specific Plan area. The river extends approximately 5.5 miles east to west across the Specific Plan site. On May 27, 2003, the Los Angeles County Board of Supervisors approved the Specific Plan, which established the general plan, zoning designations, and development standards necessary to develop the Specific Plan site. The approved Specific Plan sets forth a comprehensive set of plans, development regulations, design guidelines, and implementation programs to develop the Specific Plan site, consistent with the goals, objectives, and policies of the Los Angeles County General Plan and Santa Clarita Valley Area Plan, as amended by General Plan Amendment No. 94-087-(5) (approved May 27, 2003). The Specific Plan was designed so that all subsequent development plans and subdivision maps associated with Newhall Ranch would be consistent with both the Los Angeles County General Plan and Santa Clarita Valley Area Plan. The Specific Plan also includes the Newhall Ranch Water Reclamation Plan (WRP) at the western edge of the Specific Plan area. Individual projects, such as residential, mixed-use, commercial, non-residential developments, roadways, public facilities, and amenities, would be developed over time in accordance with the approved Specific Plan. Many of these individual development projects would require work in and adjacent to the Santa Clara River and its tributaries. The first such project to be processed through the County under the approved Specific Plan is the Landmark Village project, with Mission Village being the second.

⁶ Impact Sciences, Inc., *Revised Additional Analysis*.

Environmental review for both the Specific Plan and the WRP was conducted by Los Angeles County, pursuant to the California Environmental Quality Act (CEQA). In the environmental documentation, the Specific Plan was evaluated at a “program” level, and the Newhall Ranch WRP was analyzed at a “project” level. The County Board of Supervisors certified the adequacy of the Newhall Ranch Specific Plan Program EIR on May 27, 2003. After certification, the Board of Supervisors adopted the required resolution, findings, and conditions approving the Specific Plan, WRP, and other associated local project approvals.

The approved Specific Plan (May 2003) authorizes a broad range of residential (and associated school sites, parks, and other facilities), mixed-use development (*e.g.*, commercial, residential, office), and non-residential development (*e.g.*, commercial, business park, visitor-serving, community facilities, including fire stations, library, WRP), and arterial roads, bridges, and other infrastructure, facilities, and amenities. The Specific Plan’s total number of permitted residential dwelling units (20,885) would be constructed on approximately 2,391 acres. The Specific Plan also permits about 67 acres of commercial uses; approximately 249 acres of business park uses; 36.7 acres of High Country Special Management Area (SMA) Visitor-Serving Uses; approximately 1,010 acres of Open Area; approximately 5,180 acres of SMA/Open Space; 10 neighborhood parks; recreational lake; public trail system; golf course; fire stations; public library; electrical substation; reservation of elementary school sites, junior high school site, and a high school site; a 6.8 mgd WRP; and other associated community facilities and amenities. Buildout of the Specific Plan is projected to occur over approximately 20 years, depending upon economic and market conditions.

(1) *Specific Plan’s Existing Setting*

The Specific Plan area is topographically diverse with slope gradients ranging from moderate to steep in the hillsides, to very gentle in the Santa Clara River floodplain and in major tributary canyons. Also, there are mesas adjacent to the Santa Clara River (*e.g.*, Grapevine Mesa and Airport Mesa). Site elevations range from 825 feet above mean sea level (AMSL) in the Santa Clara River bottom at the Ventura County/Los Angeles County line, to approximately 3,200 feet AMSL on the ridgeline of the Santa Susana Mountains along the southern boundary. The primary ridges are east-, west-, and northwest-trending, with secondary ridges trending north and south. There are many distinctive ridges in the Specific Plan area, including Sawtooth Ridge along the northeastern side of Long Canyon, and Ayers Rock at the northern edge of Potrero Canyon.

Native and naturalized habitats within the Specific Plan area are representative of those found in this region and provide high-quality examples of those plant communities found in the Santa Susana Mountains and the Santa Clara River ecosystems. Upland habitats dominate the landscape within the Specific Plan area, both north and south of the Santa Clara River. The major upland plant communities include California sagebrush scrub, undifferentiated chaparral, coast live oak and valley oak woodlands,

and California annual grassland. However, the Specific Plan site also contains valley oak/grass, mixed oak woodland, chamise chaparral, California walnut woodland, and big sagebrush scrub. The Santa Clara River supports a variety of riparian plant communities, including southern cottonwood-willow riparian forest, southern willow scrub, southern coast live oak riparian forest, mulefat scrub, elderberry scrub, arrow weed scrub, giant reed, tamarisk scrub, herbaceous wetland, bulrush/cattail wetland, cismontane alkali marsh, and coastal and valley freshwater marsh and seeps. Intermittent and ephemeral drainages on site also provide habitat for alluvial scrubs.

The riparian habitat along the Santa Clara River has been designated as critical habitat by the USFWS for the state- and federally listed endangered least Bell's vireo (*Vireo bellii pusillus*). The River also provides habitat for the state- and federally listed endangered southwestern willow flycatcher (*Empidonax traillii extimus*). The River itself supports the state- and federally listed endangered and state fully protected unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*).

There are two SEAs within the boundary of the approved Specific Plan: (1) the High Country SMA/SEA 20, which is comprised of diverse oak woodland habitats that function as a wildlife corridor/linkage between the San Gabriel and Santa Monica Mountains; and (2) the River Corridor SMA/SEA 23, which is comprised of aquatic habitat within the Santa Clara River corridor that supports the endangered unarmored threespine stickleback and other listed and sensitive species.

The applicant leases portions of the Specific Plan area for oil and natural gas production, as well as for cattle grazing, ranching, and agricultural operations (e.g., food crop production, dry land farming, honey farming). All such operations are currently ongoing. In addition, the applicant leases the Specific Plan site to the movie industry for set locations. A minor land use includes employee houses, an oil company office, and miscellaneous structures. There are several easements on the Specific Plan site, including oil, natural gas, electrical, telephone, and water easements. In particular, Southern California Edison and Southern California Gas Company maintain distribution lines within on-site easements.

Grazing activities and oil and natural gas production have had an effect on much of the natural habitat on site. Scrub habitats have been displaced by annual grasslands as a result of grazing and land clearing for agriculture and other historic land uses. In addition, the Specific Plan site has been fragmented by dirt and asphalt roads, graded oil well pads and pipelines, and pumping, storage, and transmission facilities. **Figure 2.0-1** depicts the existing and ongoing agricultural, grazing, and oil leasing activities within the project area. Existing cultivated agricultural fields comprise approximately 1,965 acres; oil field leasing and other related disturbed areas comprise about 1,209 acres; and grazing areas comprise approximately 11,048 acres.

(2) *Specific Plan's Approved Land Use Plan*

The approved Newhall Ranch Specific Plan Land Use Plan in the vicinity of the Mission Village project site is shown on **Figure 2.0-4**, and it provides the framework for the approved development within the Specific Plan site. The approved Land Use Plan describes the land use designations that include Residential (five types), Mixed-Use, Commercial, Business Park, Visitor-Serving, Open Area, the two River Corridor and High Country SMAs, and a Spineflower Conservation Overlay Easement area, all linked by a comprehensive system of roadways, trails, and paseos. Land use overlays are included on the approved Land Use Plan to show approximate locations of public facilities such as parks, schools, library, golf course, fire stations, and the WRP. This information is summarized below. Additional information regarding the Specific Plan's approved Land Use Plan is found in Section 2.3 of the approved Specific Plan (May 2003).

(3) *High Country SMA/SEA 20 and River Corridor SMA/SEA 23*

The largest land use designation of the Newhall Ranch Specific Plan Land Use Plan (**Figure 2.0-4**) is the approximate 4,205-acre High Country SMA/SEA 20. The High Country SMA/SEA 20 is located in the southern portion of the Specific Plan site and includes oak savannahs, high ridgelines, and various canyon drainages, including the Salt Creek watershed in Los Angeles County. Salt Creek is a regionally significant wildlife corridor that provides an important habitat link to the Santa Clara River. The Santa Clara River is an important east-west riparian corridor within the Specific Plan site. This corridor also serves as an important connection between the upland habitats to the north and south of the River. Specifically, large expanses of undeveloped land (*i.e.*, Salt Creek in Los Angeles County) allow for the movement of wildlife to the River and back. Salt Creek also provides wildlife movement connectivity between the River Corridor SMA/SEA 23 and the High Country SMA/SEA 20.

The Specific Plan's previously adopted Resource Management Plan requires the High Country SMA/SEA 20 to be dedicated in fee to a *joint powers authority* (JPA) consisting of representatives from the Los Angeles County (four members), the City of Santa Clarita (two members), and the Santa Monica Mountains Conservancy (two members). The JPA would have overall responsibility for recreation within and conservation of the High Country SMA/SEA 20. The Center for Natural Lands Management would be responsible for resource conservation and management in the High Country SMA/SEA 20. An assessment district would be formed under the authority of the Los Angeles County Board of Supervisors to generate revenue to be distributed to the JPA for recreation, maintenance, construction, conservation, and related activities within the High Country SMA/SEA 20.

Prior to dedication in fee of the High Country SMA/SEA 20, the Specific Plan requires that a conservation and public access easement be offered to the County of Los Angeles and that a conservation and management easement be offered to the Center for Natural Lands Management. The Specific Plan also

requires that the County's conservation and public access easement be consistent with any other conservation easements to state or federal resource agencies, which may have been granted as part of the mitigation actions required by state and federal permits. In addition, the conservation and public access easement is to prohibit grazing within the High Country SMA/SEA 20, except for those grazing activities associated with long-term resource management plans; and restrict recreation to the established trail system.

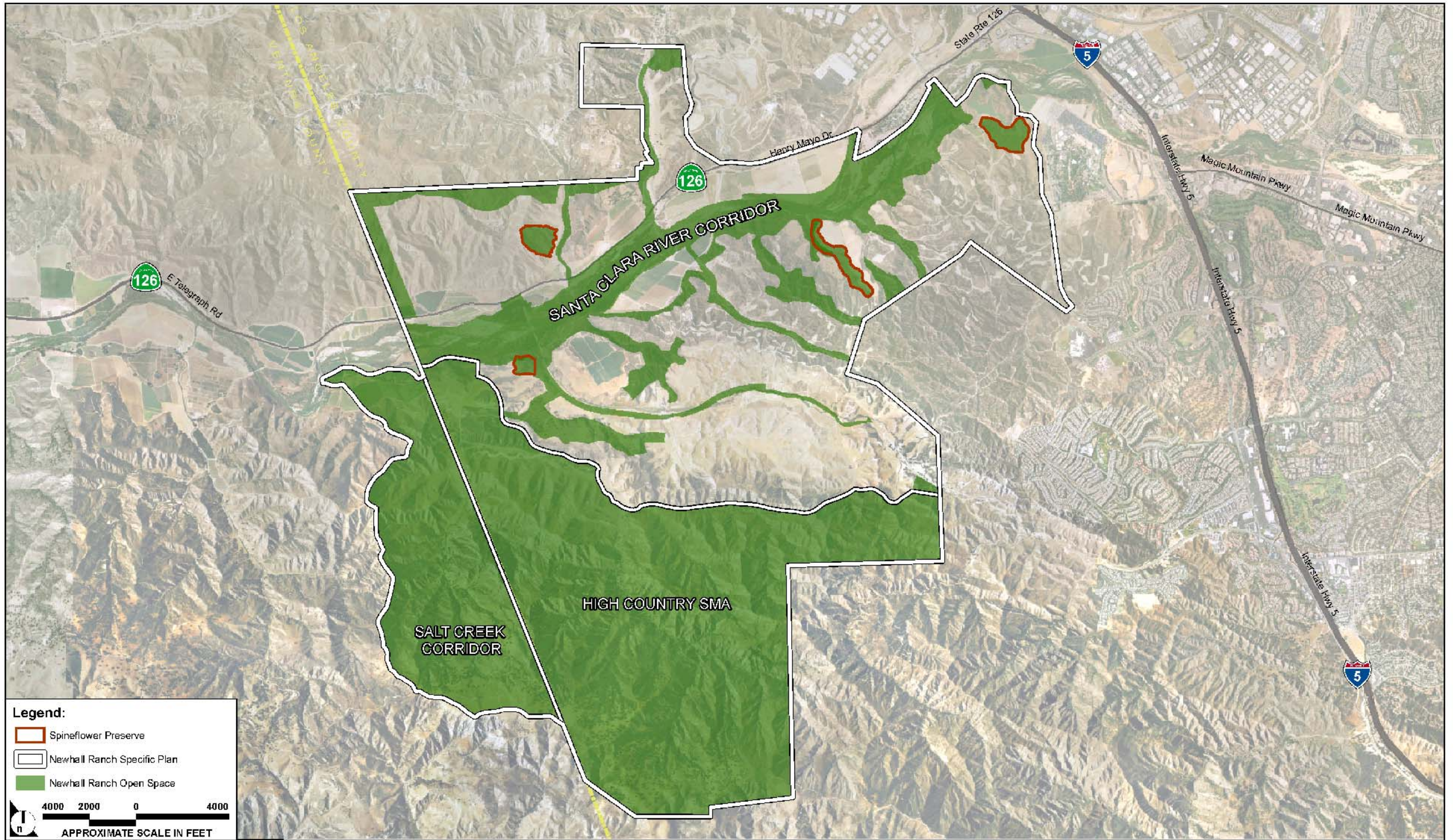
Pursuant to the Specific Plan, the High Country SMA/SEA 20's dedication in fee is to occur in three approximately equal phases of about 1,400 acres each, proceeding from north to south within the Specific Plan site, as follows: (a) the first offer of dedication would take place with issuance of the 2,000th residential building permit of the Specific Plan; (b) the second offer of dedication would take place with issuance of the 6,000th residential building permit; and (c) the remaining offer of dedication would be completed by the 11,000th residential building permit.

(4) Salt Creek Dedication and Management Area

As part of its approval of the Specific Plan in 2003, the Los Angeles County Board of Supervisors imposed an off-site condition which required that the applicant dedicate to the public the 1,517-acre (approximately) portion of the Salt Creek Watershed in Ventura County, adjacent to the western boundary of the Specific Plan site. Figure 4.3-1, Protected and Preserved Lands, depicts the off-site salt creek area in relation to the Newhall Ranch Specific Plan. The applicant must satisfy this condition by dedicating the Salt Creek area in fee and/or by conservation easement to the JPA, which is responsible for overall recreation and conservation of the High Country SMA/SEA 20. The Salt Creek Area is to be managed in conjunction with and in the same manner as the High Country SMA/SEA 20. Protection of the Salt Creek Area in both Los Angeles County and Ventura County enhances the Specific Plan's compatibility with animal movement in the region.

The Specific Plan's previously approved Resource Management Plan identified the High Country SMA/SEA 20 as a primary location for mitigating impacts that would occur within the development areas of the Specific Plan. The Salt Creek area provides similar mitigation opportunities. Both the High Country SMA/SEA 20 and the Salt Creek area provide mitigation opportunities for oak resources, slender mariposa lily, coastal sage scrub, and wetland creation, restoration, and enhancement, and other sensitive biological resources.⁷

⁷ For further information regarding mitigation opportunities for slender mariposa lily, coastal sage scrub, oak tree/woodland, and wetlands creation/restoration/enhancement within the High Country SMA/SEA 20, please refer to the Biological Resources Technical Report for the Newhall Ranch High Country Special Management Area and Salt Creek Area (Dudek, October 2006), a copy of which is located in **Appendix 4.5** of the 2009 Draft Environmental Impact Statement/Environmental Impact Report EIS/EIR.



SOURCE: Newhall Ranch 2008; Impact Sciences Inc. 2009

FIGURE 4.3-1

Mission Village EIR

Protected and Preserved Lands

The Newhall Ranch Specific Plan will not significantly affect wildlife movement in the Salt Creek corridor. Wildlife movement within the Salt Creek watershed occurs primarily along the general direction of the drainages between the Santa Susana Mountains and the Santa Clara River Valley. These routes are used because they follow the gentlest topography and more open habitat. Wildlife movement between watersheds to the east and west are easiest at the upper and lower ends of the watersheds. At the lower ends, canyons merge in the Santa Clara River Valley and are generally flat with less steep ridges. At the upper ends of the watersheds, the ridgeline of the Santa Susana Mountains provides less steep connections to the upper reaches of the canyons and adjacent watersheds.

As part of the original approval of the Newhall Ranch Specific Plan, the Board of Supervisors established a 0.5-mile-wide buffer south of the Santa Clara River and a 0.125-mile buffer north of the river between all development proposed as part of the Specific Plan and the Los Angeles County/Ventura County jurisdictional line. Habitat loss in the Potrero Creek watershed would potentially cause a shift in some wildlife populations to undisturbed habitats in the Salt Creek watershed in both Los Angeles County and Ventura County. Habitat losses in the Potrero Creek watershed also would potentially affect the long-term movement of wildlife within this watershed and within the Salt Creek watershed in both Ventura County and Los Angeles County. However, no direct impacts to that portion of the Salt Creek watershed in Ventura County would occur in association with the Specific Plan because no development is proposed in the Ventura County portion of the Salt Creek corridor, and because all development proposed as part of the Specific Plan would occur no closer than 0.5 mile from Ventura County.

Note that buildout of the Specific Plan will occur over an approximate 20-year period. Consequently, the displacement of wildlife species, primarily larger mammals, would occur incrementally over an extended period. These larger wildlife species (*e.g.*, mountain lion, deer, bobcat, and coyote) generally have home ranges that are not confined to one watershed, and would be expected to be displaced in relatively small numbers. In contrast, the smaller wildlife species will more likely suffer from direct mortality because of land development, and would not be displaced into adjacent watersheds. This time factor allows for a very gradual shift (*i.e.*, over a period of decades) of wildlife use/movement for those animals able to move a distance of more than 0.5 mile from the Specific Plan area in Los Angeles County to adjacent undeveloped areas, including the Salt Creek watershed in Ventura County. These very gradual (and temporary) increases in wildlife use/movement in the Salt Creek watershed in both Los Angeles County and Ventura County would be easier to absorb over several years (*i.e.*, the animals would have more time to adapt to the available resources or would have time to move out of the Salt Creek watershed to adjacent watersheds). Therefore, the direct impacts of habitat loss in the Specific Plan area on wildlife movement within the Salt Creek watershed, and particularly the Ventura County portion given its distance away from proposed development, are not considered significant. Nevertheless, the Board of Supervisors imposed a condition requiring the applicant to enhance and increase the effectiveness of animal movement protections within the Salt Creek wildlife corridor.

3. SUMMARY OF THE NEWHALL RANCH SPECIFIC PLAN PROGRAM EIR FINDINGS

The approved Newhall Ranch Specific Plan would develop approximately 5,793 acres of the 11,963-acre Specific Plan site (or 49 percent of the site), and would preserve as undeveloped land a total of approximately 6,170 acres (or 51 percent of the site). In addition, a condition of approval requires the applicant to dedicate to the public 1,517 acres of off-site land in the remaining Salt Creek watershed in Ventura County, adjacent to the Specific Plan site. This land is also required to be managed in conjunction with and in the same manner as the High Country Special Management Area (SMA)/Significant Ecological Area (SEA) 20. Portions of proposed development within the Specific Plan area would occur in sensitive upland and riparian habitats. Therefore, the Specific Plan was determined to have significant impacts on the biological resources located on the site. Implementation of measures contained in the Specific Plan RMP and those measures contained in the Newhall Ranch certified environmental documentation would reduce some, but not all, Specific Plan impacts to special-status plant and wildlife species, riparian, wetland and aquatic resources (located along the river corridor) to below California Environmental Quality Act (CEQA) thresholds of significance. While mitigation is also provided to reduce the magnitude of impacts to upland resources, certain of these impacts were also expected to remain significant. Also, despite the preservation of the major wildlife corridor along the Santa Clara River, the Specific Plan would significantly impact the ability of some animals to move across portions of the Specific Plan area. Table 4.3-1, Significant Biological Impacts – Newhall Ranch Specific Plan and WRP, summarizes the Specific Plan’s impacts on biological resources, the applicable mitigation measures, and the significance findings after the mitigation is implemented.

**Table 4.3-1
Significant Biological Impacts – Newhall Ranch Specific Plan and WRP**

| Impact Description | Mitigation Measures | Conclusion After Mitigation |
|--|---|-----------------------------|
| General Wildlife Impacts –Based on the amount of habitat lost (5,132 acres), the impact potential of implementation of the Newhall Ranch Specific Plan on the diminishment of habitat for wildlife or plants is considered significant. | See measures listed below for impacts to sensitive animal species. | Significant |
| The impact potential of implementation of the Newhall Ranch Specific Plan on the movement of resident wildlife species is considered significant due to the reduction in open land available for wildlife movement between the river and upland areas. | See measures listed below for impacts to sensitive animal species and habitats. | Significant |

Table 4.3-1 (Continued)
Significant Biological Impacts—Newhall Ranch Specific Plan and WRP

| Impact Description | Mitigation Measures | Conclusion After Mitigation |
|--|---|-----------------------------|
| Loss of Habitat —As approved, implementation of the Specific Plan would result in the loss of 1,820 of the 5,183 acres of coastal sage scrub, 202 of the 1,213 acres of chaparral, and 1,480 of the 1,896 acres of non-native grassland habitat present on the site (when combined, 42 percent of these vegetation types would be lost). Given the concern for this species (coast horned lizard) in the region, the substantial loss of habitat, and potentially the direct loss of individuals of this species, this impact would be considered significant without mitigation. | See measures listed below for impacts to sensitive animal species and habitats. | Significant |
| It is acknowledged that any loss of plant species listed as Rare, Threatened, or Endangered is considered a significant impact. Those include the following: | | |
| Slender-horned spineflower (significant if present) | Mitigation Measures 4.6-27, 4.6-34, 4.6-35, and 4.6-53 | Not Significant |
| California Orcutt grass | Mitigation Measures 4.6-27, 4.6-34, 4.6-35, and 4.6-53 | Not Significant |
| Lyon's pentachaeta | Mitigation Measures 4.6-27, 4.6-34, 4.6-35, and 4.6-53 | Not Significant |
| Nevin's barberry | Mitigation Measures 4.6-27, 4.6-34, 4.6-35, and 4.6-53 | Not Significant |
| Thread-leaved brodiaea | Mitigation Measures 4.6-27, 4.6-34, 4.6-35, and 4.6-53 | Not Significant |
| Santa Susana tarplant | Mitigation Measures 4.6-27, 4.6-34, 4.6-35, and 4.6-53 | Not Significant |
| Braunton's milk vetch | Mitigation Measures 4.6-27, 4.6-34, 4.6-35, and 4.6-53 | Not Significant |
| San Fernando Valley spineflower (significant in Additional Analysis) | Mitigation Measures 4.6-53, 59, and 65–80 | Not Significant |
| Short-joint beavertail cactus (significant in Additional Analysis) ^a | Mitigation Measures 4.6-27, 34, 35, 53, and 59 | Not Significant |
| Calochortus (potentially significant in Additional Analysis depending upon actual species present) | Mitigation Measures 4.6-27, 34, 35, 53, and 59 | Not Significant |
| Dudleya (potentially significant depending upon actual species present) ^a | Mitigation Measures 4.6-27, 34, 35, 53, and 59 | Not Significant |
| Based on this analysis of indirect impacts to spineflower and other sensitive plants, seven indirect impacts/edge effects are considered significant in connection with the proposed development of Newhall Ranch. | Mitigation Measures 4.6-53, 4.6-59, and 4.6-65–80 | Not Significant |
| Project construction and operation may have potential significant impacts on a number of sensitive animal species through loss of habitat and/or decrease in water quality if impacts are unmitigated. Species include the following: | | |
| Santa Ana sucker | Mitigation Measures 4.6-44, 4.6-53, 4.6-55, 4.6-57, and 4.6-58 | Not Significant |
| Unarmored threespine stickleback | Mitigation Measures 4.6-53, 4.6-54, 4.6-55, 4.6-57, 4.6-58, and 4.6-59 | Not Significant |

Table 4.3-1 (Continued)
Significant Biological Impacts—Newhall Ranch Specific Plan and WRP

| Impact Description | Mitigation Measures | Conclusion After Mitigation |
|--|--|------------------------------------|
| Arroyo chub | Mitigation Measures 4.6-44, 4.6-53, 4.6-55, 4.6-57, and 4.6-58 | Not Significant |
| Arroyo southwestern toad | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Western spadefoot toad | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-56, and 4.6-55 | Not Significant |
| Silvery legless lizard | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Southwestern pond turtle | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-56, and 4.6-55 | Not Significant |
| Coastal rosy boa | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| San Bernardino ringneck snake | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Two-striped garter snake | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-56, and 4.6-55 | Not Significant |
| California horned lizard | Mitigation Measures 4.6-27–4.6-43, 4.6-53, 4.6-56, and 4.6-55 | Significant |
| San Diego horned lizard | Mitigation Measures 4.6-27–4.6-43, 4.6-53, 4.6-56, and 4.6-55 | Significant |
| Coast patch-nosed snake | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Least Bell's vireo | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-56, and 4.6-59 | Not Significant |
| Southwestern willow flycatcher | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-56, and 4.6-59 | Not Significant |
| Northern harrier | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Cooper's hawk | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Vermilion flycatcher | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Yellow warbler | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Summer tanager | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Southern California rufous-crowned sparrow | Mitigation Measures 4.6-27–4.6-43, 4.6-53, 4.6-56, and 4.6-55 | Significant |
| Tricolored blackbird | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-56, and 4.6-55 | Significant |
| Great blue heron | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Great egret | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |

Table 4.3-1 (Continued)
Significant Biological Impacts—Newhall Ranch Specific Plan and WRP

| Impact Description | Mitigation Measures | Conclusion After Mitigation |
|--|---|------------------------------------|
| Snowy egret | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55 and 4.6-56 | Not Significant |
| Black-crowned night heron | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| White-tailed kite | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Swainson’s hawk | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Mountain plover | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Western least bittern | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Fulvous whistling duck | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Bell’s sage sparrow | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Ferruginous hawk | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Western burrowing owl | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Sharp-shinned hawk | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Golden eagle | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| Pallid bat | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Pocketed free-tailed bat | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Pale Townsend’s big-eared bat | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Greater western mastiff bat | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Mountain lion | Mitigation Measures 4.6-27–4.6-43, and 4.6-53 | Significant |
| San Diego black-tailed jackrabbit | Mitigation Measures 4.6-27–4.6-43, 4.6-53, 4.6-56, and 4.6-55 | Significant |
| San Diego desert woodrat | Mitigation Measures 4.6-27–4.6-43, 4.6-53, 4.6-56, and 4.6-55 | Significant |
| Yuma myotis | Mitigation Measures 4.6-1–4.6-26, 4.6-53, 4.6-55, and 4.6-56 | Not Significant |
| Development of the Specific Plan would result in impacts to sensitive habitats including the following: | | |
| Coast Live Oak Woodland | Mitigation Measures 4.6-28 and 4.6-48 | Significant |
| Coastal sage scrub | Mitigation Measures 4.6-27–4.6-43 | Significant |

Table 4.3-1 (Continued)
Significant Biological Impacts—Newhall Ranch Specific Plan and WRP

| Impact Description | Mitigation Measures | Conclusion After Mitigation |
|---|---|-----------------------------|
| Valley oak woodland/savanna | Mitigation Measures 4.6-27–4.6-43 | Significant |
| Elderberry scrub | Mitigation Measures 4.6-27–4.6-43, and 4.6-60 | Not Significant |
| Mainland cherry forest | Mitigation Measures 4.6-27–4.6-43, and 4.6-61 | Not Significant |
| Southern willow scrub | Mitigation Measures 4.6-1–4.6-26 | Not Significant |
| Southern cottonwood-willow riparian forest and southern willow riparian woodland | Mitigation Measures 4.6-1–4.6-26 | Not Significant |
| Valley freshwater marsh and ponds | Mitigation Measures 4.6-1–4.6-26 | Not Significant |
| Wetlands | Mitigation Measures 4.6-1–4.6-26 | Not Significant |
| SEA 20–High Country | Mitigation Measures 4.6-1–26 | Not Significant |
| SEA 23–River Corridor | Mitigation Measures 4.6-26a–52 | Not Significant |
| Indirect Impacts –Implementation of the Newhall Ranch Specific Plan has the potential to indirectly impact adjacent natural areas and sensitive biological resources that occur proximal to the site. This would occur as a result of increased use of the Santa Clara River and upland areas by humans and domestic animals, increased use of adjacent natural areas by animals typical of an urban environment, and the potential effects of light, glare, sediment, and urban pollutant runoff, unless mitigated. | Mitigation Measures 4.6-18, 4.6-19 and 4.6-56 | Significant |
| Cumulative Biological Impacts | None Proposed/Required | Significant |

Note:

^a It has since been determined that no sensitive *Dudleya* species are known to occur on the Newhall Ranch Specific Plan site.

Source:

*Biota Report for the Newhall Ranch Specific Plan (July 1996), Newhall Ranch Specific Plan Program EIR (March 1999), and Revised Additional Analysis (May 2003).*⁸

Based on the Newhall Ranch Specific Plan Program EIR and record, the County’s Board of Supervisors found that the Specific Plan would result in impacts (as identified in **Table 4.3-1**, above) that would be unavoidably significant even with implementation of all identified feasible mitigation measures. Consistent with Section 15093 of the *State CEQA Guidelines*, the Board of Supervisors found that the Specific Plan offered overriding economic, legal, social, public benefits that outweighed the identified significant unavoidable impacts and made them acceptable.

⁸ Los Angeles County Department of Regional Planning, *Biota Report, Newhall Ranch Specific Plan* (1996); County of Los Angeles, *EIR for the Newhall Ranch Specific Plan*; Impact Sciences, Inc., *Revised Additional Analysis*.

4. EXISTING CONDITIONS

a. General Project Site Characteristics

The Mission Village project site is located on the Val Verde and Newhall 7.5-minute USGS quadrangle maps (**Figure 4.3-2, Vicinity Map**), and is in northwestern Los Angeles County, approximately 30 miles northwest of downtown Los Angeles. The project site is largely undeveloped except for roads and pads associated with past oil well drilling operations, cattle grazing, and other agricultural activities. Slopes range from gentle in the mesa and canyon floor areas to very steep along the Santa Clara River bluffs and sandstone bedrock outcrops. The site topography is dominated by the north-trending Lion Canyon on the western margin of the site and the Magic Mountain Canyon on the eastern margin of the site. Located mid-site are Middle Canyon and Dead End Canyon. These canyons drain northward into the Santa Clara River which is located in the northern portion of the project site. Elevated flat lands are present on the northern portion of the site in the vicinity of Airport Mesa and Exxon Mesa. Below the elevated flat lands are old, uplifted stream and fan deposits. Elevations on the site range from 940 feet above sea level along the Santa Clara River to a high point of 1,510 feet above sea level. Dominant vegetation types on the project site include riparian (associated with the Santa Clara River and other on-site drainages), coastal sage scrub, mixed chaparral, and oak woodland. Agricultural crops are currently cultivated in Middle Canyon and were previously cultivated on Exxon Mesa.

In addition to the 1,261.8-acre tract map site, the project also includes 592.8 acres of development at locations beyond the tract map site. There are a number of off site project components, including the following:

- An underground utility corridor that generally runs east/west along SR-126 extending from the Valencia Water Reclamation Plan (WRP) (Plant 32) on the east to the proposed Newhall Ranch WRP on the west, which would serve to extend utility services to the tract map site and ultimately the Newhall Ranch Specific Plan development.
- Magic Mountain Parkway and related improvements would be extended west from the parkway's present terminus to a location within the tract map site.
- Three water tanks are proposed. Portions of two tank sites lie on site.
- Two power substation site options are proposed within the Potrero portion of the Newhall Ranch Specific Plan and Legacy Village.

- A Water Quality Basin is proposed to the northeast of the tract map site. A small portion of the water quality basin and a portion of the access road to the site are located within the tract map site. Most of the basin would be located outside of the tentative tract boundary.
- Two debris basins located to the south of the site.
- Additional proposed off-site activities include: (1) work associated with Lion Canyon drainage, (2) grading associated with construction of the northerly extension of Westridge Parkway and southerly extension of Commerce Center Drive, and (3) miscellaneous earthwork to tie proposed grades into natural grades.

For the purposes of this analysis, the “tract map site” refers only to the proposed location of the Mission Village development itself. The “project site” includes the tract map site, plus the off-site improvements discussed above.

b. Geologic and Soil Characteristics

The project site is located in the Transverse Ranges geomorphic province of Southern California in the eastern portion of the Ventura Basin. The Ventura Basin has been tectonically downwarped in the geologic past to produce a large-scale synclinal structure, which has developed a thick accumulation of Cenozoic sediments. The project site is underlain by sedimentary rock of the Saugus Formation that has been tectonically deformed into southeast-plunging folds with local faulting in the Airport Mesa area. Younger terrace deposits locally overlie the bedrock with minor to moderate angular discordance. Alluvium is present in the larger drainage areas and slopewash layers on most of the site. Two major topographic features known as mesas are located on the northeastern (Airport Mesa) and northwestern (Exxon Mesa) portions of the site. These mesas consist of older stream channel and alluvial fan deposits (Quaternary terrace deposits [Qt]) that have been uplifted and overlie the bedrock of the Saugus Formation. The soils occurring on the project site are discussed below, and the locations of the mapped soil polygons are shown in **Figure 4.3-3, Project Site Soils**.

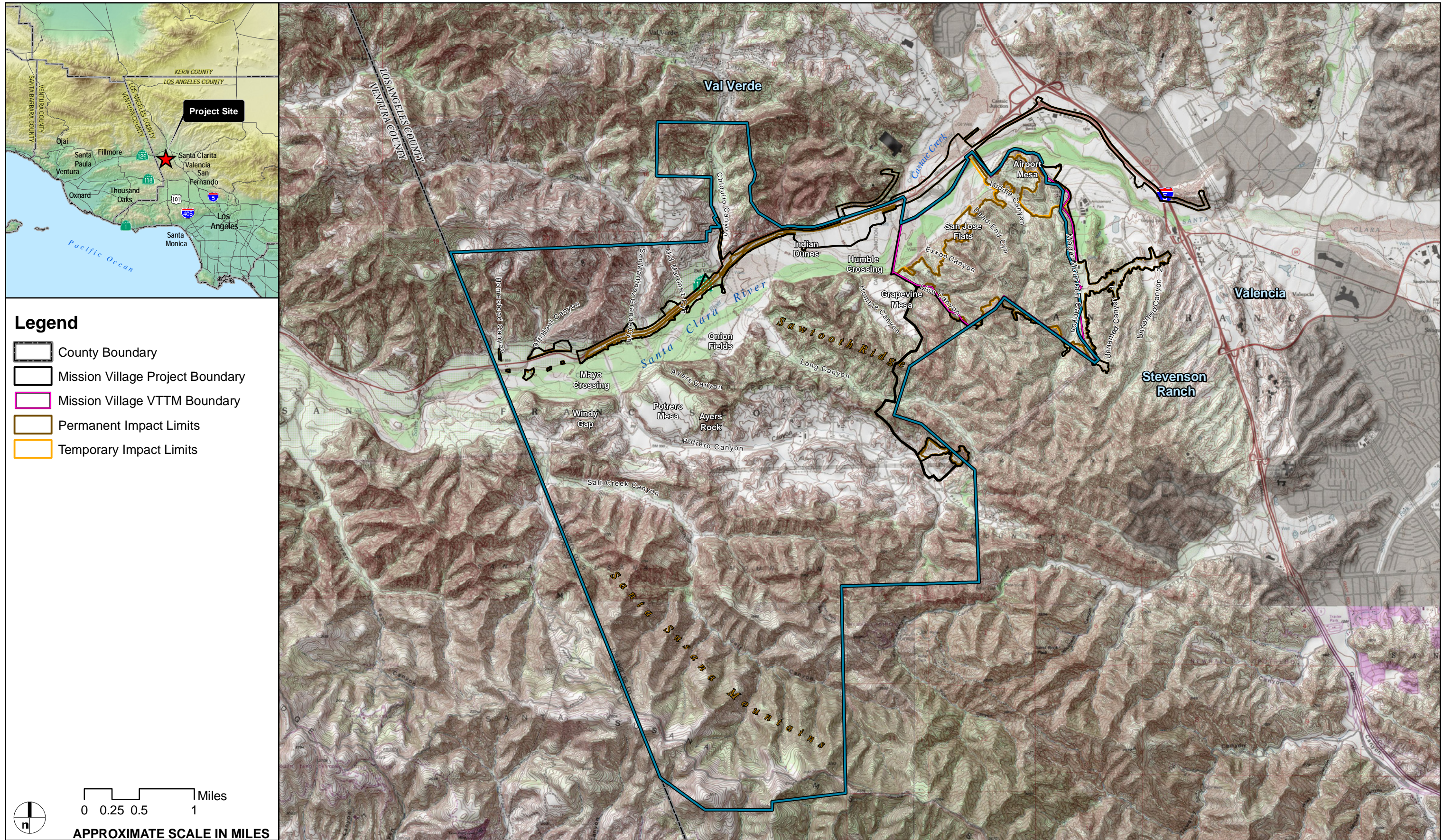


IMAGE SOURCE: USGS 24K Quad

FIGURE 4.3-2
Mission Village Biota Report
Vicinity Map

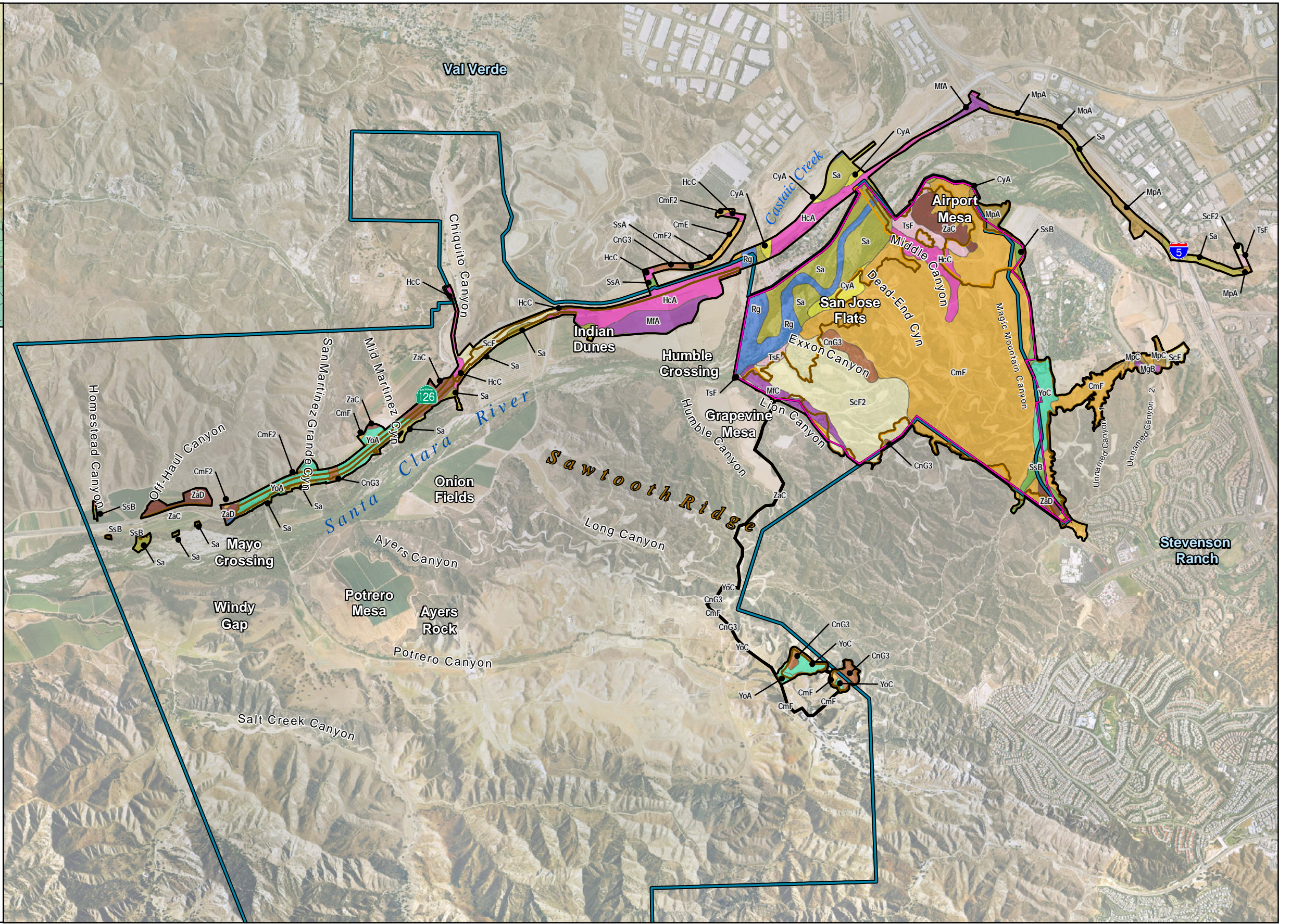
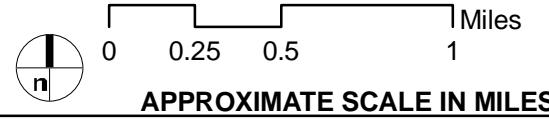


Legend

- NRSP Boundary
- Mission Village Project Boundary
- Mission Village VTTM Boundary
- Permanent Impact Limits
- Temporary Impact Limits

Project Site Soils

- CmE - Castaic-Balcom silty clay loams, 15 - 30 % slopes
- CmF - Castaic-Balcom silty clay loams, 30 - 50 % slopes
- CmF2 - Castaic-Balcom silty clay loams, 30 - 50 % slopes, eroded
- CmG2 - Castaic-Balcom silty clay loams, 50 - 65 % slopes, eroded
- CnG3 - Castaic and Saugus soils, 30 - 65 % slopes, severely eroded
- CyA - Cortina sandy loam, 0 - 2 % slopes
- HcA - Hanford sandy loam, 0 - 2 % slopes
- HcC - Hanford sandy loam, 2 - 9 % slopes
- MfA - Metz loamy sand, 0 - 2 % slopes
- MfC - Metz loamy sand, 2 - 9 % slopes
- MgB - Metz loam, 2 - 5 % slopes
- MoA - Mocho sandy loam, 0 - 2 % slopes
- MpA - Mocho loam, 0 - 2 % slopes
- MpC - Mocho loam, 2 - 9 % slopes
- Rg - Riverwash
- Sa - Sandy alluvial land
- ScF - Saugus loam, 30 - 50 % slopes
- ScF2 - Saugus loam, 30 - 50 % slopes, eroded
- SsA - Sorren- loam, 0 - 2 % slopes
- SsB - Sorren- loam, 2 - 5 % slopes
- TsF - Terrace escarpments
- YoA - Yolo loam, 0 - 2 % slopes
- YoC - Yolo loam, 2 - 9 % slopes
- ZaC - Zamora loam, 2 - 9 % slopes
- ZaD - Zamora loam, 9 - 15 % slopes



SOURCE: NRCS SSURGO Soil Survey 2008
 IMAGE SOURCE: DigitalGlobe 2007

FIGURE 4.3-3
 Mission Village EIR
 Project Site Soils

(1) Bedrock Formations**(a) Saugus Formation (TQsl and TQsu)**

The bedrock underlying the site consists of Plio-Pleistocene, non-marine sedimentary rock of the Saugus Formation. This formation includes light gray to yellowish-gray sandstone, pebbly sandstone and pebble to cobble conglomerate, light yellowish brown to brown sandy siltstone, siltstone, mudstone, and rare moderate-brown claystone. Siltstone, claystone, and mudstone units of the Saugus Formation are potentially expansive.

Subsurface investigations and field mapping indicate that the upper section of the Saugus Formation (TQsu) is lithologically distinct from the more typical lower section (TQsl). The lower (older) stratigraphic section of the Saugus Formation exposed on the western portion of the site, is generally coarse-grained, moderately to well indurated, and lithologically similar to the typical Saugus Formation characteristics. The upper (younger) stratigraphic section exposed on the eastern portion of the site is less indurated and commonly contains more thinly bedded siltstone and mudstone than the typical Saugus Formation characteristics.

The bedrock exposed to the south of the Saddle Lineament is identified as the upper member of the Saugus Formation (TQsu). North of the Saddle Lineament the bedrock encountered in subsurface explorations is mostly coarse grained and is designated as undifferentiated Saugus Formation (TQsl).

(b) Pico Formation (Tp)

The Pliocene Pico Formation underlies the southern portion of the project site. The Pico Formation observed on the project site consists of moderately hard, light gray to light greenish-gray sandstone and pebbly sandstone with local interbeds of light greenish-gray to olive-gray siltstone, sandy siltstone, and rare moderate-brown mudstone. The sandstones are generally well sorted and massive to locally well bedded with common low angle cross bedding. Pebbles are generally well rounded and commonly crystalline in composition. The siltstone and mudstone units are potentially expansive. Thin, low strength clay seams are present within this formation and can be problematic relative to slope stability. The Pico Formation soil is primarily located in the vicinity of the proposed Long Canyon Road and Valencia Boulevard segments along the western portion of the project site and along the southern portion of the project site in the vicinity of the proposed Magic Mountain Parkway extension.

(2) Surficial Deposits**(a) Quaternary Terrace Deposits (Qt)**

Deposits of relatively flat-lying older alluvium which are significantly higher than the active stream channel areas are designated as terrace deposits (Qt). At least two fill-terrace levels are present on the project site. The dominant upper terrace forms large mesas on the northwestern portion of the site (Exxon Mesa) and northeastern portion of the site (Airport Mesa), which are roughly 180 to 200 feet above the adjacent drainages. A second lower terrace level is present on the margins of Lion Canyon and locally in the larger canyons to the east across the site. The lower terrace surface is largely eroded but appears to commonly extend at least 20 to 40 feet above the adjacent drainages. Small relic Qt deposit remnants were also encountered on portions of the upper slopes on the south side of Middle Canyon. The lower terrace deposits typically consist of pebbly sandstone, pebble to cobble conglomerate, and silty sandstone which range up to an observed thickness of 23 feet.

The upper terrace deposits which compose the large mesa areas range in depth up to 112 feet and typically consist of interbedded light yellowish-brown to yellowish gray sand, gravelly sand and silty sand with interbeds of yellowish-brown sandy silt, gravelly sandy silt, and local brown silt to clayey silt. Cobbles only occur locally in the upper portion of the deposits. However, there is usually a coarse grained layer at the base which consists of 3 to 10 feet of coarse-grained sand and gravelly sand with cobbles and boulders (typically 2 feet maximum diameter, but up to 5 feet diameter were locally observed).

(b) Quaternary Alluvium (Qal)

The larger canyon areas and Santa Clara River floodplain are underlain by alluvium. Older, incised alluvium is commonly present on the margins of the canyons. These deposits typically consist of sands and gravel with cobbles, boulders, and local silty intervals.

(c) Quaternary Slopewash (Qsw)

Slopewash is a non-bedded, heterogeneous accumulation of soil and weathered bedrock deposited by gravity on slopes. Swales and side-canyons adjacent to the larger canyon drainages commonly contain accumulations of slopewash. The thickest accumulations occur at the toe of slopes and where broad swales join main drainage areas. The maximum thickness of slopewash colluvium encountered in the exploratory excavations conducted as part of the geological investigation is about 15 feet.

c. Drainage Patterns

The Mission Village project site is located within the Santa Clara River basin. The Santa Clara River flows through the northern portion of the project site from east to west. The watershed of the Santa Clara River basin is 1,634 square miles in area. The portion of the watershed in which the project site lies is located generally east of the Ventura/Los Angeles County line and is approximately 640 square miles in size with the remainder of the watershed west of the Ventura/Los Angeles County line. It drains portions of the Los Padres National Forest from the north, the Angeles National Forest from the northeast and east, and the Santa Susana Mountains from the south and southeast. The Newhall Ranch site is located within a smaller, 32.4 square-mile tributary watershed. The Mission Village site represents approximately 1.97 square miles, or 0.31 percent of the 640 square mile watershed, and 6.09 percent of the 32.4 sq. mile Newhall Ranch tributary watershed.

The entire tributary drainage area for the Mission Village project site is approximately 2,656 acres and is comprised of fifteen drainage areas that drain toward the Santa Clara River. Runoff generally flows through the drainage areas via sheet flows and natural concentrated flows. All runoff from the tributary area eventually discharges to the Santa Clara River. The drainages on and bordering the project site are discussed in more detail in **Section 4.2, Hydrology**.

5. METHODS

a. Literature/Database Review

To evaluate the natural resources found or potentially occurring on the Mission Village project site, Dudek searched the technical literature and reviewed databases. Specifically, reports reviewed included the Biota chapter of the Newhall Ranch Specific Plan Program EIR as revised (March 1999), the Newhall Ranch Biota Report (July 1996), the Newhall Ranch Revised Additional Analysis (May 2003), Section 2.2, Salt Creek Corridor, Section 2.3, Floodplain Modifications, and Section 2.6, Spineflower and Other Sensitive Plant Species, and various technical reports documenting the biological surveys conducted on the project site and greater Newhall Ranch (shown later in this document in **Table 4.3-2**).⁹ Dudek also reviewed literature sources specific to the common plants and animals, plant communities, and special-status species occurring in the County (**Section 10.0, References**).

In addition, the most recent versions of the California Natural Diversity Data Base (CNDDB) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants were reviewed for the USGS 7.5-minute quadrangle on which the project site is located (i.e., Val Verde) and the eight

⁹ County of Los Angeles, *EIR for the Newhall Ranch Specific Plan*; Los Angeles County Department of Regional Planning, *Biota Report*; Impact Sciences, Inc., *Revised Additional Analysis*.

surrounding quadrangles (i.e., Newhall, Warm Springs Mountain, Whitaker Peak, Cobblestone Mountain, Piru, Simi Valley West, Simi Valley East and Oat Mountain)¹⁰ (**Appendix 4.3**).

b. Field Surveys

All surveys were conducted by biologists qualified and/or permitted to conduct such surveys. Habitat and species observations were noted on data sheets, aerial photographs, and maps. Specific information concerning any special-status species observed on site was recorded on appropriate data sheets. All surveys were conducted in accordance with published resource agency survey protocols, where they exist, or consistent with accepted survey methodologies for the particular species when published protocols did not exist. A summary of surveys dates, surveyors, and methodologies are provided in **Table 4.3-2, Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into This EIR**. The survey reports referenced in **Table 4.3-2**, which includes additional information on specific methods used during the course of field surveys, are included in **Appendix 4.3**.

¹⁰ The CNDDDB Map is available on the California Department of Fish and Game website at www.dfg.ca.gov/biogeodata/cnddb/rarefind/asp (last accessed July 22, 2009).

Table 4.3-2
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into This EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|---------------------|---------------------------------------|--|
| Plant Surveys | FLx ¹¹ | May 5–7, 2001 | Focused plant surveys were conducted in the northeast portion of the Mission Village project site (referred to as Airport Mesa at the time) by FLx in 2002. The surveys were floristic in nature and were conducted according to accepted scientific protocol. Vegetation types and plant species associations were noted and their dominant species recorded. |
| | | October 16–17, 2002 | |
| | | April 14–27 | |
| | | May 31–June 3 | |
| | | June 15–17, and September 13–16, 2004 | |
| | | April 18–28, 2005 | |
| | | April 24 and May 5, 2006 | |
| | Dudek ¹² | May–August, 2002; | Focused plant surveys were conducted in portions of the Specific |

- ¹¹ FLx, *Rare Plant Surveys: Newhall Ranch Specific Plan Project Sites, Los Angeles County, California* (2002); FLx, *Rare Plant Survey for Helianthus sp., River Village and Water Reclamation Plant, Los Angeles County, California* (2002); FLx, *Rare Plant Survey for Helianthus sp.; Castaic Junction, Los Angeles County, California* (2002); FLx, *Sensitive Plant Species Surveys: Santa Clara River, Newhall Ranch/Valencia Company Project Sites, Los Angeles County, California* (2004); FLx, “Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area” (2004); FLx, “Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area” (2005); FLx, “Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area” (2006); FLx, “Sensitive Plant Species Survey for the Potrero Irrigation Project” (2006).
- ¹² Dudek and Associates, Inc., *2002 Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area, Los Angeles County, California* (2002); Dudek and Associates, Inc., *2002 Sensitive Plant Survey Results for Entrada [Magic Mountain Entertainment], Los Angeles County, California* (2003); Dudek and Associates, Inc., *2002 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California* (2003). Dudek and Associates, Inc., “Survey Results for Sensitive Plant Species within Water Well 206” (2003); Dudek and Associates, Inc., *2003 Sensitive Plant Survey Results for the Isola and Ventura Homestead Sites, Los Angeles County, California* (2004); Dudek and Associates, Inc., *2003 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California* (2004); Dudek and Associates, Inc., *2003 Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area, Los Angeles County, California* (2004); Dudek and Associates, Inc., *2003 Sensitive Plant Survey Results for the Castaic Junction Site, Los Angeles County, California* (2004); Dudek and Associates, Inc., *2003 Sensitive Plant Survey Results for the Magic Mountain Entertainment Site, Los Angeles County, California* (2004); Dudek and Associates, Inc., *2004 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California* (2004); Dudek and Associates, Inc., *2004 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California* (2004); Dudek and Associates, Inc., *2004 Sensitive Plant Survey Results for the Entrada Site, Los Angeles County, California* (2004); Dudek and Associates, Inc., *2003 Sensitive Plant Survey Results for the Salt Creek Site, Los Angeles County, California* (2004). Dudek and Associates, Inc., *2005 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California* (2006); Dudek and Associates, Inc., *2005 Sensitive Plant*

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|---------------------|--|---|
| | | May–August, 2003; April–July, 2004; May–July, 2005; April–August 2006; May–July 2007; ongoing | Plan area, Salt Creek area, and the Valencia Commerce Center (VCC) and Entrada planning areas for special-status species. The survey area included the Mission Village site. The surveys were floristic in nature and were conducted according to accepted scientific protocol. Survey methods varied slightly within the different study areas, but included focused surveys for the CNPS List 1 and 2 species and focused surveys for San Fernando Valley spineflower within areas identified by CDFG staff and in the remaining vegetation within the study areas. |
| Vegetation Community Surveys | Dudek ¹³ | November and December 2005; July and August 2006 | Biologists conducted vegetation community mapping throughout the Specific Plan and Salt Creek areas, and the VCC and Entrada planning areas. Vegetation community and land cover classifications used in these reports primarily follow the Vegetation Classification and Mapping Program “List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database.” ¹⁴ |

Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California (2006); Dudek and Associates, Inc., 2005 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California (2006); Dudek and Associates, Inc., 2006 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California (2006); Dudek and Associates, Inc., 2006 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California (2006); Dudek and Associates, Inc., 2006 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California (2006).

¹³ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area* (2006); Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch Specific Plan Area, Los Angeles County, California* (2006); Dudek and Associates, Inc., *Biological Resources Technical Report for the Valencia Commerce Center, Los Angeles County, California* (2006); Dudek and Associates, Inc., *Biological Resources Technical Report for the Entrada Site, Los Angeles County, California* (2006).

¹⁴ CDFG (California Department of Fish and Game). 2003. “List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database.” *California Natural Diversity Database*. Vegetation Classification and Mapping Program. September 2003.

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|---|---------------------|---|
| Oak Tree Surveys | Impact Sciences, Land Design Consultants, Richard Johnson & Associates, Inc., Dudek ¹⁵ | 2003–2006 | Biologists conducted on-site surveys and evaluations of the oak trees pursuant to the Los Angeles County Oak Tree Ordinance (CLAOTO) from 2003 through 2006. The specific area was covered on foot through areas where oak trees occur within the proposed project development area (including a 200-foot buffer). Oak trees were surveyed from the base of each tree. Oak trees subject to CLAOTO were also mapped within the VCC and Entrada planning areas. In addition, to comply with Public Resources Code Section 21083.4, biologists surveyed the site's oak woodlands, which are defined as areas with at least 10% cover by oak trees with an understory of non-grass vegetation and at least 20% cover by oak trees with an understory of grass vegetation. Oak/grass includes areas where oak trees comprise between 10% and 20% of the total cover with an understory of grass vegetation. These surveys not only captured oak woodland habitat, but also the entire range of oak trees in terms of size and maturity, including those trees that are five (5) inches or greater in diameter, measured at breast height, as identified in Public Resources Code Section 21083.4(a). Tree stands (tree groupings) outside of these areas, in undisturbed or preserved areas, were delineated on aerial images and evaluated in the field via a sampling protocol and later statistically analyzed for population estimates. Oak woodlands were mapped during the Vegetation |

¹⁵ Impact Sciences, Inc., *Newhall Ranch Oak Tree Survey* (2006); Impact Sciences, Inc., *Mission Village Oak Tree Report, Los Angeles County, California* (2006); Impact Sciences, Inc., *Landmark Village Planning Area Oak Tree Report, Los Angeles County, California* (2006); County of Los Angeles, *EIR for the Newhall Ranch Specific Plan*; Land Design Consultants, *Entrada Oak Tree Report* (2007); Richard Johnson & Associates, Inc., *Arborist Survey Report for Valencia Commerce Center VTPM 18108, Los Angeles County, California* (2007); Dudek, "Oak Tree Estimate for High Country SMA and the Salt Creek Area" (2007); Impact Sciences, Inc., *Easterly Extension of Magic Mountain Parkway, Oak Tree Report, Los Angeles County, California* (2006); Impact Sciences, Inc., "Oak Tree Report: Mission Village VTTM 61105 Los Angeles County, California March 2010 update" (2010).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|---|--|------------------------------|--|
| | | | Community Surveys. |
| Jurisdictional Delineation of Waters and Streambeds | URS ¹⁶ | 2003 | The focus of the delineation was the Santa Clara River and its tributaries within the Specific Plan area. Published Corps/CDFG delineation protocols were utilized in the field. |
| | Glenn Lukos Associates, Inc ¹⁷ | 2006 | The focus of the delineation was the Santa Clara River and its tributaries within the Entrada planning area. Published Corps/CDFG delineation protocols were utilized in the field. |
| Invertebrates (Fairy Shrimp) | Dudek ¹⁸ | December 2007– March 2008 | Wet season vernal pools surveys were conducted in five previously identified depressions associated with western spadefoot surveys in the Specific Plan area, three in Potrero Canyon, ¹⁹ one between Lion Canyon and Grapevine Mesa, and one east of Lion Canyon. ²⁰ Two of the five depressions retained water in 2007/2008 and were surveyed for shrimp presence. |
| Invertebrates (Butterflies) | Compliance Biology, Guy Bruyey ²¹ | April and May 2004 | The RMDP site and the Entrada planning area were surveyed to determine the presence or absence of San Emigdio blue butterfly, quino checkerspot butterfly, and their associated host plants. A general butterfly inventory was also conducted. |
| | | April and May 2005 | The Salt Creek Canyon Preservation area was surveyed to determine the presence or absence of San Emigdio blue butterfly, |

¹⁶ URS, *Jurisdiction Delineation, Newhall Ranch Project for a Portion of the Santa Clara River and its Tributaries, Los Angeles County, California* (2003).

¹⁷ Glenn Lukos Associates, Inc., “Jurisdictional Delineation for Entrada, an Approximately 850-Acre Property in Los Angeles County, California” (2006).

¹⁸ Dudek, *Wet Season Presence/Absence Survey for Vernal Pool Branchiopods for Newhall Ranch, Los Angeles County, California* (2008).

¹⁹ Dave Crawford, Compliance Biology, Inc., telephone call to Sherri Miller (Dudek), November 2007.

²⁰ Compliance Biology, Inc., *Results of the Focused Western Spadefoot Toad Surveys on the Mission Village Project Site* (2006).

²¹ Compliance Biology, Inc., *Results of Butterfly Surveys on the Newhall Ranch Project Site, Los Angeles County, California* (2004); Compliance Biology, Inc., *Results of Butterfly Surveys on Newhall Land, Stevenson Ranch Phase V Site, Los Angeles County, California* (2004); Compliance Biology, Inc., *Results of Butterfly Surveys on Magic Mountain Entertainment Site, Los Angeles County, California* (2004); Compliance Biology, Inc., *Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area, Los Angeles County, California* (2005).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|---------------------|--|--|
| | RECON ²² | March 15–May 10, 1999 | quino checkerspot butterfly, and their associated host plants. A general butterfly inventory was also conducted. Focused surveys for quino checkerspot butterfly and its associated habitat were conducted. The survey area included the Specific Plan Phase 1 development area (the northern portion of the Specific Plan area, including the Santa Clara River Valley, Homestead Canyon, Off-Haul Canyon, San Martinez Grande, Mid-Martinez Grande, and Chiquito Canyon). |
| Invertebrates (Gastropods) | Dudek ²³ | June 2007 | Biologists conducted a site visit to the Middle Canyon Spring as well as the lower reach of the Middle Canyon drainage to document the biotic conditions of the spring area, including the presence of the undescribed snail. (In 2010, the undescribed species of snail was formally described as <i>Pyrgulopsis castaicensis</i> n. sp. ²⁴ and is referred to by its new scientific name herein.) |
| Invertebrates (Gastropods) | Aspen ²⁵ | Five days between November 2009 and January 2010 | Surveys for terrestrial snails focused on microhabitats within California annual grassland, coastal scrub, riparian woodland, riparian scrub, big sagebrush scrub, mulefat scrub, oak woodland, and chaparral where these species have the potential to occur. Surveyed microhabitats included, but were not limited to, brush and debris piles, rock piles, isolated rocks, leaf litter, logs, trash/debris piles, and other unique features that may provide soil moisture or refugia. These areas were searched by raking through leaf and stick litter, visually inspecting cracks and crevices, and turning over objects, such as logs and rocks. |

²² RECON, *Quino Checkerspot Butterfly Habitat Assessment for Phase 1 Development and Permit Areas of Newhall Ranch* (1999).

²³ Dudek, *Draft Middle Canyon Spring Survey and Status Report*. Prepared for Newhall Land and Farming (2007).

²⁴ R. Hershler and H. Liu, 2010. "Two New, Possibly Threatened Species of *Pyrgulopsis* (Gastropoda: Hydrobiidae) From Southwestern California," *Zootaxa* 2243:1-17.

²⁵ C. Huntley, "Re: Snail Methods, etc." Email from C. Huntley (Aspen) to P. Behrends (Dudek), A.C. Lynch (Sohagi Law Group), D. Bedford (CDFG), K. Drewe

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|--|--|----------------------------|---|
| Invertebrates (General Insects) | Jones et al. CSU, Fullerton ²⁶ | April and May 2004 | An observational and sampling study of potential pollinators of the San Fernando Valley spineflower was conducted in areas occupied by the spineflower, resulting in a compilation of the insects occurring in these areas. |
| Semi-Aquatic Amphibians (Frogs, Toads, and Salamanders) and Reptiles; Fish | RECON ²⁷ | March 15–May 30, 1999 | Surveys for arroyo toads were conducted along portions of the Santa Clara River and Castaic Creek within the Specific Plan and VCC planning areas using USFWS survey protocols. |
| | White and Leatherman BioServices ²⁸ | 2000 | Habitat assessment for arroyo toad habitat was conducted at Tesoro del Valle along the San Francisquito Creek, east of the project area. |
| | Ecological Sciences ²⁹ | April–June 2001 | USFWS protocol surveys for arroyo toad were conducted along portions of the Santa Clara River, Castaic Creek, San Francisquito Creek, Santa Clara River South Fork, and Bouquet |

(CDFG), S. White (Aspen), M. Carpenter (Newhall Land), S. Rojas (Newhall Land), and S. Miller (Dudek), March 12, 2010.

²⁶ C.E. Jones et al., *Newhall Ranch Investigation of the San Fernando Valley Spineflower* (2004).

²⁷ RECON, *Survey for Arroyo Southwestern Toad for Newhall Ranch* (1999).

²⁸ White and Leatherman BioServices, "Results of Arroyo Toad Habitat Assessment at Tesoro del Valle" (2000).

²⁹ S.D. Cameron, "Permit Submittal Requirement, TE-808242, Arroyo Toad Surveys, Los Angeles County, California." (2001); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California" (2005); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, San Francisquito Creek, Santa Clarita, California" (2005); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California" (2003); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Castaic Reservoir Site, Santa Clarita, California" (2003); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Hart/Pony Baseball Site and Hart/Pony Commercial Site, Santa Clarita, California" (2003); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, NRMP Project Area, Santa Clarita, California" (2003); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Round Mountain Site, Santa Clarita, California" (2003); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Soledad Site, Santa Clarita, California" (2003); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California" (2004); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Portions of Santa Clara River/South Fork, Santa Clarita, California" (2004); Ecological Sciences, Inc. "Results of Focused Arroyo Toad Surveys, NRMP Soledad/Riverpark Area, Santa Clarita, California" (2004); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, San Francisquito Creek, Santa Clarita, California" (2004).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|-------------------------------|---------------------|---|
| | | | Creek within the Specific Plan and VCC planning areas. |
| | | April-June 2005 | USFWS protocol surveys for arroyo toad were conducted along portions of the Castaic Creek and San Francisquito Creek within the Specific Plan and VCC planning areas. |
| | | March-June 2003 | USFWS protocol surveys for arroyo toad were conducted along portions of the Santa Clara River, Castaic Creek, Castaic Reservoir site, San Francisquito Creek, South Fork of the Santa Clara River, and Bouquet Creek within the Specific Plan and VCC planning areas. |
| | | March-June 2004 | USFWS protocol surveys for arroyo toad were conducted along portions of the Santa Clara River and the South Fork of the Santa Clara River, and Castaic Creek within the Specific Plan and VCC planning areas. |
| | Impact Sciences ³⁰ | April-June, 2001 | USFWS protocol surveys for arroyo toad were conducted in portions of the Santa Clara River and adjacent uplands from near the confluence of Castaic Creek, downstream to the Los Angeles County border, within the Specific Plan and VCC planning areas. Surveys were also conducted within the Natural River Management Plan area. Surveys for southwestern pond turtle and two-striped garter snake were conducted concurrently with the arroyo toad surveys. ³¹ |

³⁰ Impact Sciences, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area, Valencia, California* (2001).

³¹ Surveys for the southwestern pond turtle primarily were visual surveys and were not conducted using the U.S. Geological Survey protocols for visual and trapping surveys (U.S. Geological Survey, *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast ecoregion* (2006), *Western Pond Turtle (Emys marmorata) Trapping Survey Protocol for the Southcoast Ecoregion* (2006)). The USGS surveys are designed to provide systematic habitat assessment and population estimates and are more rigorous than presence/absence surveys. The USGS surveys have not been adopted nor required for the purpose of CEQA analyses.

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|---|-----------------------------------|-----------------------------|--|
| | Sandburg, Nancy ³² | May 8–May 29, 2001 | Focused surveys for arroyo toad and California red-legged frog east of the project area, along the Santa Clara River from the River’s End vacation park to the Transit Mix Concrete Company mine. These were not conducted using USFWS survey protocols. |
| | BonTerra Consulting ³³ | 2003 | Surveys were conducted in 35 earth-bottom channels, including some channels in the project area for unarmored threespine stickleback and Santa Ana sucker. |
| | Compliance Biology ³⁴ | March 19–June 25, 2004 | USFWS protocol surveys for arroyo toad were conducted in portions of the Santa Clara River and adjacent uplands near the confluence of Castaic Creek, downstream to the Los Angeles County border within the Specific Plan and VCC planning areas. Surveys for southwestern pond turtle and two-striped garter snake were conducted concurrently with the arroyo toad surveys. |
| | | March 10 and March 23, 2004 | Surveys for potential western spadefoot toad breeding habitat were conducted in the Mission Village area within the Specific Plan area during the known breeding season. Surveys consisted of habitat evaluations with a focus on the presence of temporary or seasonal rain pools. All flat lowland areas were surveyed for standing water, dirt roads were inspected for deep road ruts that may fill with rainwater, and temporary man-made retention basins were surveyed. |
| | | May 9 and May 23, | Surveys for potential western spadefoot toad breeding habitat |

³² Nancy Sandburg, “Field Summary of Santa Clara River Surveys for *Bufo californicus* and *Rana aurora draytonii*, May 8 through May 29, 2001” (2001).

³³ BonTerra Consulting, *Los Angeles County Soft Bottom Channels 2003 Focused Survey Results* (2003).

³⁴ Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project; Newhall Ranch, Valencia, California* (2004); Compliance Biology, Inc., “Results of Focused Western Spadefoot Toad Surveys on the River Village Project Site and Associated Borrow Sites” (2004); Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California* (2004); Compliance Biology, Inc., *Results of the Focused Western Spadefoot Toad Surveys on the Castaic Mesa Project Site* (2006); Compliance Biology, Inc., *Results of the Focused Western Spadefoot Toad Surveys on the Mission Village Project Site*.

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|------------|---------------------|---|
| | | 2004 | were conducted in the River Village project site and associated borrow sites (now referred to as Landmark Village). Surveys consisted of habitat evaluations with focus on the presence of temporary or seasonal rain pools. All flat lowland areas were surveyed for standing water, dirt roads were inspected for deep road ruts that may fill with rainwater, and temporary man-made retention basins were surveyed. |
| | | May 12, 2004 | Surveys for potential western spadefoot toad breeding habitat were conducted in the West Creek area near Copperhill Drive and San Francisquito Creek. Surveys consisted of habitat evaluations with focus on the presence of temporary or seasonal rain pools. All flat lowland areas were surveyed for standing water, dirt roads were inspected for deep road ruts that may fill with rainwater, and temporary man-made retention basins were surveyed. |
| | | February–March 2006 | Surveys for potential western spadefoot toad breeding habitat were conducted in the Castaic Mesa area upstream of the VCC planning area near Castaic Lagoon. Surveys consisted of habitat evaluations with focus on the presence of temporary or seasonal rain pools. All flat lowland areas were surveyed for standing water, dirt roads were inspected for deep road ruts that may fill with rainwater, and temporary man-made retention basins were |

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|---|---|--|
| | | | surveyed. |
| | ENTRIX ³⁵ | March 31, April 1, November 8, 10, 2004; February 1, 2005 | Reconnaissance-level (non-USFWS protocol) field surveys were conducted, focusing on arroyo toad, California red-legged frog, southwestern pond turtle, two-striped garter snake, and identifying habitat within portions of the Santa Clara River floodplain between Castaic Creek and Chiquito Canyon Creek within the Specific Plan area. Limited seining and dipnetting were also conducted. |
| | Peter H. Bloom ³⁶ | April–July 2007 | USFWS protocols surveys for arroyo toad were conducted along approximately 8 miles of the Santa Clara River adjacent to the proposed Mission Village project area. The survey area encompassed all habitats within the River channel and up to 700 meters from the River in some areas. |
| | San Marino Environmental Associates ³⁷ | May–September 1994 | Surveys focused on trapping two-striped garter snake and southwestern pond turtle as part of the ARCO natural resource damage assessment. |
| | | May–July 1995 | Surveys focused on documenting presence/absence and distribution of unarmored threespine stickleback, arroyo chub, Santa Ana sucker, arroyo toad, California red-legged frog, and western spadefoot toad. Surveys did not use the USFWS survey protocol. Surveys included the Santa Clara River between Castaic Creek confluence and Bouquet Canyon Road bridge within the Specific Plan, VCC, and Entrada planning areas. |
| | Haglund and | June 3 and July 14, | Focused surveys for unarmored threespine stickleback, arroyo |

³⁵ ENTRIX, Inc., *Focused Special-Status Aquatic Species Assessment—Santa Clara River, Mission Village Project, Newhall Ranch, California* (2006); ENTRIX, Inc., *Focused Special-Status Aquatic Species Assessment—Santa Clara River, Landmark Village Project, Newhall Ranch, California* (2006).

³⁶ Peter H. Bloom, *Report on Arroyo Toad Surveys on Landmark Village, Newhall Land and Farming Company Property, Los Angeles County, California* (2007).

³⁷ San Marino Environmental Associates (SMEA), *Two-Striped Garter Snake Data, ARCO Natural Resource Damage Assessment* (1994); SMEA, *Southwestern Pond Turtle Data, ARCO Natural Resource Damage Assessment* (1994); SMEA, *Sensitive Aquatic Species Survey; Santa Clara River and San Francisquito Creek; Newhall Land and Farming Company Property; Los Angeles, California* (1995).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|---|---|----------------------------|--|
| | Baskin ³⁸ | 2000 | chub, and Santa Ana sucker were conducted using a seine in the Santa Clara River at the I-5 Bridge. |
| | Aquatic Consulting Services, Inc. ³⁹ | May–September 2000 | Reconnaissance surveys were conducted along the Santa Clara River within the Specific Plan, Entrada, and VCC planning areas in the following areas: Castaic Junction, Commerce Center Bridge, west of Commerce Center Bridge to the Ventura County line, and Ventura County line to Las Brisas Bridge. Surveys focused on aquatic habitats with emphasis on state and federally listed species. In addition, other species of fish, amphibians, and reptiles were also surveyed. |
| | Impact Sciences ⁴⁰ | March–June 2002 | Focused surveys were conducted for unarmored threespine stickleback and other special-status fish species in the portion of the Santa Clara River from near its confluence with Castaic Creek, (east) upstream approximately 7.2 miles. |
| | | September 16 and 25, 2002 | Focused surveys were conducted for unarmored threespine stickleback and other special-status fish species in the Natural River Management Plan area. |
| | | May 2003 | Focused surveys were conducted for unarmored threespine stickleback and other special-status fish species in Castaic Mesa and Castaic Creek. |

³⁸ T.R. Haglund and J.N. Baskin, *Fish and Wildlife Survey and Habitat Assessment of the Santa Clara River at Interstate 5* (2000).

³⁹ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part II: Commerce Center Bridge Project Area, Los Angeles County, California* (2002); Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part III: West of Commerce Center Bridge to the Ventura County Line, California* (2002); Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part IV: Ventura County Line to Las Brisas Bridge, Ventura County, California* (2002); Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part I: Castaic Junction Project Area, Los Angeles County, California* (2002).

⁴⁰ Impact Sciences, Inc., *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch, Valencia, California* (2003); Impact Sciences, Inc., *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area, Valencia, California* (2003); Impact Sciences, Inc., *Annual Status Report for Unarmored Threespine Stickleback within the Natural River Management Plan Area, Valencia, California* (2003); Impact Sciences, Inc., *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Castaic Mesa, Castaic Creek, Los Angeles County, California* (2003).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|---|-------------------------------------|---|
| | UCLA, Thomas Haglund, Ph.D. ⁴¹ | 2004–2005 | The report presents the results of a field and laboratory study on the occurrence of threespine stickleback in portions of the Santa Clara River on the Specific Plan site. |
| | ENTRIX ⁴² | 2004–2005 | This report summarizes the focused assessment of fish presence, aquatic habitat quality and quantity, and potential project effects on threatened or endangered fish species inhabiting the Newhall Ranch reach of the Santa Clara River as well as tributary drainages to the Santa Clara River. This assessment covered the mainstem Santa Clara River from Salt Creek Canyon upstream to the Middle Canyon confluence and included the Salt Creek and Potrero Creek tributaries. Specifically, this report focused on potential impacts to the state and federally listed unarmored threespine stickleback and other fish species, including arroyo chub and Santa Ana sucker. |
| Terrestrial Reptiles | Impact Sciences ⁴³ | September–October 2004; August 2006 | Pitfall trap lines were located throughout the Specific Plan area in representative habitat types in September and October 2004 and August 2006. All pitfall traps were active (open) for five consecutive days and nights, and they were checked once per day (in the morning). All captured animals were identified and released. For surveys for silvery legless lizard, 40 hours of hand raking were conducted in the late afternoons in October 2004 in areas with sandy or loose soil within suitable habitat (scrub, |

⁴¹ Thomas Haglund, *Current Status of the Unarmored Threespine Stickleback (Gasterosteus aculeatus williamsoni) along Portions of the Santa Clara River Drainage* (1989).

⁴² ENTRIX, Inc., *Focused Special-Status Fish Species Habitat Assessment—Santa Clara River and Tributary Drainages, Newhall Ranch, Los Angeles County, California* (2009).

⁴³ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area, Los Angeles County, California* (2006).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|------------------------------|---------------------|--|
| Birds | Daniel Guthrie ⁴⁴ | 1988–2006; ongoing | chaparral, sycamore, cottonwood, and oak communities). Annual bird surveys, including protocol surveys for California |

⁴⁴ Daniel Guthrie, *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1988* (1988); Daniel Guthrie, *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1989* (1989); Daniel Guthrie, *Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo; Spring 1990* (1990); Daniel Guthrie, *Surveys for Least Bell's Vireo Along the Santa Clara River and Its Tributaries near Valencia* (1991); Daniel Guthrie, *Surveys along Castaic Creek for least Bell's Vireo* (1991); Daniel Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California* (1992); Daniel Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California* (1993); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 1993; Castaic Creek Downstream to just below Newhall Ranch* (1993); Daniel Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California* (1994); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 1994; Castaic Creek Downstream to just below Las Brisas Crossing* (1994); Daniel Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995* (1995); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 1995; Castaic Creek Downstream to just below Las Brisas Crossing* (1995); Daniel Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996* (1996); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 1996; Castaic Creek Downstream to just below Las Brisas Crossing* (1996); Daniel Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997* (1997); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 1997; Castaic Creek Downstream to just below Las Brisas Crossing* (1997); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 1998; Castaic Creek Downstream to just below Las Brisas Crossing* (1998); Daniel Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998* (1998); Daniel Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 1999* (1999); Daniel Guthrie, *Bird Surveys in the Proposed Riverwood Project Area, near Valencia, California* (1999); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 1999; Ventura County Line Downstream to just below Las Brisas Crossing* (1999); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 2000; Mouth of Castaic Creek Downstream to the Los Angeles/Ventura County Line* (2000); Daniel Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000* (2000); Daniel Guthrie, *Bird Surveys along the Santa Clara River; Los Angeles/Ventura County Line Downstream to Just Below Las Brisas Crossing* (2000); Daniel Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001* (2001); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 2001; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing* (2001); Daniel Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002* (2002); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 2002; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing* (2002); Daniel Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003* (2003); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 2003; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing* (2003); Daniel Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2004* (2004); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 2004; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing* (2004); Daniel Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California* (2005); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 2005; Mouth of Castaic Creek Downstream to just below Las*

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|-----------------------------------|---------------------|---|
| | | | gnatcatcher, least Bell's vireo, and southwestern willow flycatcher, have been conducted annually that include the Mission Village project site. Protocol surveys for least Bell's vireo and southwestern willow flycatcher were most recently conducted on the Mission Village project site in 2006, while protocol surveys for California gnatcatcher were most recently conducted on the project site in 2004. |
| | BonTerra Consulting ⁴⁵ | 2003 | USFWS protocol surveys were conducted in 35 earth-bottom channels for least Bell's vireo and southwestern willow flycatcher. The 1997 report is a follow up to the Labinger <i>et al.</i> 1996 survey and contains an additional section regarding the presence of other special-status species identified during the survey. The 1998 and 1999 reports focused on least Bell's vireo monitoring, as well as documenting other avian species. These surveys focused on impacts to the avian community and impacts to listed species, including monitoring of known least Bell's vireo population; other surveys were conducted for western yellow-billed cuckoo and southwestern willow flycatcher. Although this survey was a follow-up to the 1996 survey, the overall surveyed area was increased in order to understand the distribution of endangered species and subsequent restoration planning. |
| | PCR ⁴⁶ | 1998 | USFWS protocol surveys for coastal California gnatcatcher surveys were conducted in upland habitats on the east and west |

Brisas Crossing (2005); Daniel Guthrie, *White-Tailed Kite Populations along the Upper Santa Clara River* (2005); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 2006*; *Mouth of Castaic Creek Downstream to just below Las Brisas Crossing* (2006); Daniel Guthrie, *Bird Surveys of The Old Road Phase III Environmental Project Study Area, near Valencia, California, 2006* (2006); Daniel Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California* (2006).

⁴⁵ BonTerra Consulting, *Los Angeles County Soft Bottom Channels 2003 Focused Survey Results*.

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|----------------------------------|---------------------|---|
| | | | sides of Castaic Creek (upstream of the VCC planning area). |
| | Daniel Guthrie ⁴⁷ | 2000 and 2004 | USFWS protocol surveys for coastal California gnatcatcher as well as surveys for other upland birds were conducted in upland portions of the Specific Plan area. |
| | Haglund and Baskin ⁴⁸ | April–July 2000 | Surveys using USFWS survey protocol for least Bell’s vireo and southwestern willow flycatcher were conducted along Santa Clara River at the I-5 Bridge. |
| | Impact Sciences ⁴⁹ | May–June 2000 | Six USFWS protocol surveys for coastal California gnatcatcher were conducted in a 156-acre portion of the Specific Plan site where California sagebrush scrub occurs. |
| | Compliance | 2003 | Six USFWS protocol surveys for coastal California gnatcatcher |

⁴⁶ PCR (Planning Consultants Research), “Results of Focused California Gnatcatcher Surveys for the West Creek/East Creek Project Site, Valencia, Los Angeles County “ (1998).

⁴⁷ Daniel Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area near Valencia, California* (2000); Daniel Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development near Valencia, California* (2000); Daniel Guthrie, *Bird Surveys in the Proposed Magic Mountain Entertainment Project Area, near Valencia, California, 2000* (2000); Daniel Guthrie, *Bird Surveys of Castaic Junction, an Area on the North Side of the Santa Clara River at the Junction of State Route 126 and Interstate 5, near Valencia, California* (2000); Daniel Guthrie, *Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas, near Valencia, California* (2004); Daniel Guthrie, *Bird Observations in the Commerce Center Project Site, near Valencia, California, 2004* (2004); Daniel Guthrie, *Bird Observations in the Stevenson Ranch, Phase 5 Area, near Valencia, California, 2004* (2004); Daniel Guthrie, *Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas near Valencia, California* (2004); Daniel Guthrie, *Bird Observations for Spring 2004 in the Proposed Mesa East and West Development near Valencia, California* (2004); Daniel Guthrie, *Bird Observations in the Proposed Magic Mountain Entertainment Project Area, near Valencia, California, 2004* (2004); Daniel Guthrie, *Bird Surveys along the Santa Clara River, 2004*.

⁴⁸ Haglund and Baskin, *Fish and Wildlife Survey and Habitat Assessment*.

⁴⁹ Impact Sciences, Inc., “Results of Focused Surveys for the Coastal California Gnatcatcher, ±156-Acre Project Site, Santa Clarita, Los Angeles County, California” (2000).

⁵⁰ Compliance Biology, Inc., *Results of Focused Coastal California Gnatcatcher Surveys; Prospective Water Tank Locations, River Park Project, Los Angeles County, California* (2003); Compliance Biology, Inc., *Results of Focused Survey for Coastal California Gnatcatcher Surveys; River Park Project, Santa Clarita, Los Angeles County, California* (2003); Compliance Biology, Inc., *Results of Focused Coastal California Gnatcatcher Surveys; Castaic Mesa Project, Los Angeles County, California* (2006); Compliance Biology, Inc., *Results of Focused California Gnatcatcher Surveys on the Valencia Commerce Center SCP Site; Los Angeles County, California* (2008).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|--|---------------------|---|
| | Biology ⁵⁰ | | were conducted in a 2-acre area in Riverpark where California sagebrush scrub occurs, upstream of the Specific Plan site by Soledad Canyon. |
| | | 2006 | Six USFWS protocol surveys for coastal California gnatcatcher were conducted in an 80-acre area in Castaic Mesa where California sagebrush scrub occurs, upstream of the VCC planning area by Castaic Lagoon. |
| | | 2008 | Six USFWS protocol surveys for coastal California gnatcatcher were conducted in the VCC planning area. |
| | SAIC ⁵¹ | 2003 | Six USFWS protocol surveys for coastal California gnatcatcher were conducted on the Stevenson Ranch Phase V project site, adjacent to the Specific Plan area. |
| | Forde Biological Consultants ⁵² | May–July 2006 | USFWS protocol surveys for least Bell’s vireo and southwestern willow flycatcher were conducted along Castaic Creek between Castaic Lagoon and Lake Hughes Road and Tapia Canyon Road (upstream of the VCC planning area). |
| | Bloom Biological, Inc. ⁵³ | February–June 2007 | Winter and spring bird surveys for special-status avian species and all raptors (both common and special-status) were conducted on portions of the project applicant’s property (including the Mission Village project site). The survey area encompassed all habitats within the riverbed and approximately 0.5 mile on each side of the river. The survey effort included USFWS protocol surveys for least Bell’s vireo and southwestern willow flycatcher, riparian bird surveys, raptor nest surveys, and winter burrowing owl surveys. |

⁵¹ Science Applications International Corporation (SAIC), “Results of Focused Coastal California Gnatcatcher Surveys for the Stevenson Ranch Phase V Project Site, Los Angeles, California” (2003).

⁵² Forde Biological Consultants, *Least Bell’s Vireo and Southwestern Willow Flycatcher Presence-Absence Survey; Castaic Creek below Castaic Lagoon to halfway between Lake Hughes Road and Tapia Canyon Road, Castaic, Los Angeles County, California* (2006).

⁵³ P.H. Bloom and C.A. Niemela, *2007 Results of NRMP Annual Riparian Bird Surveys on the Santa Clara River Portion of Newhall Land and Farming Company Property, Los Angeles County, California* (2007).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|--------------------------------------|-----------------------------|---|
| | Bloom Biological, Inc. ⁵⁴ | April-June 2007; ongoing | USFWS protocol focused surveys for least Bell's vireo and southwestern willow flycatcher and yellow-billed cuckoo were conducted along 25 miles of the Santa Clara River and its major tributaries. |
| | Bloom ⁵⁵ | November 2007–February 2008 | Field surveys were conducted to find special-status avian species, including raptors, with special emphasis placed on surveying abandoned agricultural fields for burrowing owls and oak woodlands for long-eared owls. Survey locations were along a 10-mile reach of the Santa Clara River and on Newhall Ranch property on both sides of SR-126 as well as in lower Salt Creek, Potrero Canyon and upland habitat. Additionally, several nights were spent surveying and camping in selected oak woodlands surrounding the Landmark Village project site in an attempt to detect the presence of long-eared owls. Surveys were conducted during daylight hours as well as up to four hours after sunset. |
| | | November 2007–June 2008 | Field surveys were conducted for white-tailed kite along the Santa Clara River from Las Brisas Bridge in Ventura County to I-5 and on all lands within Newhall Ranch, including both sides of SR-126, lower Salt Creek, and Potrero Canyon. Upon detection, foraging and nesting individuals were observed for up to several hours if possible. |

⁵⁴ Ibid.

⁵⁵ Bloom Biological, Inc., *Interim Report of Winter Surveys of Special-Status Bird Species on Portions of Newhall Land and Farming Company Property (Including Newhall Ranch)*, Los Angeles County, California (2008); Bloom Biological, Inc., *Report on White-Tailed Kites on Portions of Newhall Land and Farming Company Property (including Newhall Ranch)*; Los Angeles and Ventura Counties, California (2009); Jeff Priest, "Focused California Gnatcatcher Survey, Landmark Village Project, Los Angeles County, California" (2007); Paul Lemons, "Focused California Gnatcatcher Surveys for Mission Village, Los Angeles County, California" (2008).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|---|---|--|
| | DUDEK ⁵⁶ | April-June 2007 July 2007-January 2008 | Six USFWS protocol surveys for coastal California gnatcatcher were conducted in Landmark Village. Nine USFWS protocol surveys for coastal California gnatcatcher were conducted in Mission Village. |
| Mammals | San Marino Environmental Associates ⁵⁷ | August 7-10, 2006 (bats) | Additional bat surveys were conducted within the project area to determine occurrence of, and habitat use by, bat species. Standard visual, acoustic, and mist-netting sampling methods were used to survey bats. Sampling was conducted near roosting sites and in potential foraging areas; acoustic devices and mist nests were deployed where bats were expected to fly low or in a somewhat defined air space; and visual surveys were conducted during the day and night at potential roost sites, and at dusk while observing bats in flight. |
| | | May 1993-September 1994 | This report provides results of a number of surveys conducted to document the presence of rare plants and animals within approximately 80 square miles of the Santa Clarita water district service area, which includes a portion of Los Angeles County Sensitive Ecological Area (SEA) 23 (also known as the River Corridor SMA/SEA 23). This document contains lists of anticipated species and indicates the species actually found during the surveys. |
| | Impact Sciences ⁵⁸ | March-September 2004 July 2006 | Field surveys were conducted to sample mammal species in dominant vegetation communities throughout the Specific Plan site during 2004. Survey locations were in representative dominant vegetation communities within the Specific Plan area. Five different survey methods were utilized: small mammal trapping, scent/track stations, spotlighting, cameras, and ANABAT bat detector recording. |

⁵⁶ Priest, "Focused California Gnatcatcher Survey, Landmark Village Project"; Lemons, "Focused California Gnatcatcher Surveys for Mission Village."

⁵⁷ SMEA, *Rare Plant and Animal Survey; Santa Clarita Water District Service Area, Los Angeles County, California* (1995).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|---|---------------------|--|
| General Biological Surveys | RECON and Impact Sciences ⁵⁹ | 1995 | This report provides general biological resources information derived from surveys conducted on the Specific Plan area and its vicinity during the spring and summer months. These surveys included habitat, vegetation identification, percentages and mapping; avian surveys; river surveys that included documentation of fish, reptiles, and amphibian species; plant species documentation; butterfly surveys; and other wildlife surveys that included small mammal trapping methods. |
| | Impact Sciences ⁶⁰ | Spring 1999 | This habitat assessment report was created based on the results of vegetation surveys along the Santa Clara River on the portion of the Specific Plan site. Data were collected based on structure and composition of habitat and were used to assess the likelihood or potential for occurrence of special-status species that may occur on this portion of the river. In addition, during this study the potential for mitigation through habitat creation or enhancement of riparian habitat was also assessed. |
| | | 1996 | This report provides results from a number of surveys conducted at four sites, two of which were located within the Specific Plan area. The focus of these surveys was to study the relation between upland habitat quality and use by riparian bird species and small mammals along the edge of the Santa Clara River in order to make habitat buffer recommendations. |
| | Dudek ⁶¹ | April through July | Biologists conducted general wildlife surveys throughout the |

⁵⁸ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area, Los Angeles County, California* (2005); H.L. Johnson, "Bat Survey; August 7-10, 2006 for the Newhall Ranch, Valencia, California" (2006).

⁵⁹ RECON and Impact Sciences, Inc., *Biota Report: Newhall Ranch Specific Plan; Santa Clara River Valley, California; Tentative Tract Map 44831* (1996).

⁶⁰ RECON, *Santa Clara River Corridor Habitat Assessment for Newhall Ranch* (1999); Impact Sciences, Inc., *North Valencia Annexation Buffer Study* (1997).

⁶¹ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*; Dudek and Associates, Inc. *Biological Resources Technical Report for the Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., *Biological Resources Technical Report for*

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|--|--|--|--|
| | | 2003 November and December 2005 May through August 2006 | High Country SMA/SEA 20 portion of the Specific Plan and Salt Creek areas in 2005 and within the VCC and Entrada planning areas in 2006. |
| | Compliance Biology ⁶² | April and May 2006 | This report was conducted upstream of the VCC planning area in Castaic Mesa. The purpose was to assess the existing on-site biological conditions and the suitability of on-site habitats to support sensitive biological resources. |
| Newhall Ranch Mitigation Feasibility Study | Dudek & Associates ⁶³ | November 7–10, November 14–18, December 19–21, 2005; and August 15–16, 2006. | The report evaluates mitigation opportunities within the Newhall Ranch Specific Plan Area, including the High Country Special Management Area, for slender mariposa lily, California sagebrush scrub, oak trees, and wetlands within the High Country Special Management area. Methods included identification, ranking, and prioritization of mitigation opportunities. |
| Water Quality | GeoSyntec Consultants ⁶⁴ | November 2006 | The Mission Village Water Quality Technical Report addresses the potential impacts of the proposed project on water quality in the Santa Clara River. Potential changes in water quality are addressed for pollutants of concern based on runoff water quality modeling, literature information, and professional judgment. |

the Valencia Commerce Center; Dudek and Associates, Inc., Biological Resources Technical Report for the Entrada Site.

⁶² Compliance Biology, Inc., *Biological Resource Assessment, Castaic Mesa Project, Los Angeles County, California* (2006).

⁶³ Dudek and Associates, Inc., *Newhall Ranch Mitigation Feasibility Study* (2007).

⁶⁴ GeoSyntec Consultants, *Landmark Village Water Quality Technical Report* (2006).

Table 4.3-2 (Continued)
Biological Surveys Conducted on the Mission Village Site and Technical Reports Incorporated into EIR

| Taxonomic Group/Technical Report | Consultant | Survey Dates/Season | General Methods |
|----------------------------------|--------------------|---------------------|---|
| Flood Technical Report | PACE ⁶⁵ | November 2006 | The Mission Village Flood Technical Report assesses the hydrology and hydraulics of the Santa Clara River corridor as a result of proposed floodplain modifications associated with the Mission Village project. The report analyzes impacts to aquatic and riparian habitats downstream of the project site. |

⁶⁵ PACE (Pacific Advanced Civil Engineering, Inc), *Flood Technical Report for the Mission Village Project* (2006).

6. BIOLOGICAL RESOURCES

a. Plant Communities and Land Uses

Field investigations identified 27 plant communities (and alliances/subassociations)⁶⁶ and three existing land use types (agriculture, developed areas, and disturbed lands) on the project site. The plant communities and land covers are described below and listed in **Table 4.3-3, Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types in the Project Area**. The plant communities correspond to the *Vegetation Classification and Mapping Program, List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database*⁶⁷ where applicable. Where plant communities do not fit a defined vegetation community classification, they are defined by their dominant plant species. The plant communities and land uses on the project site have been mapped as shown on **Figure 4.3-4-A1 through 4.3-4-A5, Plant Communities and Land Uses on the Mission Village Project Site**, and **Figure 4.3-4B1, Middle Canyon Spring – Existing Conditions**. A list of all plant species observed on the project site is included in **Appendix 4.3**.

⁶⁶ Alliances are named for constant dominants or codominants in the uppermost canopy layer. When a group concept contains two layers of vegetation (e.g., tall temperate grassland with sparse broad-leaved evergreen shrubs), the alliance is named after species in the dominant stratum, while the association name includes species from the dominant and uppermost strata.

Associations are named with species from the alliance name, and have additional species that represent dominants or indicators from any layer of the vegetation. When an association has several layers, an attempt is made to include species that are dominants or indicators from at least the two most dominant layers. Indicator species are those species, other than dominants, which have been chosen to distinguish an association or alliance from others like it, or to indicate specific environmental conditions that have a controlling influence on vegetation in the community. However, the indicator species are seldom limited to controlling influence on vegetation in the community. Descriptive terms such as wetland, mesic, serpentine, etc., are used sparingly, when species composition for a type is not known well enough to provide full representation using species alone.

⁶⁷ CDFG, "List of California Terrestrial Natural Communities."

**Table 4.3-3
Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types in the
Project Area**

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | Acreage |
|---|-----------------------------------|---|---------------------------------|---------|
| Grass and Herb Dominated Communities | Non-Native Grassland | California annual grassland | Not mapped to association level | 82.4 |
| Scrub and Chaparral | Coastal Scrub | California sagebrush scrub | Not mapped to association level | 517.2 |
| | | California sagebrush – <i>Artemisia</i> | | 16.1 |
| | | California sagebrush–purple sage | | 132.9 |
| | | California sagebrush–black sage scrub | California sagebrush–black sage | 12.9 |
| | | California sagebrush–California buckwheat scrub | Not mapped to association level | 84.7 |
| | | California sagebrush scrub–undifferentiated chaparral | Not mapped to association level | 15.5 |
| | | Disturbed California sagebrush scrub | Not mapped to association level | 0.1 |
| | Undifferentiated Chaparral Scrubs | Not mapped to alliance level | Not mapped to association level | 35.9 |
| | Chaparral with Chamise | Chamise chaparral | Not mapped to association level | 2.6 |
| | | Chamise–hoaryleaf ceanothus chaparral | Not mapped to association level | 1.8 |
| Other Scrubs | Eriodictyon scrub | Not mapped to association level | 0.6 | |
| Broad Leafed Upland Tree Dominated | Oak Woodland and Forest | Coast live oak forest and woodland | Coast live oak woodland | 31.7 |
| | | Valley oak forest and woodland | Valley oak woodland | 2.3 |
| | | | Valley oak/grass | 3.3 |
| Riparian and Bottomland Habitat (60,000.00) | Other Riparian/Wetland | Herbaceous wetland | Not mapped to association level | 4.0 |
| | | River wash | Not mapped to association level | 115.1 |
| | | Alluvial scrub | Not mapped to association level | 0.5 |
| | | Big sagebrush scrub | Not mapped to association level | 24.6 |
| | | Giant reed | Not mapped to association level | 5.6 |

Table 4.3-3 (Continued)
Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types in the Project Area

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | Acreage |
|--|--------------------------------------|---|-------------------------------------|---------|
| | Low to High Elevation Riparian Scrub | Arrow weed scrub | Not mapped to association level | 7.6 |
| | | Mexican elderberry scrub | Not mapped to association level | 5.8 |
| | | Mulefat scrub | Not mapped to association level | 1.8 |
| | | Disturbed mulefat scrub | Not mapped to association level | 1.1 |
| | Riparian Forest and Woodland | Southern willow scrub | Not mapped to association level | 1.5 |
| | | Tamarisk scrub and woodland | Shrub tamarisk | 1.1 |
| | | Fremont cottonwood riparian forest and woodland | Southern cottonwood-willow riparian | 109.2 |
| Man-Made Land Cover Types | Agriculture | N/A | 224.4 | |
| | Developed land | N/A | 8.1 | |
| | Disturbed land | N/A | 404.3 | |
| | | | Total | 1,854.5 |

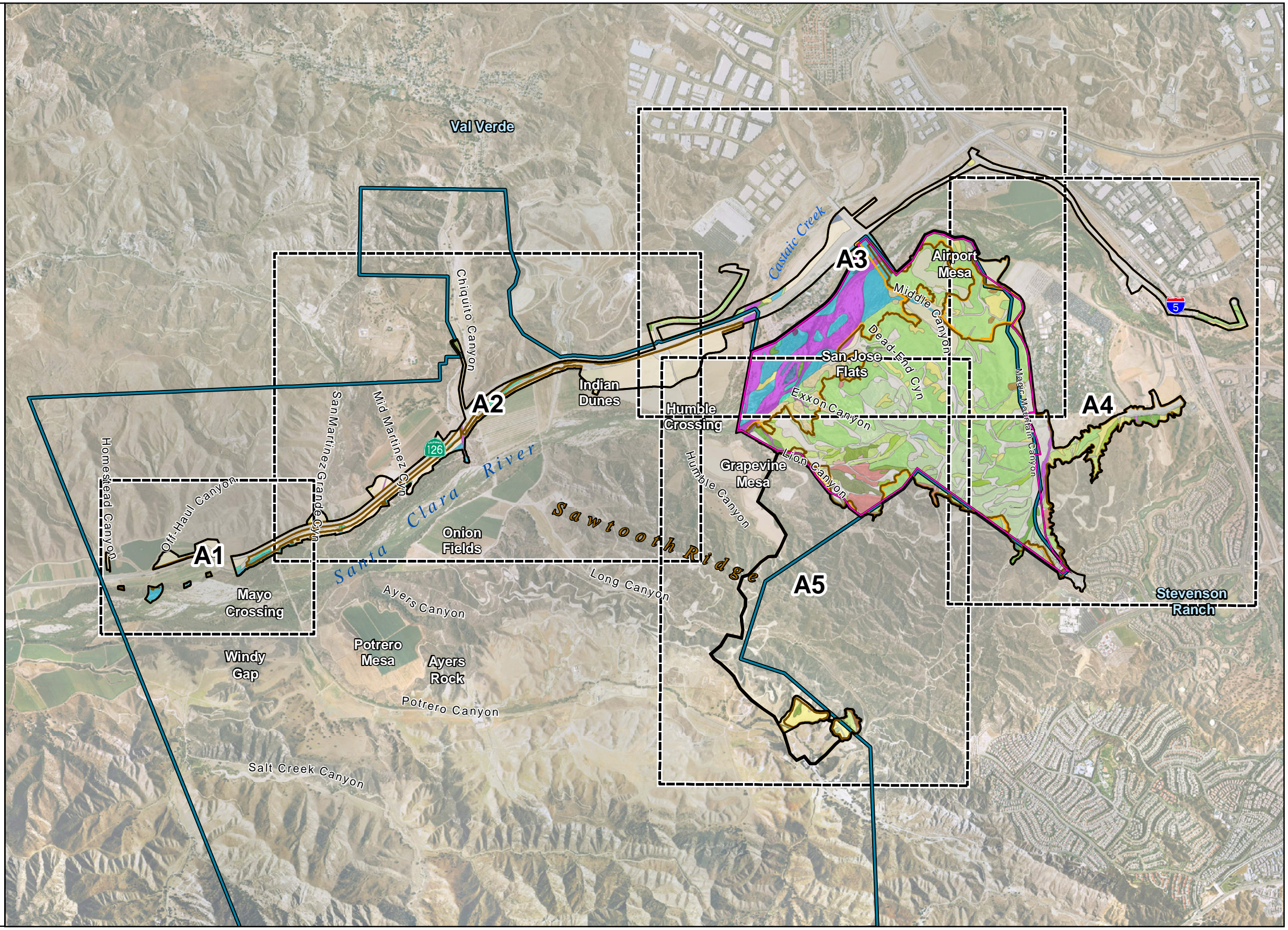
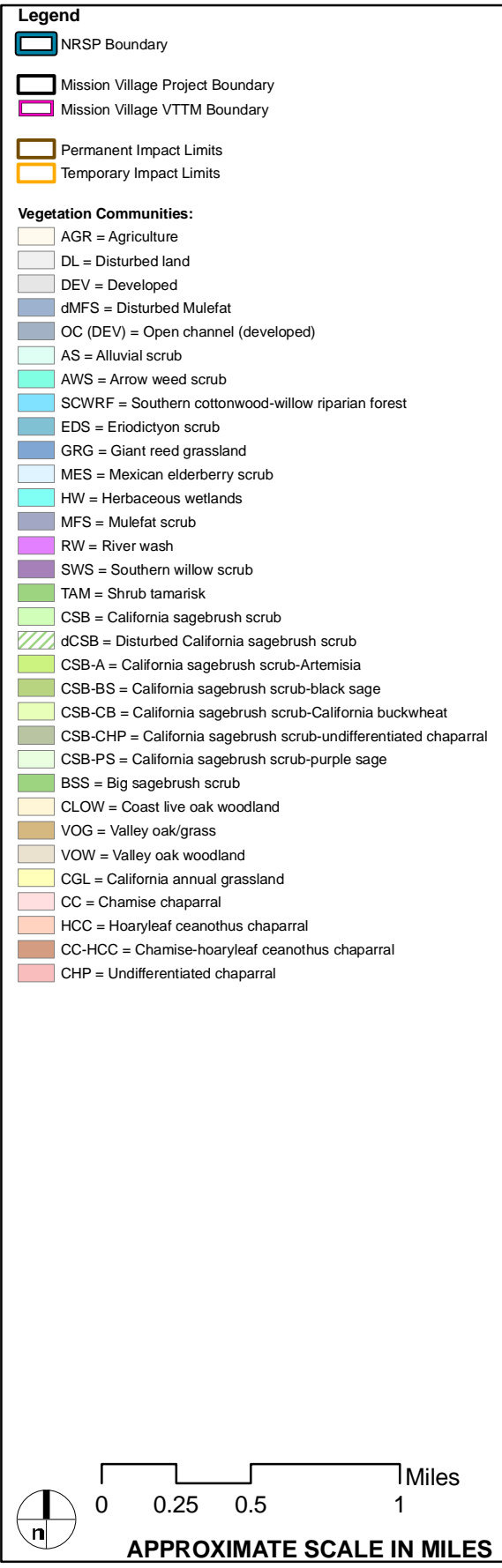


IMAGE SOURCE: DigitalGlobe 2007

FIGURE 4.3-4

Mission Village EIR

Plant Communities and Land Uses at the Mission Village Project Site



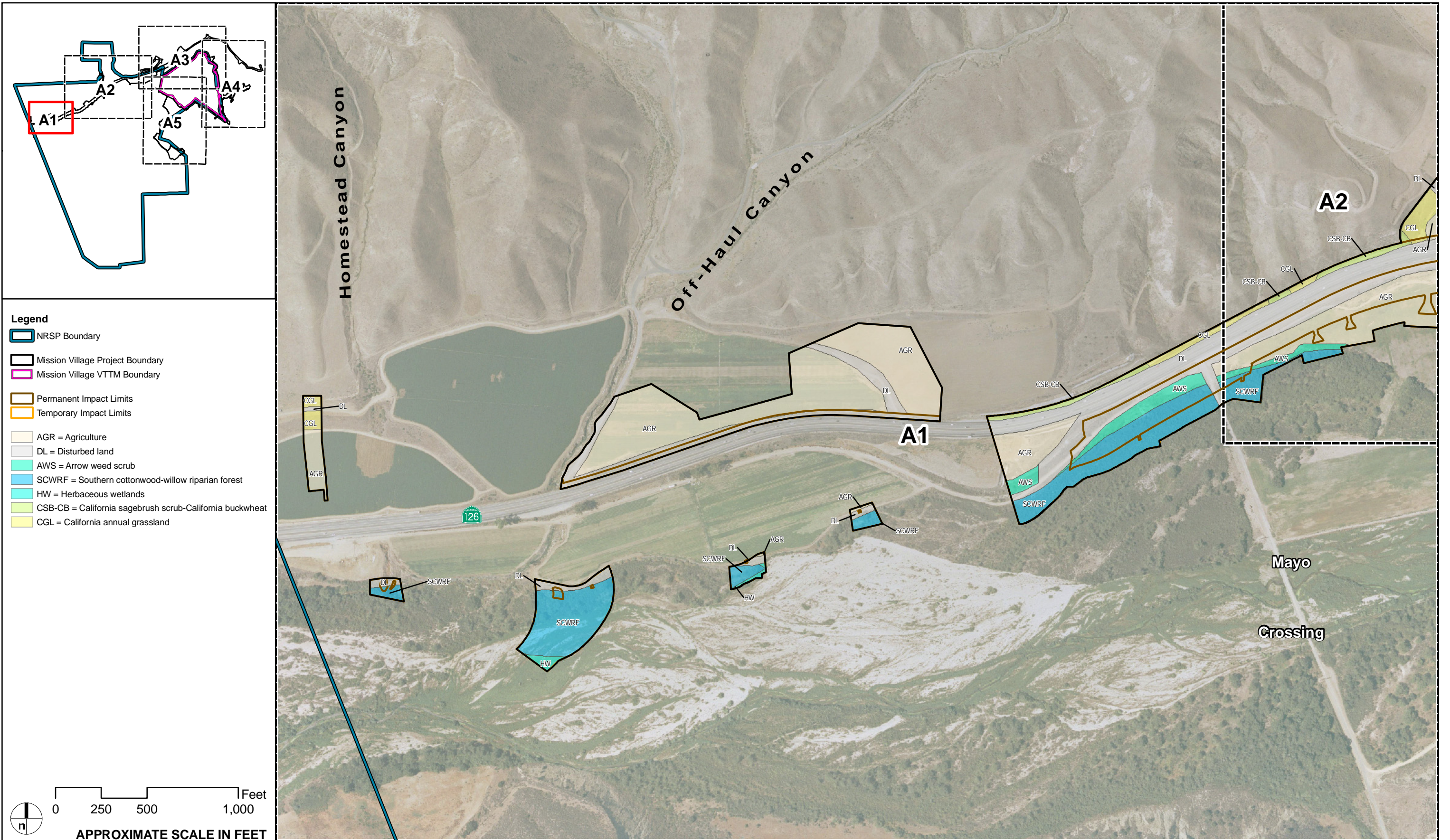


FIGURE 4.3-4-A1

Mission Village EIR

Plant Communities and Land Uses at the Mission Village Project Site

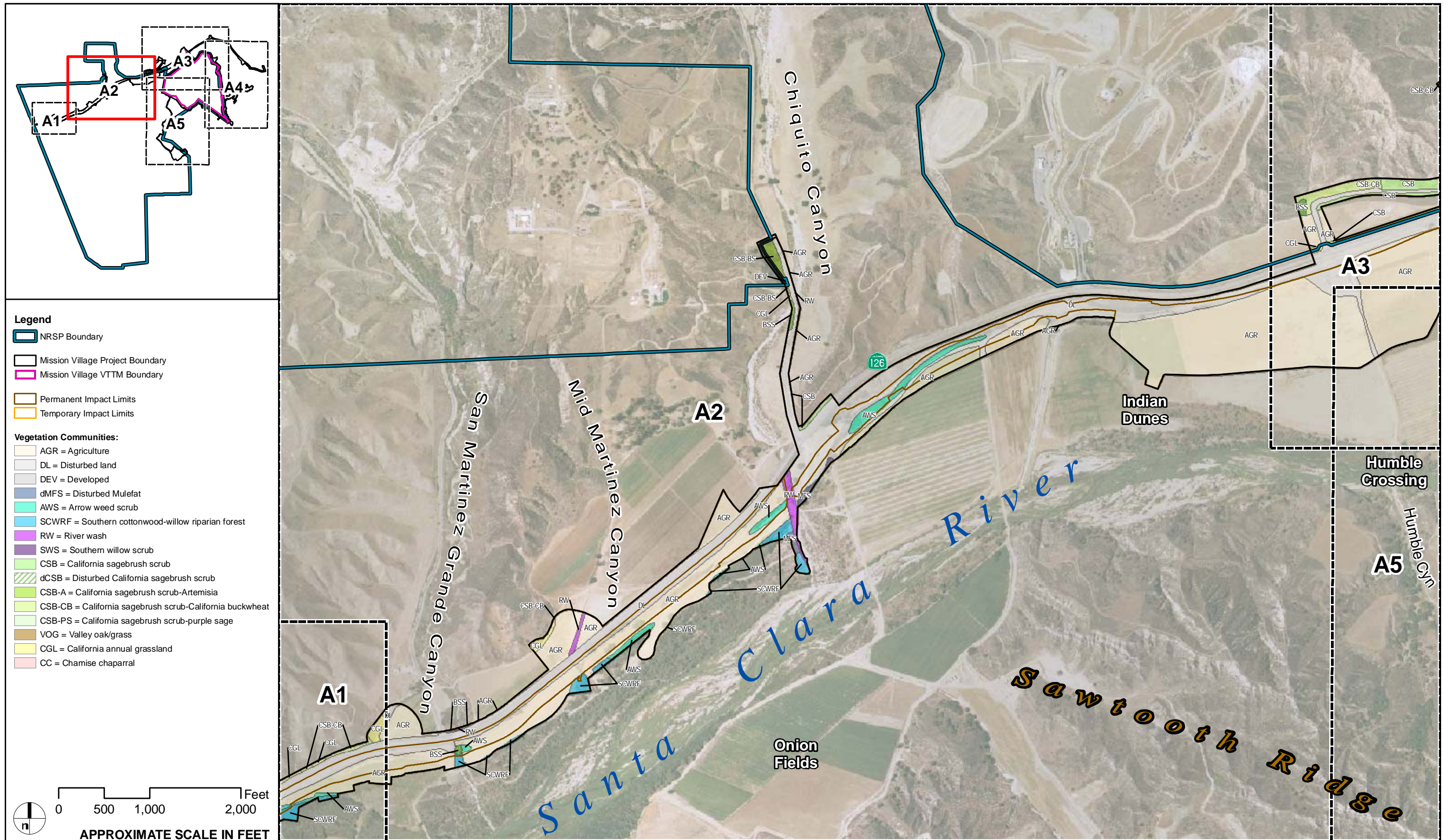


IMAGE SOURCE: DigitalGlobe 2007

FIGURE 4.3-4-A2

Mission Village EIR

Plant Communities and Land Uses at the Mission Village Project Site

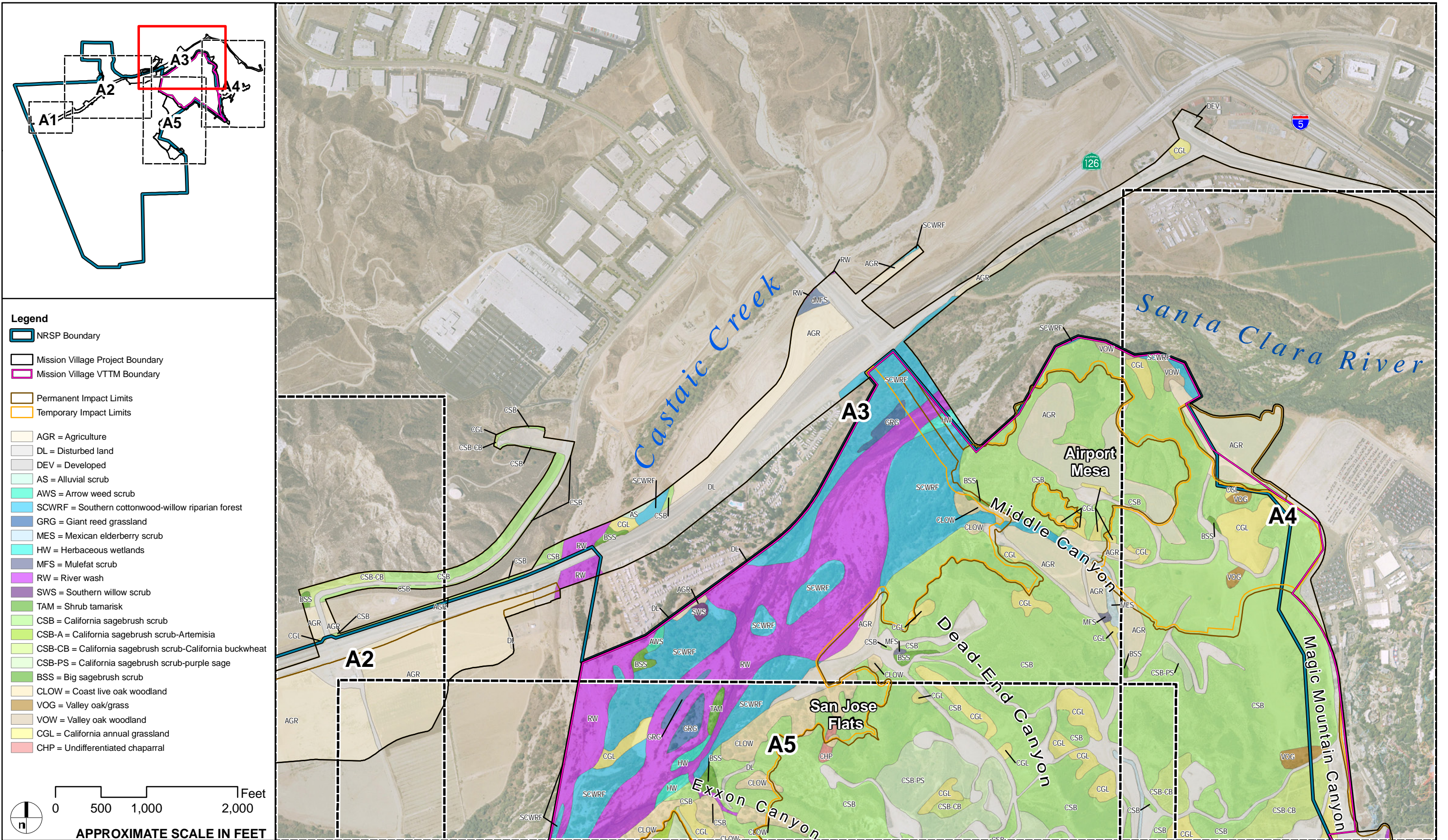


IMAGE SOURCE: DigitalGlobe 2007

FIGURE 4.3-4-A3

Mission Village EIR

Plant Communities and Land Uses at the Mission Village Project Site

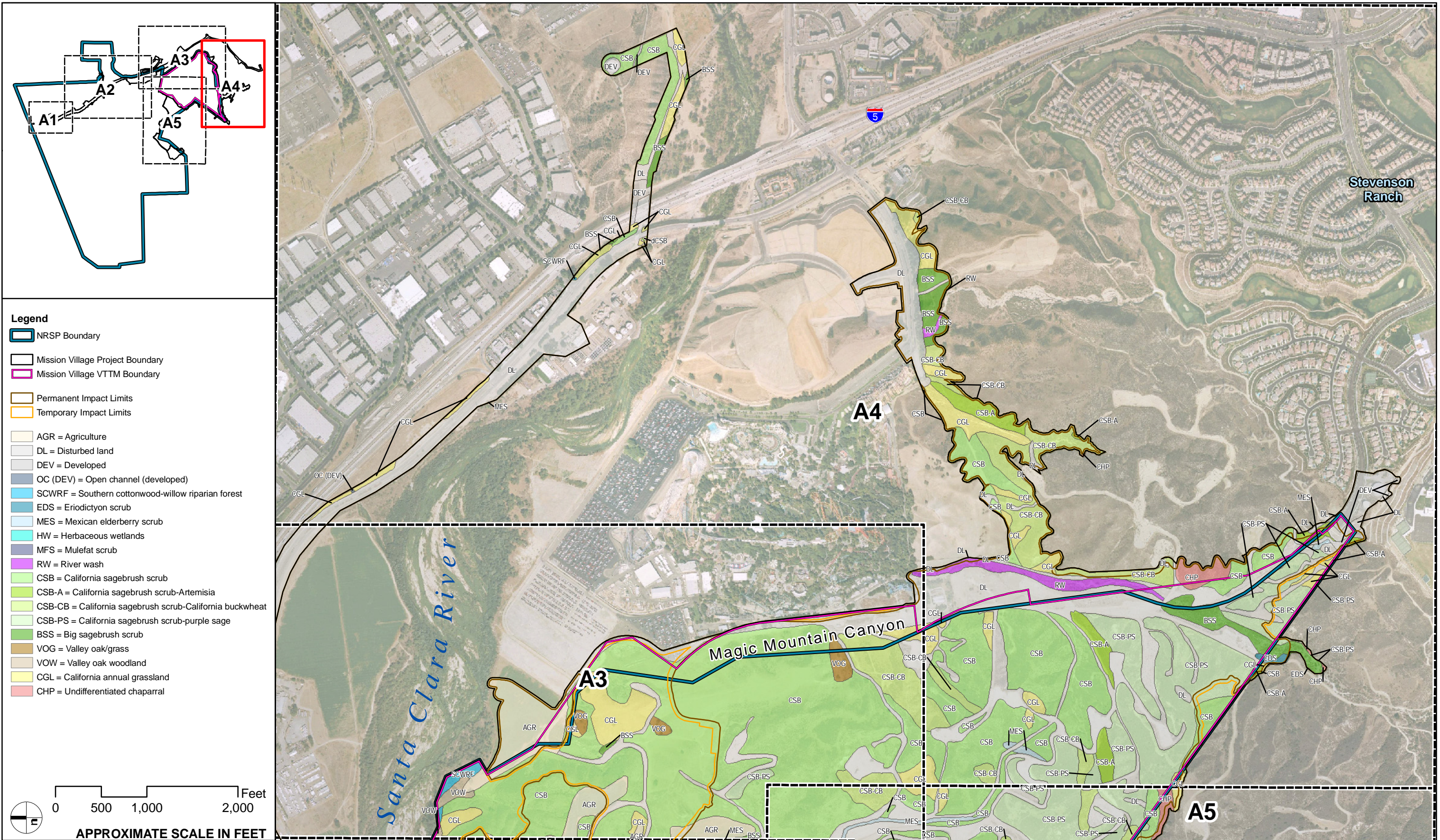


FIGURE 4.3-4-A4

Mission Village EIR

Plant Communities and Land Uses at the Mission Village Project Site

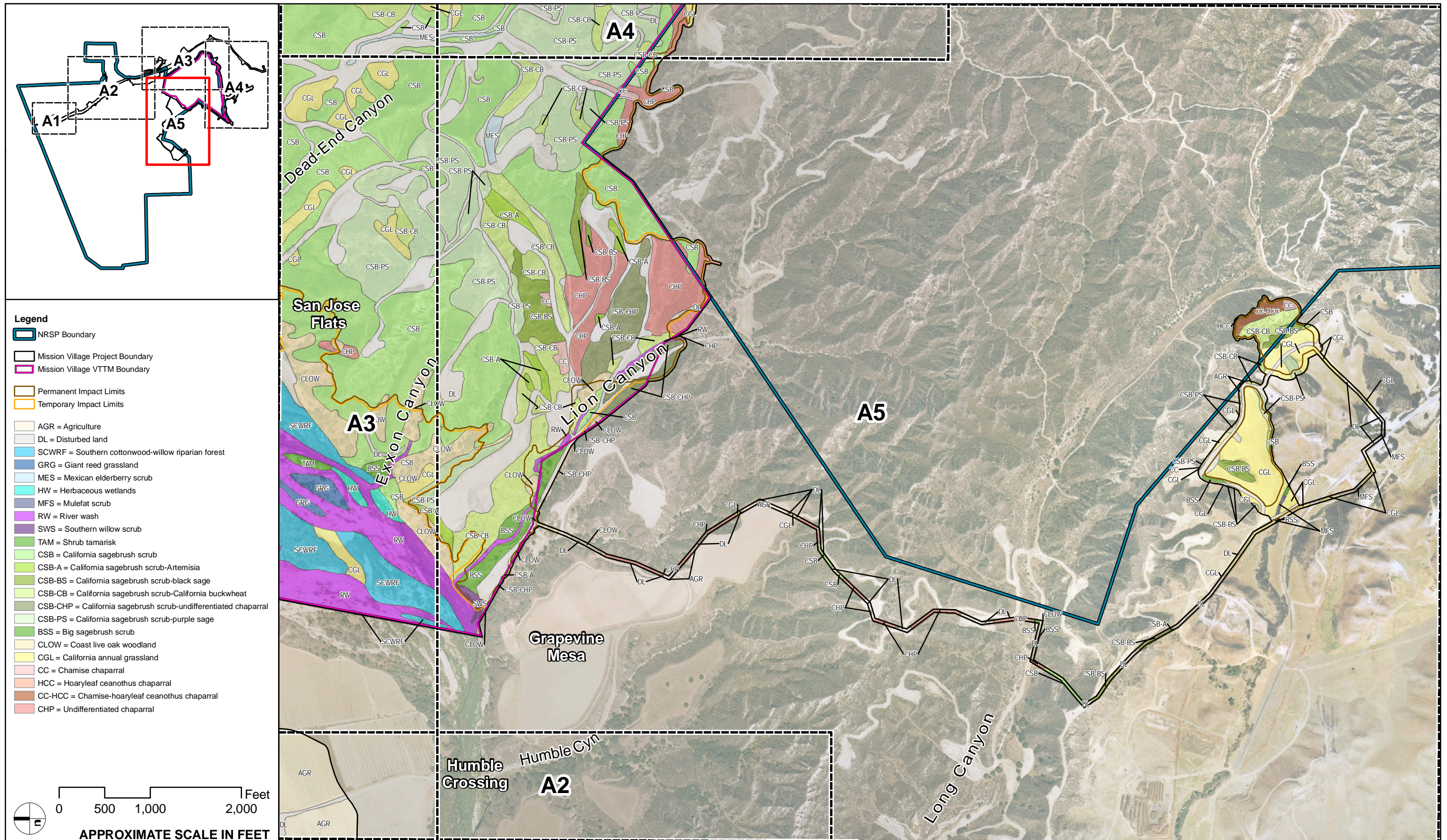


FIGURE 4.3-4-A5

Mission Village EIR

Plant Communities and Land Uses at the Mission Village Project Site

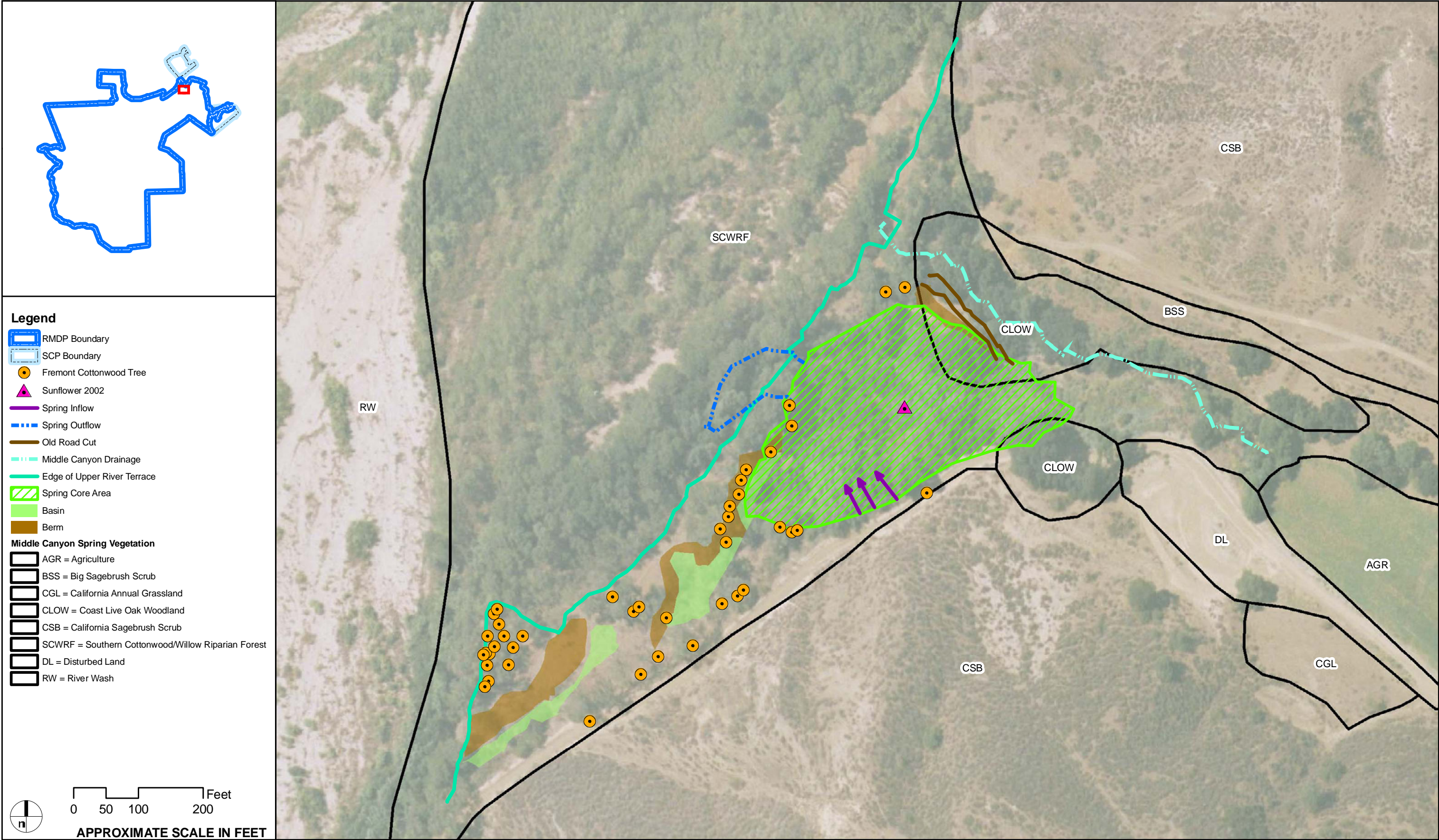


FIGURE 4.3-4-B1

Mission Village EIR

Middle Canyon Spring - Existing Conditions



Grass and herb dominated communities (40.000.00)⁶⁸**Non-Native Grassland (42.000.00)**

California Annual Grassland (42.040.00). There are 82.4 acres of California annual grassland on the project site. This non-native, annual grassland is characterized by a mixture of weedy, introduced annuals, primarily grasses.⁶⁹ On site, grassland areas consist of various annual non-native grasses including wild oat (*Avena* spp.), bromes (*Bromus diandrus*, *B. madritensis* ssp. *rubens*, *B. hordeaceus*), and slender oat (*Avena barbata*). Other herbaceous species include black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), Russian thistle (*Salsola tragus*), and dove weed (*Eremocarpus setigerus*). It may occur where disturbance by maintenance (e.g., mowing, scraping, disking, and spraying), grazing, repetitive fire, agriculture, or other mechanical disruption has altered soils and removed native seed sources from areas formerly supporting native vegetation.⁷⁰

Scrub and chaparral (30.000.00)**Coastal Scrub (32.000.00)**

There are 779.3 acres of coastal scrub (including alliances and associations) on the project site. Of this acreage, 262.1 acres are mapped as the California sagebrush scrub alliance, including 149.0 acres of two California sagebrush scrub associations (which are described below); 12.9 acres mapped as the California sagebrush-sage association; 84.7 acres mapped as the California sagebrush–California buckwheat scrub alliance; 15.5 acres mapped as the California sagebrush scrub–undifferentiated chaparral alliance, and 0.1 acre disturbed California sagebrush scrub. Dominant native species found in these plant alliances and associations include California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*) and California sagebrush (*Artemisia californica*). Other common plants include various sages (*Salvia leucophylla*, *S. mellifera*, *S. apiana*), deerweed (*Lotus scoparius*), California aster (*Lessingia filaginifolia* var. *filaginifolia*), California encelia (*Encelia californica*), giant wild-rye (*Leymus condensatus*), and chaparral bushmallow (*Malacothamnus fasciculatus*). The understory generally is sparse and contains native grasses, including valley needlegrass and native herbs such as wishbone bush (*Mirabilis californica*) and morning glory (*Calystegia macrostegia*).

⁶⁸ Species identification numbers refer to California Natural Diversity Database (CNDDDB) vegetation classifications for that species.

⁶⁹ J.O. Sawyer and T. Keeler-Wolf, *Manual of California Vegetation* (Sacramento: California Native Plant Society, 1995); R.F. Holland, *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Sacramento, California: CDFG, 1986.

⁷⁰ Holland, *Preliminary Descriptions*.

Coastal scrub has been mapped to the alliance level, and in some cases to the association level. Each type is dominated by a particular species that characterizes the alliance/association. In some cases, the dominant plant species may be the only species that is readily apparent. These alliances and associations are listed below.

California Sagebrush Scrub (32.010.00). There are 262.1 acres of California sagebrush scrub alliance and 0.07 acres of disturbed California sagebrush scrub on site. The unburned California sagebrush scrub on site includes a mixture of California sagebrush, black sage, purple sage, and California buckwheat. Other native shrubs in this community located on site include our Lord's candle (*Yucca whipplei*), Mexican elderberry (*Sambucus mexicana*), white sage, California encelia, chaparral bushmallow, giant wild-rye (*Elymus condensatus*), bush monkeyflower (*Mimulus aurantiacus*), coastal prickly-pear (*Opuntia littoralis*), and skunk bush (*Rhus trilobata*). Smaller native species that occur on site include yellow pincushion (*Chaenactis glabriuscula*), long-stem golden yarrow (*Eriophyllum confertiflorum*), common forget-me-not (*Cryptantha intermedia*), common owl's clover, deerweed, wild cucumber (*Marah macrocarpus* var. *macrocarpus*), silver puffs (*Uropappus lindleyi*), slender woolly buckwheat (*Eriogonum gracile* var. *gracile*), granny's hairnet (*Pterostegia drymarioides*), cliff malacothrix (*Malacothrix saxatilis*), and California melic (*Melica imperfecta*). Non-native species occurring on the site include red-stemmed filaree (*Erodium cicutarium*), tocalote (*Centaurea melitensis*), Russian thistle (*Salsola tragus*), horehound (*Marrubium vulgare*), and tree tobacco (*Nicotiana glauca*).

Two associations of California sage scrub alliance are also present on site: California sagebrush (32.010.01) and California sagebrush–purple sage (32.010.04). These associations were mapped in areas where California sagebrush and purple sage are the co-dominant species, although lesser amounts of the other species listed above may occur.

- California sagebrush–Artemesia (association of California sagebrush scrub, dominated only by California sagebrush) (32.010.01) – 16.1 acres
- California Sagebrush–Purple Sage (association of California sagebrush scrub, dominated by California sagebrush and purple sage) (32.010.04), including disturbed – 132.9 acres.

California Sagebrush–Black Sage Scrub (32.120.00). There are 12.9 acres of this alliance on site, in the California Sagebrush–Black Sage association. In addition to California sagebrush and black sage, this vegetation community supports the following species on site: shrubs, such as yerba santa (*Eriodictyon crassifolium*), our Lord's candle, Great Basin sagebrush (*Artemisia tridentata*), Mexican elderberry, giant wild-rye, and California encelia; native herbaceous species, including yellow-fiddleneck (*Amsinckia menziesii*), common forget-me-not, common eucrypta (*Eucrypta chrysanthemifolia*), California chicory

(*Rafinesquia californica*), wild cucumber, and southern sun cup (*Camissonia bistorta*); and non-native species such as short-podded mustard, red-stemmed filaree, and horehound.

California Sagebrush–California Buckwheat Scrub (32.110.00). There are 84.7 acres of this alliance present on site. On site, this vegetation community is dominated by California sagebrush and California buckwheat, and also supports native shrubs such as skunk bush, purple sage, Mexican elderberry, goldenbush (*Ericameria palmeri* var. *pachylepis*), and chaparral bushmallow; native wildflowers including wishbone-bush, California poppy (*Eschscholzia californica*), blue dicks (*Dichelostemma capitatum*), coast goldfields (*Lasthenia californica*), globe and angel gilia (*Gilia capitata* and *G. angelensis*); and non-native species, including red-stemmed filaree and short-podded mustard (*Hirschfeldia incana*).

California Sagebrush Scrub–Undifferentiated Chaparral (modified from 32.300.00 Coastal Sage–Chaparral Scrub). There are 15.5 acres of this alliance present on site. On site, this vegetation community includes native shrubs, such as California sagebrush, skunk bush, California buckwheat, purple sage, and chaparral bushmallow; smaller native species, such as coastal lotus (*Lotus salsuginosus*), angel's gilia (*Gilia angelensis*), blue dicks, California peony (*Peonia californica*), California aster, whispering bells (*Emmenanthe penduliflora*), fascicled tarweed (*Hemizonia fasciculata*), and tansy-leaved phacelia (*Phacelia tanacetifolia*); and non-native species, including red-stemmed filaree and short-podded mustard.

Undifferentiated Chaparral Scrubs (37.000.00)

There are 40.3 acres of undifferentiated chaparral scrubs and alliances on the project site, including 35.9 acres of undifferentiated chaparral, 2.6 acres of the alliance chamise chaparral (37.101.00), and 1.8 acres of the chamise-hoaryleaf ceanothus chaparral alliance (37.107.00). Species found on site within this plant community include chamise (*Adenostoma fasciculatum*), hoary leaf ceanothus (*Ceanothus crassifolius*), spiny redberry (*Rhamnus crocea*), sugar bush, black sage, toyon (*Heteromeles arbutifolia*), California buckwheat, California encelia, bush monkey flower, mountain mahogany (*Cercocarpus betuloides* var. *betuloides*), blue elderberry, chaparral bushmallow, holly-leaf redberry (*Rhamnus ilicifolia*), holly-leaf cherry (*Prunus ilicifolia*), and heart-leaved penstemon (*Keckiella cordifolia*). The understory is poorly developed due to the dense vegetation cover.

Chaparral with Chamise (37.100.00)

Chamise Chaparral (37.101.00). The 2.6 acres of the mapped chamise chaparral alliance present on site is dominated by chamise and also supports the following: native shrub species, such as hoaryleaf ceanothus, skunk bush, toyon, bladder pod (*Isomeris arborea*), California buckwheat, giant wild-rye, black sage, and California encelia; smaller native plants, including California peony, California aster, wishbone-

bush, common forget-me-not, globe gilia, wild cucumber, and chaparral nightshade; and non-native species, including black mustard (*Brassica nigra*) and short-podded mustard.

Chamise–Hoaryleaf Ceanothus Chaparral (37.107.00). There are 1.8 acres of mapped chamise–hoaryleaf ceanothus chaparral present on site and dominated by chamise with hoaryleaf ceanothus also very common.

Other Scrubs

Eriodictyon Scrub. Eriodictyon scrub is dominated by yerba santa (*Eriodictyon crassifolium* var. *nigrescens*). It does not conform with CDFG71-defined vegetation communities and is defined here as a scrub community dominated by yerba santa. Eriodictyon scrub occurs in the project area along the southern end of Magic Mountain Canyon and occupies 0.6 acre. On site, eriodictyon scrub is dominated by an almost monotypic stand of yerba santa. This vegetation community does support a few other sparsely distributed native shrubs, including California buckwheat, goldenbush, black sage, and purple sage; native herbaceous species western jimsonweed (*Datura wrightii*) and butterweed (*Senecio flaccidus* var. *douglasii*); and the non-native tocalote.

Broad leafed and upland tree dominated (70.000.00)

Coast Live Oak Forest and Woodland (71.060.00)

This alliance on site is mapped to the association level as coast live oak woodland (71.060.19). There are 31.7 acres of coast live oak woodland on the project site. This community occurs at the base of north-facing slopes along the River Corridor and is dominated by coast live oak (*Quercus agrifolia*). The understory is characterized by annual grasses, spiny redberry (*Rhamnus crocea*), skunkbrush, Mexican elderberry, holly-leaf cherry (*Prunus ilicifolia* ssp. *ilicifolia*), wild cucumber, eucrypta, clarkias (*Clarkia* spp.), and bedstraw (*Galium* spp.).

Valley Oak Forest and Woodland (71.040.00)

There are 5.6 acres of valley oak forest and woodland on the project site. Small patches occur within the Magic Mountain Canyon area. In addition to valley oak trees, valley oak woodland and valley oak/grass support native shrubs (Mexican elderberry and coyote brush); native herbaceous species, including miner's lettuce, California fuchsia (*Epilobium canum* ssp. *canum*), common owl's-clover, blue dicks, common lomatium (*Lomatium utriculatum*), fiesta flower, wild cucumber, yellow fiddleneck, blue dicks,

⁷¹ CDFG, "List of California Terrestrial Natural Communities."

arroyo lupine, California goosefoot, coast paintbrush (*Castilleja affinis*), shrubby phacelia, common forget-me-not, yellow fiddleneck, common eucrypta, and arroyo lupine; as well as non-native species (common chickweed, short-podded mustard, black mustard, common sow-thistle, bull thistle (*Cirsium vulgare*), shepherd's purse, milk thistle, cheeseweed, and non-native grasses).

- Two associations of valley oak forest and woodland are also present on site: valley oak woodland (71.040.08) and valley oak/grass (71.040.05). These associations were mapped in areas where California sagebrush and purple sage are the co-dominant species, although lesser amounts of the other species listed above may occur.
 - Valley oak woodland (association of Valley Oak Forest and Woodland - this community is characterized by a predominance of valley oaks in sufficient numbers to form a greater than 20 percent canopy cover) (32.010.01)—2.3 acres
 - Valley oak/grass (association of Valley Oak Forest and Woodland) - this community is characterized by a predominance of valley oaks in sufficient numbers to form a less than 20 percent canopy cover) (32.010.04)—3.3 acres.

Riparian and bottomland habitat (60.000.00)

Other Riparian/Wetland Communities

Herbaceous Wetland. There are 4.0 acres of herbaceous wetlands on the project site. These wetlands occur within the banks of the Santa Clara River or its tributaries. Commonly occurring species include Hooker's evening primrose (*Oenothera elata*), cocklebur (*Xanthium strumarium*), and immature mulefat (*Baccharis salicifolia*), willows (*Salix* spp.), and Fremont cottonwood (*Populus fremontii*) seedlings and saplings. This community does not fit into a defined plant community classification and was defined on site by the dominant plant species.

River Wash. There are 115.1 acres of river wash on the project site. The stretch of the Santa Clara River occurring within and bordering the location of the proposed bridge and haul routes, as well as areas within Magic Mountain Canyon, are sparsely vegetated and subject to scouring by seasonal storm flows. Soils are sandy riverwash and gravel, and in places form sand bars and low terraces within the channels. Shrub species occurring in and adjacent to the channel include mulefat, sandbar willow, tamarisk, scale-broom, sandwash groundsel (*Senecio flaccidus* var. *douglasii*), big saltbush (*Atriplex lentiformis* ssp. *lentiformis*), and big sagebrush. Smaller species growing in the riverbed include white sweetclover (*Melilotus albus*), buckwheat (*Eriogonum baileyi*), cocklebur, California croton (*Croton californicus*), California evening primrose (*Oenothera californica* ssp. *californica*), Mediterranean schismus (*Schismus barbata*), foxtail chess (*Bromus madritensis* ssp. *rubens*), and annual bur-sage (*Ambrosia acanthicarpa*).

Alluvial Scrub

There is 0.5 acre of alluvial scrub on the project site. This community occurs in creeks and washes on alluvial material. On site, this community occurs solely within the Santa Clara River and its tributaries. Species found include big sagebrush, mule fat, tree tobacco, scalebroom (*Lepidosparum squamatum*), big saltbush (*Atriplex lentiformis*), and California sagebrush. This community does not fit into a defined plant community classification and was defined on site by the dominant plant species.

Big Sagebrush Scrub (35.110.00). There are 24.6 acres of big sagebrush scrub on the project site. As a CDFG⁷²-recognized alliance (35.110.00) of Great Basin Scrub, big sagebrush scrub is a widespread and characteristic shrub of the high desert and Great Basin floristic provinces, where it often occurs with pines and junipers. In the Santa Clarita area, however, it seems to occur in vegetation transitional to more typical cismontane coastal scrub. Big sagebrush scrub occurs along the outer margins of the floodplains of Magic Mountain Canyon, Lion Canyon, and the Santa Clara River. On the site (and within the greater Newhall Ranch landscape), big sagebrush scrub is characterized by almost pure stands of big sagebrush, including *Artemisia tridentata* ssp. *tridentata*, *A. tridentata* ssp. *parishii*, and presumed hybrids of these subspecies.⁷³

Giant Reed (42.080.00)

There are 5.6 acres of giant reed on the project site. This non-native plant community is comprised of monotypic or nearly monotypic stands of the invasive grass giant reed (*Arundo donax*). Typically it occurs on moist soils and in streambeds. Within the project site, giant reed is associated with the Santa Clara River.

Low to High Elevation Riparian Scrub (63.000.00)

Arrow Weed Scrub (63.710.00). There are 7.6 acres of arrow weed scrub on the project site. This community occurs in moderate to dense streamside thickets strongly dominated by arrowweed (*Pluchea sericea*). On site, arrow weed scrub occurs along the banks of the Santa Clara River or its tributaries and is dense, with a few tamarisk individuals interspersed throughout.

⁷² CDFG, "List of California Terrestrial Natural Communities."

⁷³ Dudek and Associates, Inc., *Newhall Ranch High Country Specific Management Area Biological Resources Technical Report* (2006).

Mexican Elderberry Scrub (63.410.00). There are 5.8 acres of Mexican elderberry scrub on the project site. This open scrub community is dominated by Mexican elderberry but also contains scattered laurel sumac, toyon, and lemonadeberry, as well as an understory of grasses.

Mulefat Scrub (63.510.00)

There are 1.8 acres of mulefat scrub and 1.1 acres of disturbed mulefat scrub on the project site. This plant community is a relatively low (two to three m), dense, shrubby plant community that occurs in riparian vegetation, edges of catchment basins, and in canyons. It is dominated by mulefat and may contain a small number of arroyo willow (*Salix lasiolepis*), upland shrubs, and facultative herbs. Mulefat scrub is a seral community that occurs mainly along major drainages and floodplains where the riparian vegetation is open or disturbed. Frequent flooding and/or scouring apparently maintain this community in an early successional state.⁷⁴

Riparian Forest and Woodland (61.000.00)

Southern Willow Scrub (63.130.00). There are 1.5 acres of southern willow scrub on the project site. This plant community is present in locations within the floodplain of Castaic Creek and the Santa Clara River. This community is dominated by willow shrubs, but also includes mulefat and Mexican elderberry. The understory is sparse, with species such as mugwort, shrubby phacelia (*Phacelia ramosissima*), and annual grasses present.

Tamarisk Scrub and Woodland (63.810.00). This alliance on site was mapped at the association level as shrub tamarisk (63.810.02). There are 1.1 acres of shrub tamarisk on the project site. Shrub tamarisk occurs on site in small, fairly monotypic patches in Castaic Creek near the confluence with the Santa Clara River, and just upstream of this confluence in the Santa Clara River. On site, shrub tamarisk is dominated by tamarisk but also includes scattered native shrubs (coyote brush, quail brush, and mulefat), smaller native species (winged three-square, chaparral nightshade, cocklebur), and non-native species (horehound and short-podded mustard).

Southern Cottonwood-Willow Riparian Forest (61.130.02). There are 109.2 acres of southern cottonwood-willow riparian forest on the project site. This community occurs on low terraces above the main channel of the Santa Clara River and along Castaic Creek. It consists of tall, open, broadleaved, winter-deciduous trees, and is dominated by Fremont cottonwood (*Populus fremontii* ssp. *fremontii*) and willows (*Salix laevigata*, *S. exigua*, *S. lasiolepis*). Understory plants include mulefat (*Baccharis salicifolia*), arrow weed (*Pluchea sericea*), Mexican elderberry, mugwort (*Artemisia douglasiana*), hoary nettle (*Urtica*

⁷⁴ Holland, *Preliminary Descriptions*.

dioica ssp. *holosericea*), ripgut grass (*Bromus diandrus*), and alkali rye (*Leymus triticoides*). Two invasive plant species, giant reed (*Arundo donax*) and tamarisk (*Tamarix ramosissima*), are also common throughout this plant community.

The Middle Canyon Spring complex occurs within the southern cottonwood-willow riparian forest plant community on the project site. Current surface size of the spring area can be delimited within an approximately 400-foot by 400-foot polygon. The spring is located on what appears to be an upper terrace of the Santa Clara River. Approximately 4 feet of elevation separates this terrace from the river floodplain. An intermediate elevation terrace or geological structure is present between the spring terrace and the Santa Clara River floodplain. Spring flows currently saturate a core area of the spring and then drain off via two excavated channels that drain water onto the intermediate terrace, whereupon the water sheet flows until spilling over the terrace edge into the Santa Clara River floodplain. The spring vegetation exhibits a clear pattern in response to these characteristic flow patterns. Rushes (*Scirpus* sp.) appear to be associated with more consolidated flow while more dichotomous vegetation appears where sheet flow is present. Within this setting, two sensitive species (the Newhall sunflower (*Helianthus inexpectatus*) and *Pyrgulopsis castaicensis* n. sp.) find habitat conditions that specifically fulfill the needs and tolerances of each species and allow these populations to survive and persist.

Man-Made Land Cover Types

Agriculture. There are 224.4 acres of land on the project site actively used for agricultural purposes. This land cover is regularly disked and generally occurs in the northern portion of the project site.

Developed Land. There are 8.1 acres of developed land on the project site. These areas primarily include road corridors, parking lots, commercial areas, and various impermeable surfaces throughout the project site.

Disturbed Land. There are 404.3 acres of disturbed lands on the project site. These areas include portions of the site that are mostly void of vegetation, consisting primarily of dirt roads and oil pads, and still retain permeable surfaces.

b. Common Wildlife

Discussed below are representative common wildlife species (those not provided a sensitivity status by regulatory agencies) that were observed on the project site during the field surveys. A complete list of wildlife species observed or potentially occurring on the Mission Village project site is provided in **Appendix 4.3**. Special-status wildlife species observed or potentially occurring on the project site are discussed under **subsection 7, Sensitive Biological Resources**, below.

(1) Amphibians and Reptiles

The Santa Clara River and other on-site drainages provide habitat for amphibians, including toads, frogs, and salamanders. Western toad (*Bufo boreas*), Pacific chorus frog (*Pseudacris regilla*) and California chorus frog (*Pseudacris cadaverina*), all of which are common in the project area, have been observed in the portion of the river bordering the project site. Additionally, numerous tadpoles, juveniles, and adult forms of the invasive African clawed frog (*Xenopus laevis*) were observed throughout backwater areas of the Santa Clara River along and adjacent to the project site.⁷⁵ No other common amphibian species have been observed or detected during the site surveys. Three salamander species that are relatively common in suitable habitat within their ranges have some potential to occur on or adjacent to the project site: arboreal salamander (*Aneides lugubris*), black-belly salamander (*Batrochoseps nigriventris*), and ensatina (*Ensatina eschscholtzii*). However, these species are not expected to be common or widespread on the project site because they were not observed during the several amphibian and semi-aquatic reptile surveys in the Newhall Ranch Specific Plan area (see **Table 4.3-2**). Amphibians on or adjacent to the project site are expected to be largely restricted to the riverine and riparian habitats.

Common reptile species observed on the project site include western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), red coachwhip (*Masticophis flagellum piceus*), San Diego alligator lizard (*Elgaria multicaudata webbii*), western skink (*Eumeces skiltonianus*), San Diego gopher snake (*Pituophis catenifer annectens*), common kingsnake (*Lampropeltis getulus*) and southwestern rattlesnake (*Crotalus viridis helleri*). Common reptiles are expected to be abundant throughout the project site.

(2) Birds

The agricultural, grassland and scrub habitats on the project site provide foraging habitat for a number of raptor species, including turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*) and American kestrel (*Falco sparverius*). The oak trees located throughout the site provide nesting habitat for raptors. Other bird species observed within the upland portions of the project site include American robin (*Turdus migratorius*), house finch (*Carpodacus mexicanus*), savannah sparrow (*Passerculus sandwichensis*), Brewer's blackbird (*Euphagus cyanocephalus*), house sparrow (*Passer domesticus*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaidura macroura*), European starling (*Sturnus vulgaris*), white-throated swift (*Aeronautes saxatalis*), California towhee (*Pipilo crissalis*), canyon wren (*Catherpes mexicanus*), rock wren (*Salpinctes obsoletus*), western scrub-jay (*Aphelocoma californica*), California thrasher (*Toxostoma redivivum*), hermit thrush (*Catharus guttatus*),

⁷⁵ Compliance Biology, Inc., *Results of the Focused Western Spadefoot Toad Surveys on the Mission Village Project Site*.

white-crowned sparrow (*Zonotrichia albicollis*), yellow-rumped warbler (*Dendroica coronata*), Say's phoebe (*Sayornis saya*), and California quail (*Callipepla californica*).

The riparian habitats on and bordering the project site provide nesting and foraging habitat for numerous raptor and passerine bird species. Bird species commonly observed within the riparian plant communities include bushtit (*Psaltriparus minimus*), Wilson's warbler (*Wilsonia pusilla*), orange-crowned warbler (*Vermivora celata*), black phoebe (*Sayornis nigricans*), Bewick's wren (*Thryomanes bewickii*), brown-headed cowbird (*Molothrus ater*), wrentit (*Chamaea fasciata*), cliff swallow (*Petrochelidon pyrrhonota*), tree swallow (*Tachycineta bicolor*), American crow (*Corvus brachyrhynchos*), Nuttall's woodpecker (*Picoides nuttallii*), song sparrow (*Melospiza melodia*), common yellowthroat (*Geothlypis trichas*), ruby-crowned kinglet (*Regulus calendula*) and numerous other species.

Several bird species that were identified by Los Angeles Audubon Society as Los Angeles County's Sensitive Bird Species⁷⁶ have potential to occur on or adjacent to the Mission Village project site, including Virginia rail (*Rallus limicola*), sora (*Porzana carolina*), greater roadrunner (*Geococcyx californianus*), lesser nighthawk (*Chordeiles acutipennis*), belted kingfisher (*Megaceryle alcyon*), hairy woodpecker (*Picoides villosus*), gray flycatcher (*Empidonax wrightii*), marsh wren (*Cistothorus palustris*), mountain bluebird (*Sialia currucoides*), Swainson's thrush (*Catharus ustulatus*), Wilson's warbler, vesper sparrow (*Poocetes gramineus*), and western meadowlark (*Sturnella neglecta*). Los Angeles Audubon considers these species at risk locally due to the following factors: they are susceptible to possible extirpation as a winter and/or breeding species in the County; they are sensitive to urbanization; their population trends, if known, may be in decline; the County's importance to the species; and their limited distribution. The species from the County list identified above are not, however, officially designated by federal, state, or local agencies as special-status species. For that reason, they are not analyzed as special-status species in this EIR. Instead, these species are analyzed as part of the common wildlife category, and the mitigation for significant impacts to common bird species applies to these species as well.

(3) Mammals

A variety of common mammal species occur in the vicinity of the project site. During mammal surveys (which included small mammal trapping for rodents) conducted on and bordering the project site in 2004, the following common species were observed or identified by tracks, scat, or other sign: mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), desert cottontail (*Sylvilagus auduboni*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), raccoon (*Procyon lotor*), gray fox (*Urocyon cinereoargenteus*), striped skunk (*Mephitis mephitis*), western harvest

⁷⁶ Los Angeles Audubon, *Los Angeles County's Sensitive Bird Species* (2009).

mouse (*Reithrodontomys megalotis*), deer mouse (*Peromyscus maniculatus*), dusky-footed woodrat (*Neotoma fuscipes*), California mouse (*Peromyscus californicus*), California pocket mouse (*Chaetodipus californicus*), California vole (*Microtus californicus*) and Pacific kangaroo rat (*Dipodomys agilis*). The medium to larger mammals observed on the site (i.e., mule deer, coyote, bobcat, desert cottontail, raccoon, fox, striped skunk) do not typically rely on a specific single habitat and are presumed to utilize all of the habitat types on the project site. Similarly, based on the results of the 2004 surveys, small mammals were found to utilize all the habitat types on the project site. In addition, the following common bat species were confirmed in the vicinity of the project site: big brown bat (*Eptesicus fuscus*), western red bat (*Lasiurus blossevillii*), hoary bat (*Lasiurus cinereus*), California myotis (*Myotis californicus*), long-legged bat (*Myotis volans*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), western pipistrelle (*Pipistrellus hesperus*), and Mexican free-tailed bat (*Tadarida brasiliensis*).

(4) Gastropods

Three native species of shoulderband snails were detected during the surveys for the Trask shoulderband snail within the Newhall Ranch Specific Plan area and nearby areas, including Southern California shoulderband snail (*Helminthoglypta tudiculata* cf. *H.t. convicta*), Vasquez rocks shoulderband snail (*Helminthoglypta vasquezi*), and Grapevine shoulderband snail (*Helminthoglypta uvasana*). None of these species are designated by CDFG as special-status species. The Southern California shoulderband snail and Vasquez rocks shoulderband snail were detected in the project area in a variety of habitat types, including California annual grassland, coastal scrub, and in riparian areas. All snails were found in association with their expected microclimates (i.e., under rocks, in leaf litter, woody debris piles, under the decaying bases of yucca bushes, and similar moist environments). Vasquez rocks shoulderband snail was found at several locations in the proposed project area and proposed open space areas, including the mouth of Middle Canyon; portions of upper Middle Canyon; and the Magic Mountain Canyon watershed. Southern California shoulderband snail was found at several locations in the proposed project area, including the Middle Canyon area. Grapevine shoulderband snail was not detected in the project area, but was located in the Piru Creek floodplain near the confluence with the Santa Clara River. This species was previously known only from the type locality near Fort Tejon State Historical Park in Kern County. This detection extends the known range of this species at least 42 miles southwest of the type locality and greatly expands the known distribution of the species. Based on these new occurrences, this species is expected to also occur in the project area.

c. Wildlife Habitat Linkages/Regional Open Space

Wildlife corridors are described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural

or human induced factors such as urbanization. The fragmentation of natural habitat creates isolated “islands” of vegetation that may not provide sufficient area or resources to accommodate sustainable populations for a number of species. Wildlife corridors: (1) allow animals to move between remaining habitats to replenish depleted populations and increase the available gene pool; (2) provide live-in habitat for some species; (3) provide escape routes from fire, predators, and human disturbances, which reduce the risk that catastrophic events (such as fire or disease) will result in population or species extinction; and (4) serve as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

The following analysis of wildlife movement and habitat linkages between the project site and surrounding open space areas is based on extensive field visits conducted over the past decade in association with the Newhall Ranch Specific Plan Program EIR, the Final Additional Analysis and the related Biological Constraints Analysis (BCA) and Biota Report for the Specific Plan. It is also based on (1) a review of available aerial photography and mapping of the Specific Plan and adjacent watersheds in both Los Angeles County and Ventura County; (2) an evaluation of habitat types and distribution associated with the Mission Village project site and surrounding areas; (3) a review of the animal species known to use or expected to utilize these habitats; and (4) the conceptual regional wildlife habitat linkage design identified in the South Coast Missing Linkages Project.⁷⁷ In this discussion, wildlife movement and habitat linkages are addressed from a watershed and habitat perspective, as the preservation of habitats within watersheds that connect remaining open space areas is critical to providing movement corridors for the variety of wildlife species that occur in the Specific Plan area, inclusive of the Mission Village project site.

The Mission Village project site, indeed the Newhall Ranch Specific Plan area, is part of a larger regional wildlife movement interface that exists between the Los Padres/Angeles National Forest, the Santa Clara River, and the Santa Susana Mountains.⁷⁸ This interface spans a distance of approximately 35 miles, from approximately Saticoy on the west in Ventura County to Castaic Junction on the east in Los Angeles County. The Santa Clara River forms the central east-west corridor of this interface, extending throughout the Newhall Ranch Specific Plan area and west into Ventura County. As shown on **Figure 4.3-5, Potential Wildlife Movement Corridors**, the Newhall Ranch Specific Plan site represents an approximately 2- to 5-mile-wide portion (6 to 14 percent) of this 35-mile-wide interface.

⁷⁷ Penrod et al., *South Coast Missing Linkages Project*.

⁷⁸ e.g., Penrod et al., *South Coast Missing Linkages Project*.



Legend

- NRSP Boundary
- Mission Village Project Boundary
- Mission Village VTTM Boundary
- Permanent Impact Limits
- Temporary Impact Limits

Wildlife Corridor

- 1 - Santa Clara River Corridor
- 2 - Salt Creek Confluence
- 3 - Salt Creek High Country
- 4 - East Fork Salt Creek
- 5 - Potrero Canyon Salt Creek
- 6 - Potrero Canyon
- 7 - Long Canyon
- 8a - Humble Canyon
- 8b - Lion Canyon
- 8c - Exxon Canyon
- 8d - Dead End Canyon
- 8e - Middle Canyon
- 8f - Magic Mountain Canyon
- 9 - Chiquito Canyon
- 10 - San Martinez Grande Canyon
- 11 - Off-Haul Canyon
- 12 - Homestead Canyon
- 13 - Castaic/Hasley Corridor

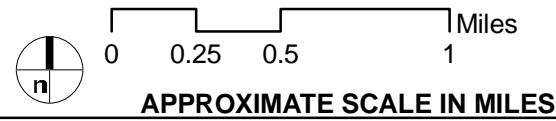


IMAGE SOURCE: DigitalGlobe 2007

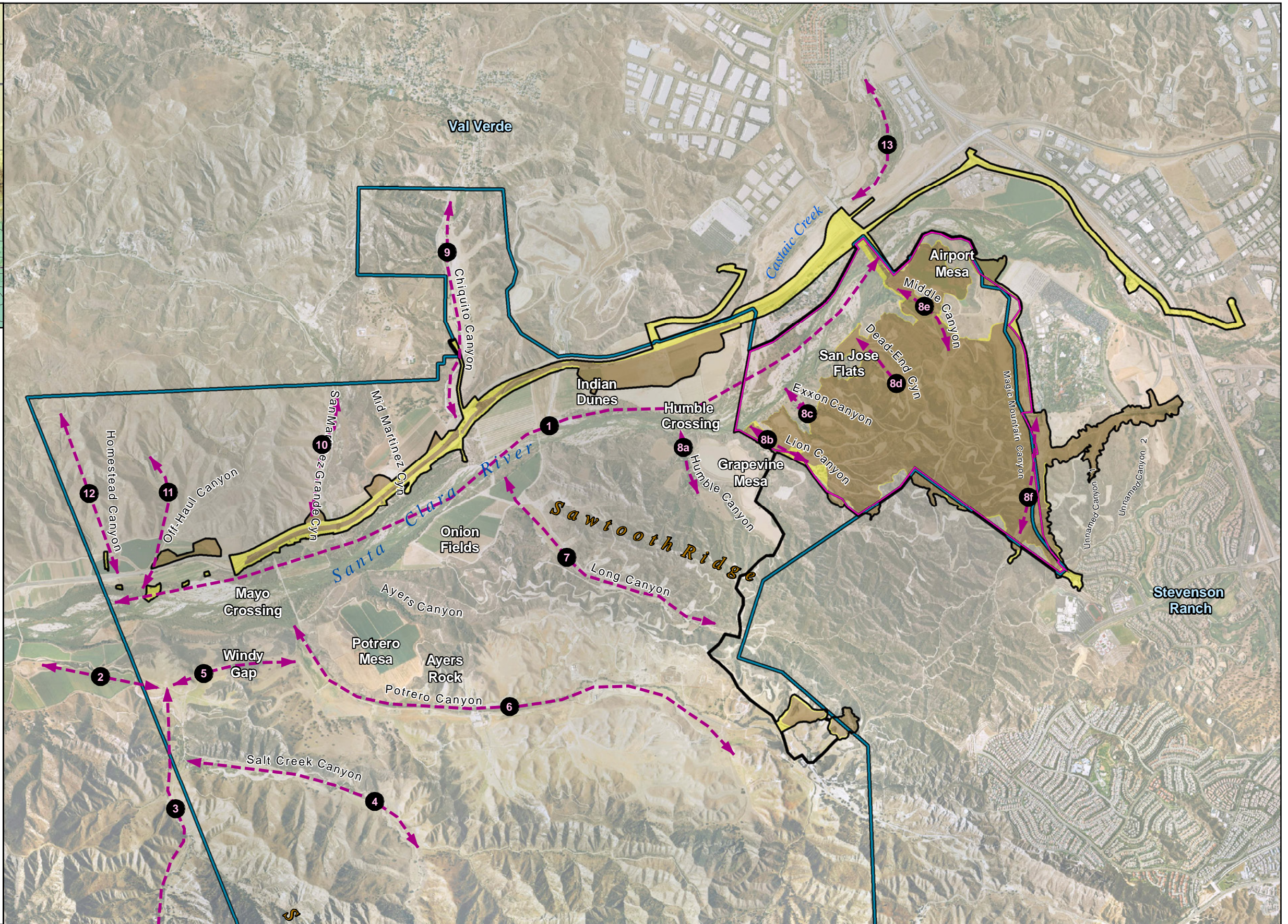


FIGURE 4.3-5

Mission Village EIR

Potential Wildlife Movement Corridors

The Santa Clara River flows from its origins in the San Gabriel Mountains to where it eventually empties into the Pacific Ocean approximately 50 miles to the west. The river is an important migration and genetic dispersion corridor for many wildlife species, including aquatic taxa, riparian obligate species (resident and migratory) and larger, more mobile terrestrial animals.

Penrod et al.⁷⁹ identified regional wildlife habitat linkages that would provide upland landscape-scale habitat connectivity between the Santa Susana Mountains to the south and the Los Padres National Forest to the north (**subsection 4.3.9.b.1.e**). These conceptual linkages encompass the High Country SMA/SEA 20 and the Salt Creek area within the project site and the Santa Clara River west of the project site. Penrod et al.⁸⁰ considered the High Country SMA/SEA 20 and Salt Creek area, along with regional open space conservation areas and initiatives such as “SOAR,”⁸¹ in recommending a linkage design that would connect the Santa Monica Mountains, San Gabriel Mountains, and the Sierra Madre Mountains. This linkage design was also based on a “least cost analysis” that quantitatively models the most efficient routes that target animals could take to travel between these open space areas.⁸²

Within the Newhall Ranch Specific Plan area, south of the Santa Clara River, several drainages, including Long Canyon, Potrero Creek, and Salt Creek, are directly connected to the Santa Clara River through their own drainage systems, providing potential wildlife movement routes between the river and the Santa Susana Mountains to the south. These drainages serve to provide habitat linkages between the High Country areas within the Newhall Ranch Specific Plan and the Santa Clara River. Other drainages, including Chiquito Canyon, San Martinez Grande, and Castaic Creek, connect the river to open space areas to the north and eventually the Angeles National Forest further north and the Los Padres National Forest to the northwest.

Chiquito Canyon is located west of the project site, and the Castaic Creek drainage is chiefly north of the project site. Both of these drainages are tributaries of the Santa Clara River and serve as suitable habitat/movement corridors for wildlife route from the river to the north toward the Angeles and Los Padres National Forests. Given the presence of a culvert underneath SR-126 (located to the north of the Chiquito Canyon-Santa Clara River confluence along the western edge of the project site), wildlife could cross under SR-126 and continue to move north through Chiquito Canyon.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Save Open-Space and Agricultural Resources (SOAR) is a non-profit organization that seeks to maintain agricultural, open space, and rural lands within Ventura County and surrounding regions. Development activities within the SOAR boundaries are limited by County Ordinance.

⁸² In this context, “least cost” refers to the amount of energy an animal would expend in traveling between habitat areas.

As previously stated, much of the Mission Village tract map site is used for agricultural purposes and a portion of it is disked regularly. These activities, and existing suburban development located nearby, limit the use of the main portion of the site as a movement corridor for most wildlife. While several species are expected to forage occasionally over and within the project area, most species likely move through the area along the canyons and areas west of the project site. However, the large expanses of habitat (including drainages and woodlands) on the Mission Village project site provide potential movement pathways for wildlife moving between the Santa Susana Mountains and the Santa Clara River (which, as discussed above, is an important migration and genetic dispersion corridor for many wildlife species). Additionally, wildlife traveling along the river corridor (through the project site) can access the Castaic Creek drainage, which serves as a suitable habitat/movement corridor for wildlife from the Santa Clara River (north) towards the Angeles and Los Padres National Forests. Given the above, the Mission Village project site is considered part of a locally and regionally important wildlife movement corridor.

Finally, from a broader regional perspective, Dudek completed a comprehensive study of the Santa Clara River watershed.⁸³

That study analyzed the cumulative impacts of development, including past projects, current land use zoning, and future and approved projects in the Los Angeles County portion of the watershed. Based on that analysis, the study found that while land conversion has occurred in the Santa Clara River Valley and adjacent foothills, and will continue to occur in the future, the vast majority of the watershed is comprised of natural lands. The study also concluded that the additional impacts of the Mission Village project, the Landmark Village project, Newhall Land and Farming projects in general, and other planned and approved projects in the Los Angeles County portion of the watershed are relatively small in proportion to the size of the overall watershed. Key findings of the study include:

- The Santa Clara River watershed is and for the most part will remain undeveloped—lands converted to agriculture and urban development comprise about 10 percent of the Los Angeles County portion of the upper watershed. Planned and approved projects in Los Angeles County (including the City of Santa Clarita) would increase the amount of development in the upper watershed by about 3 percent.
- The watershed includes substantial existing public lands and planned open spaces that will be protected in perpetuity. Based on current public lands and currently zoned open space, approximately 71 percent of the upper watershed (733,526 acres) is existing or zoned open space.

⁸³ Dudek, *Draft Santa Clara River Watershed Study* (2008).

- Under current land use zoning, important biological and physical features of the entire watershed would be retained. The major vegetation communities (coastal scrubs, chaparral, non-native grassland, woodlands and forest, and riparian/wetlands) will remain relatively common in the watershed.
- The Newhall Ranch Specific Plan area comprises a very small portion (less than 2 percent) of the entire watershed and is limited to a small area in the southern portion of the watershed. Planned development on the Newhall Ranch Specific Plan area (including the proposed Mission Village project) would impact 1 percent of the entire watershed.

Although encroachment by past development (including agriculture) has caused habitat loss and fragmentation and impacts to species in the watershed, the Dudek study concluded that the existing and proposed cumulative development in the watershed will not significantly impact sensitive biological resources, based on the findings noted above. In addition, the Dudek study found that the Santa Clara River is still a natural river system and provides habitat for several listed threatened or endangered species such as the least Bell's vireo, southwestern willow flycatcher, unarmored threespine stickleback, and arroyo toad, as well as a number of non-listed special-status species.

7. SENSITIVE BIOLOGICAL RESOURCES

The following discussion focuses on those species and plant communities considered by state and/or federal resource agencies, and by recognized conservation organizations, to be of special status, that are known to occur, or could potentially occur, on the project site. A list of all plant and wildlife species, both common and special status, observed or expected to potentially occur on the project site is found in **Appendix 4.3**.

All of the surveys and reports referenced in this section are incorporated by reference, as permitted in section 15150 of the *State CEQA Guidelines*. All referenced documents are available for public inspection and review upon request to: County of Los Angeles, Department of Regional Planning, 320 West Temple Street Los Angeles, California 90012 (Samuel Dea; (213) 974-4808) or Impact Sciences, Inc., 803 Camarillo Springs Road, Suite A-1, Camarillo, California 93012 (Susan Tebo; (805) 437-1900). Additionally, many of these documents are included in the appendices to the Newhall Ranch Resource Management and Development Plan and the Spineflower Conservation Plan Draft EIS/EIR (SCH No. 2000011025), and can be obtained from the California Department of Fish and Game's Web site at <http://www.dfg.ca.gov/regions/5/newhall/docs/>.

a. Special-Status Plants

For purposes of the analysis presented in this subsection, special-status plants include those species that are: (1) state or federally listed as Rare, Threatened, or Endangered; (2) federal candidates for listing; (3) proposed for state or federal listing; (4) included on Lists 1, 2, 3 or 4 of the CNPS Inventory of Rare and Endangered Plants of California (CNPS Inventory); (5) species of undescribed taxa; or (6) species designated as special-status by the County of Los Angeles. Plants included on the CNPS Inventory are broken down into the following classifications: List 1A is comprised of plants presumed extinct in California; List 1B is comprised of plants that are Rare, Threatened, or Endangered in California and elsewhere; List 2 is comprised of plants that are Rare, Threatened, or Endangered in California, but more common elsewhere; List 3 is comprised of plants about which more information is needed (a review list); and List 4: plants of limited distribution (a watch list).

Additionally, there is a second designation that follows the List classification, denoting the threat classification. When a List number is assigned to a special-status plant, a further designation of “.1” means that the plant is seriously endangered in California, a further designation of “.2” means that the plant is fairly endangered in California, and a further designation of “.3” signifies that the plant is not considered to be very endangered in California. Therefore, for example, the slender mariposa lily discussed below is a CNPS List 1B.2 plant, meaning the CNPS has classified this species as being Rare, Threatened, or Endangered in California and elsewhere, and further, the threat classification means that the plant is fairly endangered in California.

Based on a review of the CNDDDB and CNPS databases and the survey reports prepared for the Newhall Ranch Specific Plan area and the project site, a total of 41 special-status plant species were identified as occurring in the region. This list formed the basis of the following analysis, wherein each of the identified species is addressed in one of the following two sections: **subsection 7.a.(1)** addresses the special-status plant species observed on the site during focused surveys; and **subsection 7.a.(2)** addresses the special-status plant species that are known to occur in the project area, but were not observed on or adjacent to the project site during focused surveys. **Table 4.3-2**, above, details the specificity of the focused surveys.

(1) Special-Status Plant Species Observed on or Adjacent to the Project Site

Special-status plant species that were observed on the project site during focused surveys include San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), slender mariposa lily (*Calochortus clavatus* var. *gracilis*), mainland cherry (*Prunus ilicifolia* ssp. *ilicifolia*), island mountain-mahogany (*Cercocarpus betuloides* var. *blancheae*), Parish’s sagebrush (*Artemisia tridentata* ssp. *parishii*), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), Peirson’s morning-glory (*Calystegia peirsonii*), Southern California

black walnut (*Juglans californica*), and Newhall sunflower (*Helianthus inexpectatus*). In addition, a potentially undescribed species was observed: an undescribed everlasting (*Gnaphalium* sp. *nova*). While these plants currently have no sensitivity status, it is described in this report because of their unique nature and potential to be assigned a sensitivity status in the future. These nine species are discussed in more detail below, and their locations with respect to the project site are shown on **Figure 4.3-6, Special-Status Plant Species Locations**.

San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) is a federal candidate plant species, is state listed as Endangered, and is a CNPS List 1B species. SFVS occurrences were mapped as polygons. Where plants were less than four meters (13.1 feet) from one another, they were mapped in the same polygon. Where they were four meters or farther from one another, they were mapped as separate polygons. The four-meter distance was selected based on topography, vegetation density, detectability of the plants, the general accuracy of the Global Positioning System (GPS), and time constraints. The distance is not specifically tied to SFVS biology (i.e., reproductive biology, seed dispersal) and thus is not intended to reflect reproductively isolated sub-populations, the total extent of the SFVS seed bank, or any other feature of the species' life history. Field botanists walked around the perimeter of each spineflower polygon, defining the boundary by SFVS occurrence at a less-than-four-meter (13.1-foot) distance. Polygon boundaries were defined by manually storing GPS location data in a hand-held Trimble GPS unit (sub-meter precision) every one to four meters (3.3 to 13.1 feet) along the polygon boundary. Each SFVS polygon was given a unique identifier (i.e., numbers and/or letters) in the field. Field data sheets, which included estimated plant numbers and associated species, were completed for each polygon. GPS data were analyzed using GIS or Computer Assisted Drafting software (e.g., ArcGIS, AutoCAD), then delineated so that the outer boundary was defined as a "minimum convex polygon" (i.e., the smallest polygon whose outer perimeter is made up of convex angles).⁸⁴

⁸⁴ Dudek and Associates, Inc., 2002 *Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area, Los Angeles County, California* (2002); Dudek and Associates, Inc., 2002 *Sensitive Plant Survey Results for Entrada [Magic Mountain Entertainment], Los Angeles County, California* (2003); Dudek and Associates, Inc., 2002 *Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California* (2003). Dudek and Associates, Inc., "Survey Results for Sensitive Plant Species within Water Well 206" (2003); Dudek and Associates, Inc., 2003 *Sensitive Plant Survey Results for the Isola and Ventura Homestead Sites, Los Angeles County, California* (2004); Dudek and Associates, Inc., 2003 *Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California* (2004); Dudek and Associates, Inc., 2003 *Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area, Los Angeles County, California* (2004); Dudek and Associates, Inc., 2003 *Sensitive Plant Survey Results for the Castaic Junction Site, Los Angeles County, California* (2004); Dudek and Associates, Inc., 2003 *Sensitive Plant Survey Results for the Magic Mountain Entertainment Site, Los Angeles County, California* (2004); Dudek and Associates, Inc., 2004 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California* (2004); Dudek and Associates, Inc., 2004 *Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California* (2004); Dudek and Associates, Inc., 2004 *Sensitive Plant Survey Results for the Entrada Site, Los Angeles County, California* (2004); Dudek and Associates, Inc., 2003 *Sensitive Plant Survey Results for the Salt Creek Site, Los Angeles County, California* (2004). Dudek and Associates, Inc., 2005 *Sensitive Plant Survey Results for the*

San Fernando Valley spineflower (SFVS) occurs on the greater NRSP, including locations on the Mission Village project site. This species has been observed in four general areas within the NRSP, including Airport Mesa, Grapevine Mesa, Potrero Canyon and San Martinez Grande Canyon. Most of the plants occur on slopes with a south-facing aspect within openings in sparsely vegetated in habitat characterized as open California sagebrush scrub and associations, California annual grasslands, or at the edge of agricultural fields on mesas. Most of the observed San Fernando Valley spineflower were found on soils mapped by the USDA as slightly eroded to eroded Castaic-Balcom silty clay loam (30 to 50 percent slopes) or Terrace Escarpments.⁸⁵ Plants in the vicinities of Grapevine and Airport mesas were observed downslope of terrace surfaces capped by Zamora clay loam (2 to 9 percent slopes), with a few plants occurring on artificial fill or alluvium derived from adjacent terrace deposits. Vegetative cover in the area of San Fernando Valley spineflower occurrences ranged from 5 to 100 percent, but was most commonly between 60 and 80 percent. The soil type for all mapped San Fernando Valley spineflower occurrences in the project area consisted of sandy loams. Elevations at San Fernando Valley spineflower locations on site range from approximately 1,000 to 1,300 feet AMSL.





Surveys for SFVS were conducted throughout the NRSP annually from 2002 through 2007. In 2002, the total population of SFVS was estimated to include nearly 8,000 individuals. In 2003, surveys estimated populations of SFVS totaling approximately 5.9 million individuals. In 2004, the total population of SFVS was estimated to be 560,000 individuals. In 2005, the total population of SFVS on the NRSP was estimated to be approximately 7.4 million individuals. In 2006, the total population of SFVS was estimated to be 1.8 million individuals. In 2007, the total population of SFVS was estimated to be 760 individuals.

Newhall Ranch Specific Plan Area, Los Angeles County, California (2006); Dudek and Associates, Inc., 2005 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California (2006); Dudek and Associates, Inc., 2005 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California (2006); Dudek and Associates, Inc., 2006 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California (2006); Dudek and Associates, Inc., 2006 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California (2006); Dudek and Associates, Inc., 2006 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California (2006).




⁸⁵ U.S. Department of Agriculture (USDA), *Survey, Antelope Valley Area, California: U.S. Department of Agriculture (1969).*



Legend

-  NRSP Boundary
-  Mission Village Project Boundary
-  Mission Village VTTM Boundary
-  Permanent Impact Limits
-  Temporary Impact Limits

Special-Status Plants

-  San Fernando Valley Spineflower
-  Slender Mariposa Lily
-  Undescribed Everlasting

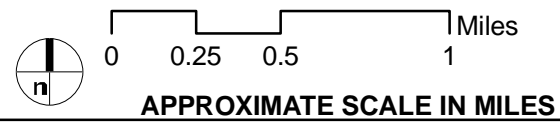


IMAGE SOURCE: DigitalGlobe 2007

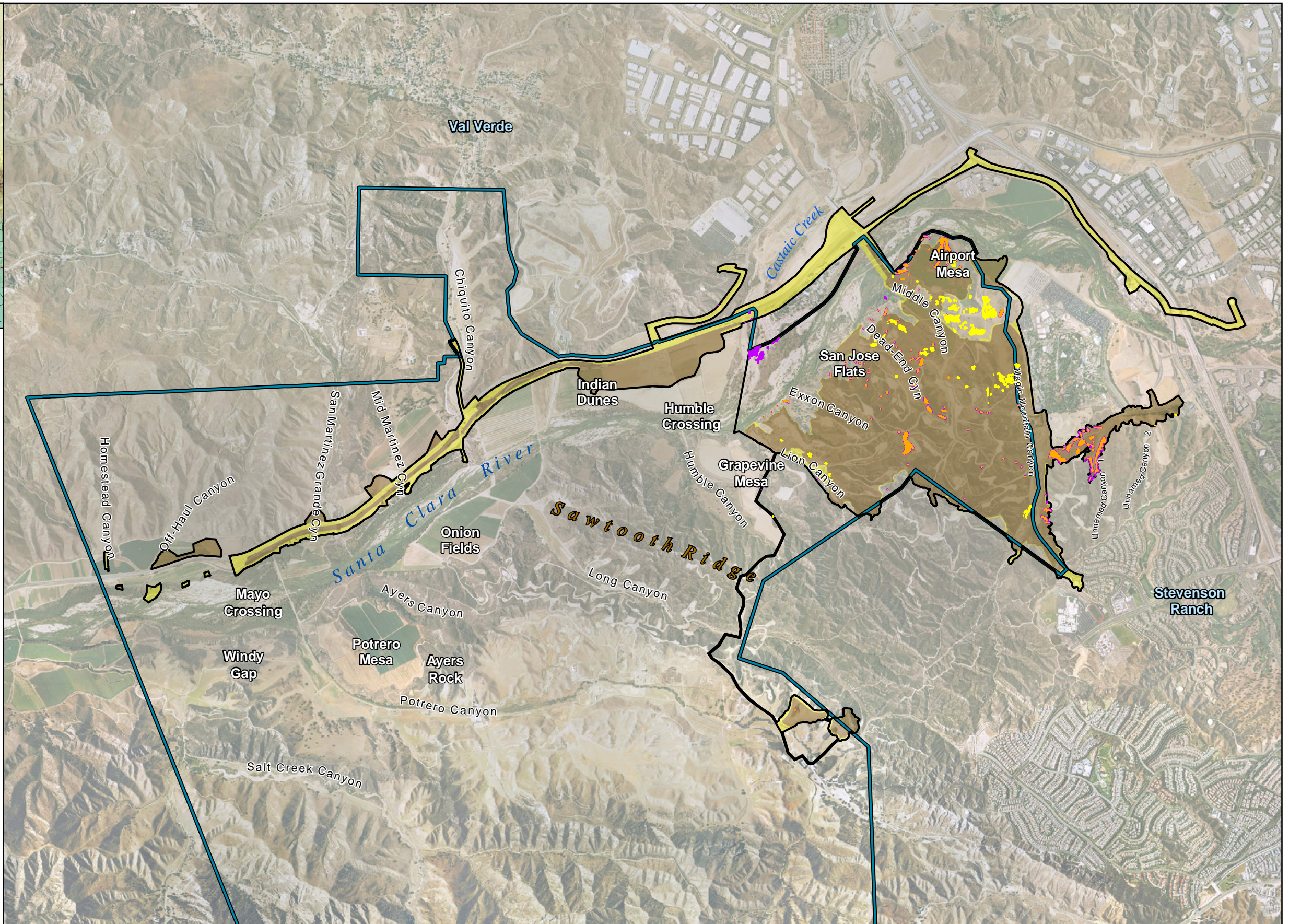


FIGURE 4.3-6

Mission Village EIR

Special-Status Plant Species Locations

On the Mission Village project site, yearly fluctuations of SFVS have also occurred. The acreage of SFVS mapped on the project site has varied significantly between 2002 and 2007, ranging from a low of 0.42 acre up to 7.14 acres, with a cumulative spineflower footprint of 8.57 acres. The variation of spineflower abundance and area occupied from year to year is typical of annual plant species. In the case of spineflower, it appears that climatic conditions influence spineflower abundance and area occupied. On the Newhall Land property, the estimated number of spineflower was lower in 2002, 2004, and 2007, compared to 2003 and 2005, with 2006 falling in between. Years 2002, 2004, and 2007 experienced below-average rainfall; in year 2003, rainfall was considered normal, according to the Western Regional Climate Center. Winter 2004/spring 2005 rainfall was considered to be above normal; in winter 2005/spring 2006, rainfall was slightly below average but was not as low as it was in 2002, 2004, and 2007, according to the Western Regional Climate Center.⁸⁶ The wide annual fluctuations of SFVS on site suggest that the locations would be best characterized by the cumulative area occupied rather than by number of individuals. The cumulative occupied area represents the overlap or intersection of spineflower occupied areas mapped from years 2002 through 2007. The Newhall Ranch Spineflower Conservation Plan (SCP) contains detailed information on the SFVS populations on and surrounding the project site (see **Appendix 4.3**). It should be noted that the SCP describes spineflower preserves proposed under Newhall Ranch RMDP-SCP EIS/EIR Alternative 2, which would create greater impacts than the proposed Mission Village project.

Slender mariposa lily is a CNPS List 1B plant (S1.1),⁸⁷ but has no federal status. This species is typically found in chaparral, California sagebrush scrub, and grasslands, often on clay and/or rocky soils.

⁸⁶ Western Regional Climate Center, "Rainfall data," 2006.

⁸⁷ Bittman, Roxanne, "California Heritage (CNDDDB) Element Ranking," https://transfer.natureserve.org/download/longterm/ERWG/Background_papers/ELEMENT%20RANKING%20with%20explanation%20with%20DT%20edits.doc.

S1: Less than 6 Eos OR less than 1,000 individuals OR less than 2,000 acres

S1.1 = very threatened

S1.2 = threatened

S1.3 = no current threats known.

S2: 6 to 20 Eos OR 1,000 to 3,000 individuals OR 2,000 to 10,000 acres

S2.1 = very threatened

S2.2 = threatened

S2.3 = no current threats known.

S3: 21 to 80 Eos or 3,000 to 10,000 individuals OR 10,000 to 50,000 acres

S3.1 = very threatened

S3.2 = threatened

S3.3 = no current threats known.

S4: Apparently secure within California. This rank is clearly lower than S3, but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat. NO THREAT RANK.

S5: Demonstrably secure to ineradicable in California. NO THREAT RANK.

Populations of this species have been documented and mapped throughout the project site. The mapped acreage of this species on the Mission Village project site in 2003 was 9.68 acres, in 2004 was 6.63 acres, and in 2005 was 6.23 acres. In total (when the 2003–2005 data is unioned), slender mariposa lily occupies a cumulative footprint of 17.43 acres of the project site.

Mainland cherry. The mainland cherry has no state or federal sensitivity status, but it is locally protected through the County of Los Angeles. This large shrub to tree was incidentally observed from 2002 to 2006 in the Specific Plan area, Entrada, and Valencia Commerce Center (VCC) planning areas as an occasional component of undifferentiated chaparral, big sagebrush scrub, and river wash. Given the low sensitivity status of the species, individual mainland cherry trees were not mapped.

Island mountain-mahogany. The island mountain-mahogany is a CNPS List 4 (S3.3) plant, but it has no federal status. It is an evergreen shrub or shrubby tree that is typically found in chaparral and closed-cone coniferous forests in Los Angeles and Ventura counties, as well as on several of the Channel Islands. Within the Specific Plan, Salt Creek, and Entrada areas, island mountain-mahogany occurs as an occasional component of chaparral communities at the base of north-facing slopes. Given the low sensitivity status of the species, individual island mountain-mahogany plants have not been mapped.

Parish's sagebrush is considered special status by the County of Los Angeles, but it has no federal, state, or CNPS status. This species grows intermixed with the big sagebrush scrub community within the Salt Creek watershed,⁸⁸ co-occurring with the more common big sagebrush (*Artemisia tridentata* ssp. *tridentata*). According to The Jepson Manual,⁸⁹ the differentiating characteristics between the two subspecies in question are as follows: drooping inflorescence branches and hairy fruit in subspecies *parishii* and erect to spreading inflorescence branches and glandular fruit in subspecies *tridentata*.⁹⁰ These differences are confirmed by Shultz.⁹¹ Parish's sagebrush occurs along coastal ranges in Baja California and Southern California, extending inland to regions south of the Great Basin.⁹² It is considered regionally rare by local botanists.⁹³ Where big sagebrush scrub occurs along the outer margins of the Magic Mountain Canyon and Santa Clara River floodplains, Parish's sagebrush may be present.

⁸⁸ Dudek and Associates, Inc., 2003 Sensitive Plant Survey Results for the Salt Creek Site.

⁸⁹ James C. Hickman, *The Jepson Manual: Higher Plants of California* (Berkeley: University of California Press, 1993).

⁹⁰ Ibid.

⁹¹ L.M. Shultz, "Artemisia tridentata spp. parishii" *Flora of North America North of Mexico* 19 (2006), 517; L.M. Shultz, "Artemisia tridentata spp. tridentata" *Flora of North America North of Mexico* 19 (2006), 516.

⁹² Ibid.

⁹³ Mary Meyer, CDFG, personal communication, October 2007.

Southwestern spiny rush. The southwestern spiny rush is a CNPS List 4 (S3.2) plant, but it has no federal status. This species is considered locally and regionally rare by local botanists. This stout, robust perennial herb is found primarily on coastal dunes with mesic soils, meadows and alkaline seeps, and marshes and coastal salt swamps. Within the Specific Plan area, southwestern spiny rush individuals were observed annually from 2001 through 2006 in mesic riparian areas along the Santa Clara River. This species is not numerically abundant on site and given the low sensitivity status of the species, individual plants have not been mapped.

Peirson's morning-glory is a CNPS List 4 (S3.2) plant, but has no federal status. This species is typically found in chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, and grasslands. While never abundant, Peirson's morning-glory is widespread on site and was observed on ridges and slopes, weakly climbing over mixed chaparral, California sagebrush, California buckwheat and in annual grasslands.⁹⁴ Given the low sensitivity status of the species, observations were not mapped.

Southern California black walnut (*Juglans californica*) is a CNPS List 4 plant, but has no state or federal status. This large shrub to tree was incidentally observed on the project site along the Santa Clara River. Given the low sensitivity status of the species, individual southern California black walnut trees were not mapped.

Newhall sunflower. The Newhall sunflower (*Helianthus*) is a CNPS List 1B.1 plant (S1), but has no federal status. For the purposes of this analysis it is considered a special-status species. The Newhall sunflower was found in 2002 at Middle Canyon Spring, on the south side of the Santa Clara River between Middle Canyon and San Jose Flats within the Specific Plan site. Ten or fewer plants were observed rooted in saturated wetland soils in dense vegetation including cattails, tules, stinging nettle, and wild grape. The species is a perennial with a near-surface tuber that produces annual growth stems that are 4 meters or more in length (16 to 20 feet). The stems produce abundant flowers in late summer through the fall and sometimes topple from their weight and lay about on the vegetation beneath. In 2002, more than 300 flowering stems were estimated in an area under 1 acre in size and appeared to be associated with three to five different clumps of sunflower.

⁹⁴ Dudek and Associates, Inc., 2002 *Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., 2003 *Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., 2004 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., 2005 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., 2006 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area*; Dudek, 2007 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California* (2007).

Undescribed everlasting (*Gnaphalium* sp. *nova*) was documented on the project site during the 2003, 2004, and 2005 field seasons. Because this plant is undescribed (a physical description of the plant with known distribution and species name has not been published in a peer reviewed publication) and its extent and distribution are unknown, for the purposes of this analysis it is considered a special-status species. Two main populations and a number of smaller populations of this undescribed species were documented within the Specific Plan area during the 2003, 2004, 2005, and 2007 field seasons.⁹⁵ Two main populations of this undescribed species, totaling about 530 individuals, were documented in 2003 in the Santa Clara River corridor near the mouth of Long Canyon and in Castaic Creek south of SR-126 within the Specific Plan area. During the 2004 surveys, these two occurrences were noted again with about 700 plants. In addition, a population of about 250 individuals was observed in the portion of Castaic Creek west of the I-5 Bridge and in an area to the north of the I-5 Bridge. In 2005, the two Specific Plan area occurrences consisted of approximately 800 individuals and five individuals, while approximately 65 individuals were found north of the I-5 Bridge in Castaic Creek. During 2007 surveys, the off-site occurrence north of the I-5 Bridge was estimated at approximately 350 individuals; one main occurrence and a number of smaller occurrences were documented within the Specific Plan area, totaling approximately 85 individuals. These occurrences are primarily on secondary alluvial benches. The vegetation around these plants consists of sparsely vegetated open river wash.

(2) Special-Status Plant Species Known to Occur in the Project Area but Not Observed on or Adjacent to the Project Site

The special-status plant species identified in **Table 4.3-4, Special-Status Plant Species Documented in the Project Area but Not Observed on or Adjacent to the Project Site**, are known to occur in the project area and were target species of the focused plant surveys conducted on, and in the vicinity of, the project site. None of these species were observed on or adjacent to the project site. Given the thoroughness of the survey efforts (**Table 4.3-2**), it is unlikely that any of the species identified below are present on the project site, though the potential of some of these species to occur on the site in future seasons cannot be entirely ruled out.

⁹⁵ Dudek and Associates, Inc., 2003 Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area; Dudek and Associates, Inc., 2004 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area; Dudek and Associates, Inc., 2005 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area; A. Causey, "Focused Surveys for the Undescribed Everlasting Species in Castaic Creek and the Santa Clara River in Los Angeles County, California" (2007); FLx, "Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area" (2004).

**Table 4.3-4
Special-Status Plant Species Documented in the Project Area but
Not Observed on or Adjacent to the Project Site**

| Common Name Scientific Name | Sensitivity Status | | | | Habitat | Growth Form (Blooming) |
|--|--------------------|-------|------|--|---|---|
| | Federal | State | CNPS | California Heritage (CNDDDB) Element Ranking | | |
| Marsh sandwort <i>Arenaria paludicola</i> | FE | CE | 1B.1 | S1.1 | Dense freshwater marsh. | PH (May–August) |
| Braunton's milk-vetch <i>Astragalus brauntonii</i> | FE | — | 1B.1 | S2.1 | Chaparral, coastal sage scrub, grasslands; often on carbonate substrates. | PH-b (March–July) |
| Coulter's saltbush <i>Atriplex coulteri</i> | — | — | 1B.2 | S2.2 | Coastal sage scrub and grasslands on alkaline or clay substrate. | PH (March–October) |
| Davidson's saltscale <i>Atriplex serenana</i> var. <i> davidsonii</i> | — | — | 1B.2 | S2? | Coastal bluff scrub and coastal sage scrub on alkaline substrate. | AH (May–October) |
| Malibu baccharis <i>Baccharis malibuensis</i> | — | — | 1B.1 | S1.1 | Chaparral, coastal sage scrub, cismontane woodland. | Sh-d (August) |
| Nevin's barberry <i>Berberis nevinii</i> | FE | CE | 1B.1 | S2.2 | Chaparral, coastal sage scrub, riparian scrub, cismontane woodland on sandy or gravelly substrate. | Sh-e (March–April) |
| Thread-leaved brodiaea <i>Brodiaea filifolia</i> | FT | CE | 1B.1 | S2.1 | Clay substrate openings in chaparral, sage scrub, and grasslands. | PH-b (March–June) |
| Catalina mariposa lily <i>Calochortus catalinae</i> | — | — | 4.2 | S3.2 | Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. | PH (February) March–June); uncommon in February. |
| Club-haired mariposa lily <i>Calochortus clavatus</i> var. <i> clavatus</i> | — | — | 4.3 | S3 | Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/usually serpentinite, clay, rocky. | PH (May–June) |
| Plummer's mariposa lily <i>Calochortus plummerae</i> | — | — | 1B.2 | S3.2 | Chaparral, coastal sage scrub, cismontane woodland, grasslands on rocky granitic substrate. | PH-b (May–July) |
| Late-flowering mariposa lily <i>Calochortus weedii</i> var. <i> vestus</i> | — | — | 1B.2 | S2.2 | Chaparral, cismontane and riparian woodland. | PH-b (June–August) |

Table 4.3-4 (Continued)
Special-Status Plant Species Documented in the Project Area but
Not Observed on or Adjacent to the Project Site

| Common Name Scientific Name | Sensitivity Status | | | | Habitat | Growth Form (Blooming) |
|---|--------------------|-------|------|--|--|---------------------------|
| | Federal | State | CNPS | California Heritage (CNDDDB) Element Ranking | | |
| Southern tarplant <i>Centromadia</i> [= <i>Hemizonia</i>] <i>parryi</i> ssp. <i>Australis</i> | — | — | 1B.1 | S2.1 | Mesic edges of marshes in grasslands. | AH (May–November) |
| Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i> | — | — | 1B.1 | S2 | Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/sandy or rocky, openings. | AH (April–June) |
| Santa Susana tarplant <i>Deinandra</i> [= <i>Hemizonia</i>] <i>minthornii</i> | — | CR | 1B.2 | S2.2 | Chaparral and coastal sage scrub on rocky substrate. | Sh-d (July–November) |
| Slender-horned spineflower <i>Dodecahema leptoceras</i> | FE | CE | 1B.1 | S1.1 | Alluvial scrub on sandy substrate, chaparral and cismontane woodland. | AH (April–June) |
| Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> | — | — | 1B.1 | S2.1 | Clay openings in chaparral and coastal sage scrub, grasslands. | PH (April–June) |
| Marcescent dudleya <i>Dudleya cymosa</i> ssp. <i>marcescens</i> | FT | CR | 1B.2 | S2.2 | Chaparral, often on volcanic substrate. | PH (April–June) |
| Santa Monica Mountains dudleya <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> | FT | — | 1B.2 | S2.2 | Chaparral and coastal sage scrub, often on volcanic substrate. | PH (March–June) |
| Many-stemmed dudleya <i>Dudleya multicaulis</i> | — | — | 1B.1 | S2.1 | Coastal bluff scrub, coastal sage scrub, valley and foothill grassland, rocky, often clay substrate. | PH (April–June) |
| Conejo dudleya <i>Dudleya parva</i> | FT | — | 1B.2 | S2.1 | Coastal sage scrub and grassland on rocky, gravelly clays. | PH (May–June) |
| Round-leaved filaree <i>Erodium macrophylla</i> | — | — | 2.2 | S3.1 | Cismontane woodland and grasslands on clay substrate. | AH (March–May) |
| San Gabriel bedstraw <i>Galium grande</i> | — | — | 1B.2 | S2.2 | Broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest. | Sh-d (January–July) |
| Palmer's grappling hook <i>Harpagonella palmeri</i> var. <i>palmeri</i> | — | — | 4.2 | S3.2 | Chaparral, coastal scrub, valley and foothill grasslands. | AH (March–May) |

Table 4.3-4 (Continued)
Special-Status Plant Species Documented in the Project Area but
Not Observed on or Adjacent to the Project Site

| Common Name Scientific Name | Sensitivity Status | | | | Habitat | Growth Form (Blooming) |
|---|--------------------|-------|------|--|---|--|
| | Federal | State | CNPS | California Heritage (CNDDDB) Element Ranking | | |
| Los Angeles sunflower <i>Helianthus nuttallii</i> ssp. <i>parishii</i> | — | — | 1A | SH | Marshes and swamps. | PH (August–October) |
| Mesa horkelia <i>Horkelia cuneata</i> var. <i>puberula</i> | — | — | 1B.1 | S2.1 | Chaparral, cismontane woodland, coastal sage scrub on sandy or gravelly substrate. | PH (February–December) |
| Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i> | — | — | 1B.1 | S2.1 | Marshes and swamps (coastal salt), playas, vernal pools. | AH (February–June) |
| Fragrant pitcher sage <i>Lepechinia fragrans</i> | — | — | 4.2 | S3.2 | Chaparral. | Sh (March–October) |
| Ross's pitcher sage <i>Lepechinia rossii</i> | — | — | 1B.2 | S1.2 | Chaparral. | Sh (May–September) |
| Ocellated Humboldt lily <i>Lilium humboldtii</i> ssp. <i>ocellatum</i> | — | — | 4.2 | S3.2 | Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland/openings. | PH Mar–July(August); uncommon in August. |
| Davidson's bush mallow <i>Malacothamnus davidsonii</i> | — | — | 1B.2 | S1.1 | Chaparral, coastal sage scrub, riparian woodland. | Sh-d (June–January) |
| California muhly <i>Muhlenbergia californica</i> | — | — | 4.3 | S3.3 | Chaparral, coastal scrub, lower mountain coniferous forest, meadows and seeps/mesic, seeps and streambanks. | PH-r (June–September) |
| Mud nama <i>Nama strenocarpum</i> | — | — | 2.2 | S1S2 | Edges of lakes, rivers, ponds, vernal pools. | AH (January–July) |
| Spreading navarretia <i>Navarretia fossalis</i> | FT | — | 1B.1 | S2.1 | Chenopod scrub, marshes, and swamps, playas, vernal pools. | AH (April–June) |
| Piute mountains navarretia <i>Navarretia setiloba</i> | — | — | 1B.1 | S1.1 | Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland/clay or gravelly loam. | AH (April–July) |
| Chaparral nolina <i>Nolina cismontana</i> | — | — | 1B.2 | S1.1 | Chaparral, coastal sage scrub on sandstone or gabbro substrate. | SH-e (April–July) |

Table 4.3-4 (Continued)
Special-Status Plant Species Documented in the Project Area but
Not Observed on or Adjacent to the Project Site

| Common Name <i>Scientific Name</i> | Sensitivity Status | | | | Habitat | Growth Form (Blooming) |
|--|--------------------|-------|------|--|---|---------------------------|
| | Federal | State | CNPS | California Heritage (CNDDDB) Element Ranking | | |
| Short-joint beavertail <i>Opuntia basilaris</i> var. <i>brachyclada</i> | — | — | 1B.2 | S1.2 | Chaparral, Joshua tree woodland, Mojavean desert scrub. | Sh-ss (April-June) |
| California Orcutt grass <i>Orcuttia californica</i> | FE | CE | 1B.1 | S2.1 | Vernal pools. | AH (April-August) |
| Lyon's pentachaeta <i>Pentachaeta lyonii</i> | FE | CE | 1B.1 | S1.1 | Openings in chaparral and coastal sage scrub, grasslands. | AH (March-August) |
| Pringle's yampah <i>Perideridia pringlei</i> | — | — | 4.3 | S3.3 | Chaparral, cismontane woodland, coastal scrub, pinyon, and juniper woodlands, serpentinite, clay soils. | PH (April-July) |
| Gambel's watercress <i>Rorippa gambelii</i> | FE | CT | 1B | N/A | Marsh and swamps (freshwater and brackish). | PH-r (April-September) |
| Rayless ragwort <i>Senecio aphanactis</i> | — | — | 2 | S1.2 | Chaparral, coastal sage scrub, cismontane woodland on alkaline substrate. | AH (January-April) |
| Salt spring checkerbloom <i>Sidalcea neomexicana</i> | — | — | 2 | S2S3 | Chaparral, coastal sage scrub, and playas on alkaline substrate. | PH (March-June) |

Table 4.3-4 (Continued)
Special-Status Plant Species Documented in the Project Area but
Not Observed on or Adjacent to the Project Site

| Common Name Scientific Name | Sensitivity Status | | | | Habitat | Growth Form (Blooming) |
|---|--------------------|-------|------|--|--|-----------------------------|
| | Federal | State | CNPS | California Heritage (CNDDDB) Element Ranking | | |
| Greata's aster <i>Symphyotrichum greatae</i> | — | — | 1B.3 | S2.3 | Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland/mesic. | PH-r (June–October) |
| Sonoran maiden fern <i>Thelypteris puberula</i> var. <i>sonorensis</i> | — | — | 2 | S2.2? | Meadows and seeps. | PH-r (January–September) |

Key:

Status:

Federal: FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate

State: CE = California Endangered; CT = California Threatened; CR = California Rare

CNPS: List 1A = Presumed extinct

List 1B = Plants Rare and Endangered in California and elsewhere

List 2 = Plants Rare, Threatened, or Endangered in California, but more common elsewhere

List 4 = Plants of limited distribution (watch list)

Threat Code Extensions:

.1: The plant is seriously endangered in California

.2: The plant is fairly endangered in California

.3: The plant is not considered to be very endangered in California.

Growth Form:

AH = Annual Herb, Sh = Shrub, r = rhizomatous, PH = Perennial Herb, b = bulb, e = evergreen, d = deciduous, ss = stem succulent

Note: For CNDDDB element ranking, uncertainty about the rank of an element is expressed in two major ways: First, by expressing the ranks as a range of values: e.g., S2S3 means the rank is somewhere between S2 and S3. Second, by adding a "?" to the rank: e.g., S2? This represents more certainty than S2S3, but less certainty than S2.

b. Oaks

The County of Los Angeles Oak Tree Ordinance (CLAOTO), Sections 22.56.2050–22.56.2260, protects oak trees that are at least 8 inches in diameter, as well as trees that have two trunks totaling at least 12 inches in diameter, as measured 4.5 feet above natural ground. A heritage oak, as defined by CLAOTO, is any species in the genus *Quercus* that measures 36 inches or more in diameter as measured 4.5 feet above natural ground, or any oak of 36 inches or less in diameter having a significant historical or cultural importance to the community. CLAOTO requires that all potential impacts to oak trees regulated by this ordinance be preceded by an application to the County that includes a detailed oak tree report (see

Appendix 4.3). Mitigation for impacts to oak trees is usually required as a condition of an Oak Tree Permit issued by the County.

During 2005 and 2006, an oak tree survey was conducted of the on-site oak trees occurring within 200 feet of the proposed grading limits (see **Appendix 4.3**). The survey identified 564 oaks potentially regulated by CLAOTO within the project boundary, 29 of which are heritage oaks. The vast majority of the oaks on the site are coast live oak, but valley oak (*Quercus lobata*) and scrub oak (*Quercus berberidifolia*) also occur.

In addition, Public Resources Code 21083.4 sets forth the following three analytical and mitigation requirements for oak tree impacts: (a) counties must determine whether a project may result in the conversion of oak woodlands; (b) if it does, the county must determine if the conversion will have a significant impact on the environment; and (c) if there is a conversion, and it has a significant impact, the county must impose one or more of the following mitigation measures:

1. Conserve oak woodlands, through the use of conservation easements
2. Plant an appropriate number of trees, including maintaining plantings and replacing dead trees
 - a. Maintain planted oak trees for seven years
 - b. The planting of oak trees shall not fulfill more than one-half of the mitigation requirement for the project
3. Contribute funds to the Oak Woodlands Conservation fund
4. Other mitigation measures developed by the County.

Public Resources Code 21083.4(a) defines “oak” as a “native tree species in the genus *Quercus*, not designated as Group A or Group B commercial species pursuant to regulations adopted by the State Board of Forestry and Fire Protection pursuant to Section 4526, and that is 5 inches or more in diameter at breast height.” This statute does not provide a definition of “oak woodland,” but Public Resources Code Section 12220(g) indicates that “forest land” is any “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.”

Using Section 12220(g) as a guide, this EIR defines “oak woodland” as an area with at least 10% cover by oak trees with an understory of non-grass vegetation and at least 20% cover by oak trees with an

understory of grass vegetation. Oak/grass includes areas where oak trees comprise between 10% and 20% of the total cover with an understory of grass vegetation. As part of the Vegetation Communities analysis, biologist surveyed the site and identified all oak woodlands meeting this definition. Note that these surveys not only captured the oak woodland habitat, but also the entire range of oak trees in terms of size and maturity, including all trees with trunk diameters of five (5) inches or more, measured at breast height, as required under Public Resources Code 21083.4(a). These surveys indicate that the project site supports 37.3 acres of oak woodland, as defined.

c. Sensitive Plant Communities

The CDFG Wildlife and Habitat Data Analysis Branch has developed a *List of California Terrestrial Natural Communities*. The most recent version of this list, dated September 2003 (updated 2007), is derived from the California Natural Diversity Database (CNDDDB) and is intended to supersede all other lists developed from the CNDDDB. It is based on the detailed classification put forth in *A Manual of California Vegetation*.⁹⁶ It is also structured to be compatible with previous CNDDDB lists.⁹⁷

The two primary purposes of the CNDDDB classification are to assist in characterizing vegetation in a consistent manner and to identify rare and declining vegetation types. The ranking of natural communities by rarity or threat is an important facet of this system. For the purposes of this Biota analysis, vegetation communities denoted on the October 2007 list as G1, G2, or G3 (high priority for inventory)⁹⁸ or otherwise regulated by local, state, and/or federal resource agencies, are considered to have “special status.”

Of the 23 plant communities and three existing land use types occurring on the Mission Village project site, Mexican elderberry scrub, southern willow scrub, and southern cottonwood–willow riparian are currently denoted as G1, G2, or G3 by CDFG⁹⁹ and, therefore, are considered special status. In addition to those vegetation communities ranked as G1, G2, or G3, riparian and wetland vegetation communities on site are considered special-status, including herbaceous wetland, river wash, arrow weed scrub, and mulefat scrub. Given the occurrence of *Artemisia tridentata* ssp. *parishii* (which is considered special status by the County of Los Angeles) within the big sagebrush scrub community, this EIR treats big sagebrush scrub as a special-status vegetation community. Please see **subsection 6. Biological Resources, a. Plant**

⁹⁶ Sawyer and Keeler-Wolf, *Manual of California Vegetation*.

⁹⁷ e.g., Holland, *Preliminary Descriptions*.

⁹⁸ CDFG, “Vegetation Classification and Mapping Program, List of California Vegetation Alliances” (2007).

⁹⁹ *Ibid.*

Communities and Land Uses, above, for a more detailed discussion of these plant communities and their distribution on the project site.

Note that the Newhall Ranch Specific Plan Program EIR identified coastal sage scrub (coastal scrub) as a special-status plant community. However, this determination was based on a previous CDFG list of terrestrial natural communities, which has been superseded by the current *List of California Terrestrial Natural Communities*.¹⁰⁰ In this new list, coastal sage scrub is not identified as a special-status plant community, although it remains important at a watershed level because it provides habitat for a variety of special-status species and is addressed as such in this EIR.

d. Special-Status Wildlife

Special-status wildlife species include those that are (1) state- or federally listed as Threatened or Endangered, (2) proposed for listing as Threatened or Endangered, (3) designated as state or federal candidates for listing, (4) considered state Species of Special Concern, or (5) considered a state Fully Protected Animal.

Based on a review of the CNDDDB and the biological documentation prepared for the project site and the greater Newhall Ranch Specific Plan area, a total of 99 special-status wildlife species were identified that are known to occur in the project region. This list formed the basis of the following analysis, wherein each of the identified species is addressed in one of the following three headings: (1) **subsection 7.d.(1)** addresses the special-status wildlife species that were observed on or adjacent to the project site during the course of various field surveys; (2) **subsection 7.d.(2)** addresses the special-status wildlife species that have not been observed on the site, but based on the presence of suitable habitat and known occurrences in the area, have the potential to occur on the site as a resident, overwintering or nesting species, and (3) **subsection 7.d.(3)** addresses the special-status wildlife species known to occur in the project area, but for which the project site does not provide suitable habitat to support the species as a resident or nesting species, or for which the species is expected to utilize the site only on rare occasions, such as during migration for bird species.

(1) Special-Status Wildlife Species Observed on the Project Site

During the course of various field surveys conducted for the proposed project or greater Newhall Ranch Specific Plan area (**Table 4.3-2**), 61 special-status wildlife species were observed on or bordering the project site. **Table 4.3-5, Special-Status Wildlife Species Observed on or Adjacent to the Project Site**,

¹⁰⁰ CDFG, "List of California Terrestrial Natural Communities."

identifies these species and provides the species' listing status, habitat requirements, and observation information.

**Table 4.3-5
Special-Status Wildlife Species Observed on or Adjacent to the Project Site**

| Common Name <i>Scientific Name</i> | Status | | | Habitat Requirements | On-Site Status |
|---|---------|-------|-------|---|--|
| | Federal | State | Other | | |
| INSECTS (BUTTERFLIES) | | | | | |
| Monarch butterfly (wintering sites) <i>Danaus plexippus</i> | — | *** | — | Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby. | Individual monarchs have been observed within the Newhall Ranch Specific Plan area (NRSP), including the High Country ¹⁰¹ ; due to site's distance from coast, it is unlikely that the project site would be used by large numbers of overwintering adults. Not expected to occur in Salt Creek area. |
| San Emigdio blue butterfly <i>Plebulina emigdionis</i> | — | *** | — | Often near streambeds, washes, or alkaline areas. Associated with four-wing saltbush (<i>Atriplex canescens</i>) and quail brush (<i>Atriplex lentiformis</i>). | A colony was observed in Potrero Canyon in NRSP in association with <i>Atriplex lentiformis</i> plants. ¹⁰² Suitable habitat occurs within Salt Creek. |
| MOLLUSKS | | | | | |
| <i>Pyrgulopsis castaicensis</i> n. sp. | — | — | — | Occupies groundwater-dependent spring, occurring on muddy and gravelly substrate and in water of depths up to several centimeters. | This species was observed on the NRSP in 2006 at the Middle Canyon Spring complex. ¹⁰³ |

¹⁰¹ Compliance Biology, Inc., *Results of Butterfly Surveys on the Newhall Ranch Project*; Compliance Biology, Inc., *Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area*; Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

¹⁰² Compliance Biology, Inc., *Results of Butterfly Surveys on the Newhall Ranch Project Site*; Compliance Biology, Inc., *Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area*.

¹⁰³ Dudek, *Draft Middle Canyon Spring Survey and Status Report*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------------|---------|-------|--|--|
| | Scientific Name | Federal | State | | |
| FISH | | | | | |
| Santa Ana sucker <i>Catostomus santaanae</i> | — | CSC | — | Occupies small- to medium-sized perennial streams with water ranging in depth from a few centimeters to a meter or more. | This species is known to occur in the Santa Clara River and has been sparsely observed in the portion of the river within NRSP. ¹⁰⁴ Population in the Santa Clara River system is not listed as threatened because it is introduced to the area. Not expected to occur in Salt Creek. |
| Unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i> | FE | CE, CFP | — | Slow-moving and backwater areas. | This species is known to occur in the Santa Clara River and has been observed evenly distributed in the portion of the river within NRSP ¹⁰⁵ . It was also observed in Castaic Creek. ¹⁰⁶ |
| Arroyo chub <i>Gila orcutti</i> | — | CSC | — | | This species is known to occur in the Santa Clara River and has been observed abundantly in the portion of the river within NRSP. ¹⁰⁷ Not |

¹⁰⁴ CDFG, "RareFind: California Natural Diversity Database," Version 3, <http://www.dfg.ca.gov/bdb/html/cnddb.html>; Impact Sciences, Inc., *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch*.

¹⁰⁵ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part III, Aquatic Consulting Services, Inc., Surveys along the Santa Clara River; Part IV; Impact Sciences, Inc., Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species, Newhall Ranch; Impact Sciences, Inc., Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area; ENTRIX, Inc., Special Status Aquatic Species Habitat Assessment Santa Clara River, Landmark Village Project, Newhall Ranch, California (2005)*.

¹⁰⁶ Haglund, *Current Status of the Unarmored Threespine Stickleback*.

¹⁰⁷ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part III, Aquatic Surveys along the Santa Clara River; Part IV; Impact Sciences, Inc., Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch; Impact Sciences, Inc., Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area; ENTRIX, Inc., Special Status Aquatic Species Habitat Assessment*

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|---------|-------|-------|---|--|
| Scientific Name | Federal | State | Other | | |
| | | | | | expected to occur in Salt Creek. |
| AMPHIBIANS | | | | | |
| Arroyo toad <i>Bufo californicus</i> | FE | CSC | — | Restricted to rivers with shallow, gravely pools adjacent to sandy terraces that have a nearly complete closure of cottonwoods, oaks or willows, and almost no herbaceous cover. Requires shallow pools with minimal current, little to no emergent vegetation and a sand or pea gravel substrate overlain with flocculent silt for egg deposition. | Numerous focused surveys have been conducted for the arroyo toad throughout the project site and along the Santa Clara River east of the project site. Surveys include. ¹⁰⁸ Adult toads have been documented in limited numbers upstream of the project area along the Santa Clara River and tributaries. ¹⁰⁹ One study detected three arroyo toad tadpoles in the river within NRSP site, downstream of the |

¹⁰⁸ SMEA, *Sensitive Aquatic Species Survey*; RECON, *Survey for Arroyo Southwestern Toad for Newhall Ranch*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part II*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part III*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part IV*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part I*; Sandburg, "Field Summary of Santa Clara River Surveys for *Bufo californicus* and *Rana aurora draytonii*"; Impact Sciences, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area, Valencia, California*; Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Castaic Creek" (2003); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Castaic Reservoir Site"; Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Hart/Pony Baseball Site and Hart/Pony Commercial Site"; Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, NRMP Project Area "; Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Round Mountain Site"; Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Soledad Site "; Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Castaic Creek" (2004); Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Portions of Santa Clara River/South Fork"; Ecological Sciences, Inc. "Results of Focused Arroyo Toad Surveys, NRMP Soledad/Riverpark Area"; Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, San Francisquito Creek" (2004); Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project*.

¹⁰⁹ Impact Sciences, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area*; Sandburg, "Field Summary of Santa Clara River Surveys for *Bufo californicus* and *Rana aurora draytonii*."

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------------|---------|-------|--|--|
| | Scientific Name | Federal | State | | |
| | | | | | Commerce Center Drive bridge site; ¹¹⁰ and another study detected three arroyo toad tadpoles, two near the Valencia Water Treatment Plant and one upstream of Commerce Center Drive. ¹¹¹ |
| Western spadefoot toad <i>Spea hammondi</i> | — | CSC | — | Open areas in lowland grasslands, chaparral, and pine-oak woodlands; requires temporary rain pools that last approximately three weeks. | Two pools were found with western spadefoot toad tadpoles, one near the western boundary of Mission Village and the other near Grapevine Mesa. ¹¹² Seasonal backwater areas within NRSP, as well as seasonal, stock ponds and depressions within existing dirt roads, provide breeding habitat. Given documented occurrences of the species at several on-site locations, and the presence of suitable breeding habitat, the species could occupy additional suitable on-site habitats. |
| REPTILES | | | | | |
| Silvery legless lizard <i>Anniella pulchra pulchra</i> | — | CSC | — | Stabilized dunes, beaches, dry washes, chaparral, pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, | This species has been observed within NRSP in 2004 in leaf litter of coast live oak woodland; ¹¹³ suitable habitat occurs within Salt Creek in association |

¹¹⁰ Aquatic Consulting Services, Inc., *Surveys along the Santa Clara River; Part II.*

¹¹¹ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part I.*

¹¹² Compliance Biology, Inc., *Results of the Focused Western Spadefoot Toad Surveys on the Mission Village Project Site.*

¹¹³ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area.*

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name <i>Scientific Name</i> | Status | | | Habitat Requirements | On-Site Status |
|---|---------|-------|-------|--|--|
| | Federal | State | Other | | |
| | | | | loamy soils. | with California sagebrush scrub, chaparral, oak woodland, and riverbank habitats. |
| Coastal western whiptail <i>Aspidoscelis tigris stejnegeri</i> | — | *** | — | Open areas in semiarid grasslands, scrublands, and woodlands. | Observed within NRSP in High Country ¹¹⁴ and one was observed off site in Castaic Mesa; ¹¹⁵ suitable habitat occurs within Salt Creek in association with grassland, scrub, oak woodland, and riverbank habitats. |
| Southwestern pond turtle <i>Actinemys marmorata pallida</i> | — | CSC | — | Streams, ponds, freshwater marshes, and lakes with growth of aquatic vegetation. | This species was observed in the reach of the Santa Clara River within NRSP; ¹¹⁶ and in Salt Creek; ¹¹⁷ river and riparian habitats within NRSP and Salt Creek provide suitable habitat. |
| Coast horned lizard <i>Phrynosoma coronatum</i> | — | CSC | — | Exposed gravelly-sandy soils with minimal shrubs, riparian woodland clearings, dry chamise chaparral, and annual grasslands with scattered seepweed or saltbush. | This species was also observed during the reptile surveys in 2004 and 2006. ¹¹⁸ Suitable habitat occurs within NRSP and Salt Creek in association with scrub, chaparral, and riverbank habitats; species presumed to occur on |

¹¹⁴ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

¹¹⁵ Compliance Biology, Inc., *Biological Resource Assessment, Castaic Mesa Project*.

¹¹⁶ SMEA, *Sensitive Aquatic Species Survey*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part I*; Impact Sciences, Inc., 2002; Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project*.

¹¹⁷ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

¹¹⁸ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--|-----------------|---------|-------|---|--|
| | Scientific Name | Federal | State | | |
| | | | | | site within suitable habitat. |
| Two-striped garter snake <i>Thamnophis hammondi</i> | — | CSC | — | Perennial and intermittent streams with rocky or sandy beds and artificially-created aquatic habitats (man-made lakes and stock ponds); requires dense riparian vegetation. | This species was observed in the reach of the Santa Clara River within and adjacent to the NRSP ¹¹⁹ ; river and riparian habitats within Salt Creek provide suitable habitat. |
| BIRDS | | | | | |
| Cooper's hawk (nesting) <i>Accipiter cooperi</i> | — | WL | LC | Dense stands of live oak, riparian woodlands, or other woodland habitats near water. | This species is known to be a year-round resident within the NRSP ¹²⁰ ; it occurs commonly along the Santa Clara River and in Potrero Canyon. ¹²¹ This species has been observed nesting within NRSP near Grapevine Mesa and within active territories in NRSP. ¹²² It has been observed over multiple years foraging within Salt Creek during annual bird surveys. The project site provides foraging and nesting habitat for the species. |
| Sharp-shinned hawk (nesting) | — | WL | LC | Nests in woodlands and forages over dense | This species has been observed within the |

¹¹⁹ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part IV*; Impact Sciences, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California*; Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project*; Compliance Biology, Inc., "Results of Focused Western Spadefoot Toad Surveys."

¹²⁰ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor (Gymnogyps californianus) on Portions of Newhall Land and Farming Company Property, Los Angeles County, California* (2007).

¹²¹ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹²² Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------|-------|-------|--|--|
| Scientific Name | Federal | State | Other | | |
| <i>Accipiter striatus</i> | | | | chaparral and scrublands. | NRSP hunting along agriculture fields along the Santa Clara River ¹²³ and was observed by Guthrie in the NRSP. ¹²⁴ It was also observed east of the site along the Santa Clara River ¹²⁵ and one individual was observed in Salt Creek. ¹²⁶ All observations were thought to be migrants and/or wintering birds. The project site is outside the known breeding range for this species. This species forages in woodlands, chaparral, scrublands, and edge/ecotone areas between habitats which occur throughout the project site. |
| Tricolored blackbird (nesting colony) <i>Agelaius tricolor</i> | BCC, USBC | CSC | — | Freshwater marshes and riparian scrub (nesting). Grassland and agriculture (foraging). | This species has been observed on the project site during focused bird surveys. A flock of approximately 200 breeding pairs of tricolored blackbirds was observed in Castaic Junction. ¹²⁷ Another flock of approximately 20 breeding pairs of tricolored blackbirds |

¹²³ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹²⁴ Guthrie, *Bird Surveys along the Santa Clara River, 1997*; Guthrie, *Bird Surveys along the Santa Clara River, 1999*.

¹²⁵ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia* (1995).

¹²⁶ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹²⁷ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1994).

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|-----------------|---------|-------|-------|----------------------|---|
| Scientific Name | Federal | State | Other | | |
| | | | | | was observed next to Castaic Creek. ¹²⁸ In 1995 and 1996 small flocks visited the Castaic Creek site again in April and May, but did not breed there. ¹²⁹ Labinger <i>et al.</i> observed a small nesting colony within the project site ¹³⁰ (specific location is not known). Migrants have also been observed within the RMDP boundaries during surveys, ¹³¹ but no breeding colonies have been observed since 1994, despite annual surveys through 2007. A flock of 20 tricolored blackbirds was observed in Potrero Canyon in 1994, ¹³² and a flock of 50 birds was seen on the Newhall Ranch property north of Mayo |

¹²⁸ Ibid.

¹²⁹ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*, 1995; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*, 1996.

¹³⁰ Z. J. Labinger, J. Greaves, and D. Haupt. *Preliminary Results of Avian Surveys Following the January 17, 1994, ARCO/Four Corners Oil Spill on the Santa Clara River, California* (1995).

¹³¹ Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California*, 2000; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California*, 2001; Guthrie, *Bird Surveys along the Santa Clara River*, 2006; Dudek and Associates, Inc., *Biological Resources Technical Report for the Entrada Site*.

¹³² Guthrie, *Bird Surveys along the Santa Clara River*, 1994.

¹³³ County of Los Angeles, *Revised Draft Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Environmental Impact Report* (Volumes 1 and 2) and *Final Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Environmental Impact Report* (Volumes 3–7) (Project # 94087, SCH # 95011015. 7 vol., November 2002 to May 2003, Prepared by Impact Sciences, Inc. for Los Angeles County Department of Regional Planning. Agoura Hills, California: Impact Sciences, Inc., 2003).

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------------|-----------|-------|---|--|
| | Scientific Name | Federal | State | | |
| | | | | | Crossing. ¹³³ |
| Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i> | — | WL | LC | Coastal scrub. | This species has been observed over multiple years as a fairly common resident within the Coastal scrub within NRSP and Salt Creek during annual bird surveys and has been observed foraging in upland scrub on the south side of the Santa Clara River, and in upland areas, ¹³⁴ and near the Santa Clara River, ¹³⁵ and nesting in 2007; ¹³⁶ the project site provides suitable nesting and foraging habitat with large concentrations of coastal scrub in the northeastern portion of NRSP and southeastern portion of High Country. |
| Golden eagle (nesting and wintering) <i>Aquila chrysaetos</i> | BCC | WL CFP | — | Nests on cliff-walled canyons and large trees in open areas. Forage in open shrublands, agriculture, and grassland. | One pair was seen frequently in upper Potrero Canyon and a juvenile was seen once in the same area; this is likely a resident pair, but no nests have been observed to date. ¹³⁷ An |

¹³⁴ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹³⁵ Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2001*; Guthrie, *Bird Surveys along the Santa Clara River, 2002*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas*.

¹³⁶ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

¹³⁷ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------------|---------|-------|--|---|
| | Scientific Name | Federal | State | | |
| | | | | | individual was observed over the Santa Clara River corridor in Castaic Junction area in 1993 and 1995 ¹³⁸ and another was flushed in a woodland west of Grapevine Mesa in the NRSP in 2000; ¹³⁹ no nesting eagles have been observed on the project site but suitable nesting and foraging habitat is present within NRSP and Salt Creek. These species have also been observed along Santa Clara River east and west of the project site. ¹⁴⁰ |
| Short-eared owl (nesting) <i>Asio flammeus</i> | USBC | CSC | — | Grassland, prairies, dunes, meadows, irrigated lands, saline and freshwater emergent wetlands. | This species was observed in the Salt Creek area just west of the Ventura/Los Angeles County line in the fall of 2005. ¹⁴¹ A freshly dead individual was found at the edge of a cultivated field just west of I-5 during the Santa Clarita |

¹³⁸ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia* (1993); Guthrie, *Bird Surveys along the Santa Clara River*, 1993; Guthrie, *Bird Surveys along the Santa Clara River*, 1995.

¹³⁹ Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*.

¹⁴⁰ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia* (1993); Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*, 1997; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2004; Guthrie, *Bird Surveys along the Santa Clara River*, 2006; Z. Labinger, J. Greaves, and D. Haupt. *1996 Avian Survey Results following the ARCO/Four Corners Oil Spill (January 17, 1994) on the Santa Clara River, California* (Draft prepared for the U.S. Fish and Wildlife Service, Goleta, California: Labinger Biological Consulting, January 9, 1997).

¹⁴¹ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--|-----------------|---------|--------------|--|---|
| | Scientific Name | Federal | State | | |
| | | | | | Bird Count in December 2006. ¹⁴² This species is likely a winter visitor and is not known to nest in the project vicinity. |
| Long-eared owl (nesting) <i>Asio otus</i> | — | CSC | — | Dense, riparian and live oak thickets near meadow edges, nearby woodland and forest habitats. Also found in dense conifer stands at higher elevations. Forages in grassland and agriculture. | This species was observed within NRSP near Via Canyon in Fall 2005. ¹⁴³ Some suitable nesting habitat is present along the Santa Clara River and Castaic Creek, and foraging habitat is present throughout the NRSP and Salt Creek. |
| Western burrowing owl (burrowing sites) <i>Athene cunicularia</i> | BCC | CSC | — | Grasslands, open scrub, and agriculture, particularly with ground squirrel burrows. | A single individual was observed with NRSP. ¹⁴⁴ Given the timing of the sighting (winter 2006), the observed individual may have been wintering on site or temporarily using the site during migration. Another individual was observed in December 2006 and on April 11, 2007. ¹⁴⁵ NRSP and Salt Creek provide suitable habitat for the species; California ground squirrel burrows occur on the project site. |
| Oak titmouse (nesting) <i>Baeolophus inornatus</i> | USBC | *** | ABC, LC, Aud | Montane hardwood-conifer, montane hardwood, blue oak, | This species is a common resident and nests on site in |

¹⁴² G. Olson, Audubon California, letter containing comments on the Draft Environmental Impact Report for Landmark Village to D. Fierros (County of Los Angeles, Department of Regional Planning), January 19, 2007.

¹⁴³ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

¹⁴⁴ Keith Babcock, Dudek, telephone call to Callie Ford, Dudek, October 2007.

¹⁴⁵ Sherri Miller, Dudek, verbal communication with Callie Ford, Dudek, November 2007.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--|-----------------|---------|---------|---|---|
| | Scientific Name | Federal | State | | |
| | | | | valley oak and coastal oak woodlands, montane and valley foothill riparian habitats. | cottonwood riparian and coast live oak communities; it has been observed over multiple years in the NRSP sites. Recent observations have been in 2006 ¹⁴⁶ and 2007 and 2008. ¹⁴⁷ |
| Ferruginous hawk (wintering) <i>Buteo regalis</i> | BCC | WL | NT, Aud | Grasslands, agricultural fields, and open scrublands. | This species is an infrequent seasonal migrant. Individuals of this species were observed almost every day in east alfalfa fields, Wolcott fields, and Potrero Canyon, and other agriculture fields along the Santa Clara River in winter 2008. ¹⁴⁸ Although suitable foraging habitat is present on the project site, this species has not been documented to nest in California and is expected to forage on the site. |
| Costa's hummingbird (nesting) <i>Calypte costae</i> | USBC | *** | — | Shrubs and arid habitats. Edges of desert riparian and valley foothill riparian, coastal scrub, desert scrub, desert succulent scrub, arid shrublands, lower elevation chaparral, and palm oasis. | This species has been observed over multiple years within the NRSP sites; it is thought to be a summer resident, although does not appear to be an abundant species within the project site based on the number of sightings each year. Recent |

¹⁴⁶ Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence* (2006).

¹⁴⁷ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁴⁸ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--|-----------------|---------|--------------|--|--|
| | Scientific Name | Federal | State | | |
| | | | | | observations have been in 2006. ¹⁴⁹ |
| Lawrence's goldfinch <i>Carduelis lawrencei</i> | BCC, USBC | — | ABC, LC, Aud | Valley foothill hardwood, valley foothill hardwood-conifer; and, in Southern California, desert riparian, palm oasis, pinyon-juniper and lower montane habitats. | This species has been observed as a resident in the coastal scrub in the northern and northeastern portions of the project site, and has been observed within the riparian habitats of the Santa Clara River over multiple years within NRSP and Entrada during annual bird surveys. Recent observations have been in 2006 ¹⁵⁰ and 2007 and 2008. ¹⁵¹ Suitable nesting and foraging habitat is present within NRSP and Salt Creek. |
| Turkey vulture <i>Cathartes aura</i> | — | † | — | Rangeland, agriculture, grassland; uses cliffs and large trees for roosting, nesting and resting. | This species has been observed over multiple years within NRSP and Salt Creek; recent observations in the project site have been made in 2006; ¹⁵² nesting opportunities are also present within the project site. |
| Northern harrier (nesting) | — | CSC | LC | Coastal salt marsh, freshwater marsh, | This species has been observed over multiple |

¹⁴⁹ Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence* (2006).

¹⁵⁰ Ibid.

¹⁵¹ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁵² Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence* (2006); Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--|---|-----------|-------|--------------------------------------|--|
| | Scientific Name | Federal | State | | |
| | <i>Circus cyaneus</i> | | | | |
| | | | | grasslands, and agricultural fields. | years within NRSP in 1999 and 2000 ¹⁵³ and in 2007 and 2008 near the Santa Clara River in the NRSP and Entrada sites. ¹⁵⁴ This species has also been observed within the vicinity of the project site; ¹⁵⁵ suitable foraging and nesting habitat is present within NRSP and Salt Creek. |
| Western yellow-billed cuckoo (nesting) | <i>Coccyzus americanus occidentalis</i> | FC BCC | CE | — | Nests along the broad, lower flood-bottoms of larger river systems. Also nests in riparian forests and riparian jungles of willow often mixed with cottonwoods, with an understory of blackberry, nettles, or wild grape. |
| | | | | | One individual was heard at the Magic Mountain (Entrada) area in 1997 and thought to be a migrant. ¹⁵⁶ Single individuals (thought to be migrants) were observed along the Santa Clara River east of the project site in 1997 and 1998, ¹⁵⁷ and west of the Ventura county line; ¹⁵⁸ none have been observed since then; species has not been observed nesting on site; |

¹⁵³ Guthrie, *Bird Surveys in the Proposed Riverwood Project Area; Guthrie, Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area.*

¹⁵⁴ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor; Bloom Biological, Inc., Interim Report of Winter Surveys.*

¹⁵⁵ Compliance Biology, Inc., *Results of Focused Survey for Coastal California Gnatcatcher Surveys; River Park Project; Compliance Biology, Inc., Results of Focused Coastal California Gnatcatcher Surveys; Castaic Mesa Project.*

¹⁵⁶ Z. Labinger, J. Greaves, and D. Haupt. *Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring: Restoration Phase of the ARCO/Four Corners January 17, 1994, Oil Spill on the Santa Clara River, California* (Draft. Prepared for the U.S. Fish and Wildlife Service, Goleta, California: Labinger Biological Consulting. November 30, 1997).

¹⁵⁷ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997; Z. Labinger and J. Greaves Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring: Restoration Phase of the ARCO/Four Corners January 17, 1994 Oil Spill on the Santa Clara River, California* (Draft prepared for the U.S. Fish and Wildlife Service, Goleta, California: Labinger Biological Consulting, March 1, 1999).

¹⁵⁸ Guthrie, *Bird Surveys along the Santa Clara River, 1997.*

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------------|---------|-------|--|---|
| | Scientific Name | Federal | State | | |
| | | | | | suitable nesting and foraging habitat present within NRSP. This species has been observed historically in 1979, 1981 and 1992. ¹⁵⁹ |
| Hermit warbler (nesting) <i>Dendroica occidentalis</i> | — | *** | | Breeds in mature ponderosa pine, montane hardwood-conifer, mixed conifer, Douglas fir, redwood, red fir and Jeffrey pines. Uses live oak woodlands and deciduous trees during migration, and valley foothill hardwood in winter. | Individuals of this species have been observed within or adjacent to the Specific Plan in 1994, 1996, and 2002. ¹⁶⁰ All observations were thought to be migrants. The project site is within this species winter range. Suitable habitat for migration and wintering habitat occurs on site, but no suitable nesting occurs on site. |
| Yellow warbler (nesting) <i>Dendroica petechia brewsteri</i> | — | CSC | LC | Riparian thickets and woodlands. | This species has been observed over multiple years during annual bird surveys and nests in the riparian areas within NRSP and Salt Creek. These species have been observed both during nesting season and migration. Recent observations of these species within the project site in 2006 ¹⁶¹ and 2007. ¹⁶² |
| White-tailed kite | — | CFP | — | Inhabits herbaceous | This species has been |

¹⁵⁹ Labinger, Greaves, and Haupt. 1996 *Avian Survey Results*.

¹⁶⁰ Guthrie, *Bird Surveys along the Santa Clara River, 1994*; Guthrie, *Bird Surveys along the Santa Clara River, 1996*; Guthrie, *Bird Surveys along the Santa Clara River, 2002*.

¹⁶¹ (Guthrie, *Bird Surveys along the Santa Clara River, 2006*; Guthrie, *Bird Surveys of The Old Road Phase III Environmental Project Study Area*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence* (2006).

¹⁶² Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--|-----------------|---------|-------|---|---|
| | Scientific Name | Federal | State | | |
| (nesting) <i>Elanus leucurus</i> | | | | and open stages of most habitats, common in cismontane in California. Nests are placed near top of dense oak, willow or other tree stand; usually 6 to 20 meters (20 to 100 feet) above ground. Nest located near open foraging area. | observed successfully nesting on site and in the vicinity of the project site along the Santa Clara River over multiple years within NRSP and Salt Creek during annual bird surveys ¹⁶³ and during focused survey; ¹⁶⁴ suitable foraging and nesting habitat is present on the project site. At least three pairs observed nesting along the River in 2007, including a pair downstream of the project site (adjacent to the Landmark Village site). ¹⁶⁵ A small roost of about eight individuals was observed near the Castaic Confluence in 2007. ¹⁶⁶ No roosts and three individuals were observed throughout the NRSP during the 2008 winter bird surveys. ¹⁶⁷ |
| Willow flycatcher (nesting) <i>Empidonax traillii</i> | USBC | CE | — | Riparian woodlands that contain water and low willow thickets. | This species has been observed along the Santa Clara River over |

¹⁶³ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2000*; Guthrie, *Bird Surveys of Castaic Junction*; Guthrie, *Bird Surveys of The Old Road Phase III Environmental Project Study Area*.

¹⁶⁴ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Report on White-Tailed Kites*.

¹⁶⁵ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

¹⁶⁶ Bloom Biological, *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor (Gymnogyps californianus) on Portions of Newhall Land and Farming Company Property, Los Angeles County, California (2007)*

¹⁶⁷ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|----------|-------|-------|--|---|
| Scientific Name | Federal | State | Other | | |
| | | | | | multiple years within the NRSP project site. The observations have usually been of individual species, thought to be migrants passing through the area based on their behavior and time of year (no observations occurred after June 22). Recent observations along the Santa Clara River within the NRSP have been made in 2005 and 2006. ¹⁶⁸ These species have also been observed adjacent to the project site. No nesting has been observed. |
| Southwestern willow flycatcher (nesting) <i>Empidonax traillii extimus</i> | FE, USBC | CE | — | Riparian woodlands that contain water and low willow thickets. | Most of the observations of the willow flycatcher have not identified individuals to the subspecies level. Individuals were considered to be migrating through the site as they were not located after June 22. Within the vicinity of the project site, two individuals identified as southwestern willow flycatchers were observed in Castaic Creek in 2006. ¹⁶⁹ These individuals, however, were not displaying any |

¹⁶⁸ Guthrie, *Bird Surveys along the Santa Clara River, 2005*; Guthrie, *Bird Surveys of The Old Road Phase III Environmental Project Study Area*.

¹⁶⁹ Forde Biological Consultants, *Least Bell's Vireo and Southwestern Willow Flycatcher Presence-Absence Survey; Castaic Creek below Castaic Lagoon to halfway between Lake Hughes Road and Tapia Canyon Road, Castaic, Los Angeles County, California* (prepared for Compliance Biology, Inc., Camarillo, California, August 14, 2006).

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|---------|-------|-------|--|---|
| Scientific Name | Federal | State | Other | | |
| | | | | | nesting behavior. Suitable nesting and foraging habitat is present within NRSP. The most recent observation of this subspecies displaying territorial behavior is downstream approximately 18 miles, near Saticoy. ¹⁷⁰ |
| California horned lark <i>Eremophila alpestris actia</i> | — | WL | LC | Grasslands, disturbed areas, agriculture fields and beach areas. | This species has been observed within NRSP during annual bird surveys foraging in plowed and graded fields over multiple years. In winter 2008 flocks of 250-500 individuals were observed in the Wolcott agriculture fields and east alfalfa field on several occasions, ¹⁷¹ and was observed in agriculture fields in 2007; ¹⁷² this species is thought to be a resident with recent observations, ¹⁷³ no nesting has been observed, but suitable foraging and nesting habitat is present on the project site. |
| Merlin (wintering) <i>Falco columbarius</i> | — | WL | LC | Coastlines, wetlands, woodlands, | Several individuals observed on different |

¹⁷⁰ Labinger and Greaves, *Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring*.

¹⁷¹ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁷² Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

¹⁷³ Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*; Guthrie, *Bird Surveys along the Santa Clara River, 2000*; Guthrie, *Bird Surveys along the Santa Clara River, 2005*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence* (2006).

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--|-----------------|---------|-------|---|---|
| | Scientific Name | Federal | State | | |
| | | | | agricultural fields, and grasslands. | occasions hunting over agriculture fields along the Santa Clara River and in Potrero Canyon. ¹⁷⁴ A male and female were observed flying over agriculture fields bordering riparian habitat near Indian Dunes in the NRSP in March 2007. ¹⁷⁵ Although this species does not nest in California, CDFG considers wintering birds to be of Special Concern. |
| Prairie falcon (nesting) <i>Falco mexicanus</i> | BCC | WL | LC | Grasslands, savannas, rangeland, agricultural fields, and desert scrub; requires sheltered cliff faces for shelter and nesting. | At least 2 individuals were observed on several occasions in Potrero Canyon; and two other individuals were observed along the Santa Clara River on single occasions. ¹⁷⁶ Individuals observed foraging within NRSP in 2000, ¹⁷⁷ along Castaic Creek in 2001, ¹⁷⁸ and Salt Creek in 2005; ¹⁷⁹ it was observed flying |

¹⁷⁴ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁷⁵ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

¹⁷⁶ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁷⁷ Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*.

¹⁷⁸ Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, 2001*.

¹⁷⁹ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|---------------|------------------------|-------|--|--|
| Scientific Name | Federal | State | Other | | |
| | | | | | north over the NRSP on April 29, 2007; ¹⁸⁰ all of these occurrences were thought to be migrants in the project site. No nesting individuals have been observed and available nesting habitat is marginal. |
| American peregrine falcon <i>Falco peregrinus anatum</i> | BCC, Delisted | CE ¹ CFP | LC | Nests near wetlands, lakes, rivers, or other water bodies, on cliffs, banks, dunes, and other human-made structures. | One individual was observed on one occasion over Wolcott agriculture field. ¹⁸¹ An individual was observed foraging over the Santa Clara River corridor near the Grapevine Mesa area within NRSP in 2000; ¹⁸² no other occurrences of this species have been documented on site during annual bird surveys. No nesting peregrine falcons have been observed on the project site. Moderate potential for foraging within NRSP and Salt Creek. The species may nest in the Santa Susana Mountains, south of the project site. ¹⁸³ |
| California condor <i>Gymnogyps californianus</i> | FE, USBC | CE CFP | — | Forages over wide areas of open rangelands, roosts on cliffs and in large trees | Until April 2008, California condors had not been known to nest or land within the |

¹⁸⁰ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

¹⁸¹ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁸² Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*.

¹⁸³ *Ibid*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------------|---------|-------|---|---|
| | Scientific Name | Federal | State | | |
| | | | | and snags. | project area within the last 25 years. ¹⁸⁴ In April 2008, a California condor was observed feeding on a dead calf in a Potrero side canyon by wildlife biologist Chris Niemela. ¹⁸⁵ A condor was also directly observed in January 2009 in the Potrero Canyon area, ¹⁸⁶ and there have been other documented landings in the project area between April and July 2008. ¹⁸⁷ It is a wide-ranging species that nests on remote cliffs, but forages over hundreds of square miles and is known to at least fly over the site. ¹⁸⁸ |
| Yellow-breasted chat (nesting) <i>Icteria virens</i> | — | CSC | LC | Riparian thickets and riparian woodlands with a dense understory. | This species was observed nesting in riparian thickets in 2007 ¹⁸⁹ and has been observed over multiple years along the Santa Clara River within dry riparian woodland |

¹⁸⁴ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁸⁵ M. Carpenter, Newhall Land and Farming Company, personal communication reporting that a California condor was observed feeding on a dead calf in a Potrero side canyon by wildlife biologist Chris Niemela in a Potrero side canyon, 2008.

¹⁸⁶ C. Niemela, memo from C. Niemela (Bloom Biological) to Jesse Grantham (USFWS) regarding observations of California condor in Potrero Canyon in January 2009, March 11, 2009.

¹⁸⁷ R.P. Root. "Acknowledgement of Request for Formal Consultation on the Proposed Newhall Ranch Specific Plan, Santa Clarita, Los Angeles County, California." Letter from R.P. Root (USFWS) to A.O. Allen (Corps), November 12, 2008.

¹⁸⁸ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁸⁹ Bloom Biological, *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|---------|-------|-------|---|---|
| Scientific Name | Federal | State | Other | | |
| | | | | | habitat in NRSP and Salt Creek during annual bird surveys. Recent observations were made within the project site in 2006; ¹⁹⁰ suitable foraging and nesting habitat is present on the project site. |
| Loggerhead shrike <i>Lanius ludovicianus</i> | BCC | CSC | LC | Grasslands and open shrublands with scattered shrubs, trees, fences or other perches. | This species is a resident on site. ¹⁹¹ In winter 2008 it was observed regularly in Potrero Canyon, Tapo Canyon, near Magic Mountain ranch gate, and Wolcott agriculture fields. ¹⁹² Observed to be fairly common within California sagebrush scrub and grasslands in NRSP and also observed within Salt Creek ¹⁹³ ; it was observed nesting near Potrero Canyon and near an agriculture field near the Santa Clara River in 2007; ¹⁹⁴ it was thought to have nested within and adjacent to the Entrada site; ¹⁹⁵ suitable nesting |

¹⁹⁰ Guthrie, *Bird Surveys along the Santa Clara River, 2006*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence* (2006).

¹⁹¹ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Interim Report of Winter Surveys* (2006).

¹⁹² Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁹³ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

¹⁹⁴ Bloom Biological, *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

¹⁹⁵ Guthrie, *Bird Surveys in the Proposed Magic Mountain Entertainment Project Area*; Guthrie, *Bird Observations in the Proposed Magic Mountain Entertainment Project Area*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|---------|-------|--------------|--|---|
| Scientific Name | Federal | State | Other | | |
| | | | | | and foraging habitat is present on the project site. |
| Black-crowned night-heron (rookery) <i>Nycticorax nycticorax</i> | — | *** | LC | Riparian; nests in dense-foliaged trees and dense emergent wetlands. | This species has been observed along the Santa Clara River within the NRSP, most recently in 2007, ¹⁹⁶ and in 2006. ¹⁹⁷ This species was observed early in the year and is thought to be a wintering or migratory species within the project site. No rookery sites have been detected on or near the site. ¹⁹⁸ It is not known if this species has a rookery site within or adjacent to the project site. ¹⁹⁹ Some suitable foraging and nesting habitat is present on site. |
| Nuttall's woodpecker (nesting) <i>Picoides nuttallii</i> | USBC | *** | ABC, LC, Aud | Lower elevation riparian deciduous and oak habitats. | This species is a common, year-round resident in cottonwood and willow riparian habitat along the Santa Clara River and Castaic Creek. ²⁰⁰ It has been observed nearly every year since surveys began in 1988 (see Guthrie and Bloom Biological surveys). |

¹⁹⁶ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

¹⁹⁷ Guthrie, *Bird Surveys along the Santa Clara River, 2006*; Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

¹⁹⁸ Bloom Biological, *Interim Report of Winter Surveys*.

¹⁹⁹ Bloom Biological, *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

²⁰⁰ (Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Interim Report of Winter Surveys*).

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name <i>Scientific Name</i> | Status | | | Habitat Requirements | On-Site Status |
|--|----------|-------|-------|--|--|
| | Federal | State | Other | | |
| Summer tanager (nesting) <i>Piranga rubra</i> | — | CSC | — | Cottonwood-willow riparian habitats, especially older, dense stands along rivers and streams. | Individuals have been observed during annual bird surveys within NRSP in 1994, ²⁰¹ in Entrada in 1991 and 1993, ²⁰² it has also been observed east of the project site in 2000 and 2003, ²⁰³ suitable nesting and foraging habitat present along the Santa Clara River and Castaic Creek within NRSP. |
| Coastal California gnatcatcher <i>Poliophtila californica californica</i> | FT, USBC | CSC | — | Various sage scrub communities, often dominated by California sage and buckwheat; generally avoids nesting in areas with a slope of greater than 40%, and typically less than 820 feet in elevation. | Suitable nesting and/or foraging habitat types are present on site, but all at higher elevations and/or with steeper slopes than typical of this species. The species has not been observed on site during numerous annual bird surveys (including USFWS protocol surveys). Focused protocol surveys have been conducted throughout the project site in 2000 ²⁰⁴ and 2007. ²⁰⁵ |

²⁰¹ Guthrie, *Bird Surveys along the Santa Clara River*, 1994.

²⁰² Guthrie, *Surveys for Least Bell's Vireo*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1993); Guthrie, *Bird Surveys along the Santa Clara River*, 1993.

²⁰³ Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003*.

²⁰⁴ Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*; Guthrie, *Bird Surveys in the Proposed Magic Mountain Entertainment Project Area*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas*; Guthrie, *Bird Observations in the Commerce Center Project Site*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Mesa East and West Development*; Guthrie, *Bird Observations in the Proposed Magic Mountain Entertainment Project Area*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--------------------------------|---------|-------|-------|------------------------------------|--|
| Scientific Name | Federal | State | Other | | |
| | | | | | <p>Focused surveys have also been conducted off site in Legacy Village²⁰⁶ and other areas.²⁰⁷ However, during the course of biological monitoring conducted in the VCC planning area, an individual California gnatcatcher was observed on October 5, 2007 by Dudek biologist Jeff Priest and biologist Ron Francis, a sub-consultant to Dave Crawford, Compliance Biology, Inc.²⁰⁸ Given the time of year and the fact that no other California gnatcatchers have been observed within the project site (despite extensive focused and general surveys), this observation is believed to have been that of a dispersing or transient individual.</p> |
| Vermilion flycatcher (nesting) | — | CSC | — | Breeding habitat includes riparian | A single individual was observed along the |

²⁰⁵ Priest, "Focused California Gnatcatcher Survey, Landmark Village Project."

²⁰⁶ Guthrie, *Bird Observations in the Stevenson Ranch*; Impact Sciences, Inc., "Results of Focused Surveys for the Coastal California Gnatcatcher"; SAIC, "Results of Focused Coastal California Gnatcatcher Surveys."

²⁰⁷ Compliance Biology, Inc., *Results of Focused Coastal California Gnatcatcher Surveys; Prospective Water Tank Locations, River Park Project*; Compliance Biology, Inc., *Results of Focused Survey for Coastal California Gnatcatcher Surveys; River Park Project*; Compliance Biology, Inc., *Results of Focused Coastal California Gnatcatcher Surveys; Castaic Mesa Project*; PCR, "Results of Focused California Gnatcatcher Surveys for the West Creek/East Creek Project Site."

²⁰⁸ Jeff Priest, Dudek, "Documentation of California Gnatcatcher Observation at Newhall, Valencia Commerce Center Project on 10/5/07" (memorandum from J. Priest, Dudek, to D. Crawford and R. Francis, Compliance Biology, Inc., October 8, 2007).

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|--|-----------------------|---------|-----------------|--|--|
| | Scientific Name | Federal | State | | |
| Pyrocephalus rubinus flammeus | | | | woodlands, riparian scrub, and freshwater marshes. | Santa Clara River in 1993, ²⁰⁹ suitable breeding and foraging habitat present on site along the Santa Clara River in the NRSP; some suitable habitat exists in Salt Creek. |
| Allen's/Rufous hummingbird (nesting) <i>Selasphorus sasin/rufus</i> | USBC/ USBC, BCC | *** | ABC, LC, Aud | Breeds in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats. Migrates in woodland and scrub habitats. | This species has been observed along the Santa Clara River within and adjacent to the NRSP. ²¹⁰ These observations were thought to be of migrants. The project site provides suitable foraging, nesting, and migrating habitat throughout the NRSP. The project site is within this species' year-long range. |
| Chipping sparrow (nesting) <i>Spizella passerina</i> | — | *** | LC | Open woodlands with sparse or low shrubs. | This species has been observed as a common migrant in the project site, ²¹¹ additional observations are within and adjacent to the NRSP near the Santa Clara River, ²¹² near |

²⁰⁹ Guthrie, *Bird Surveys along the Santa Clara River*, 1993.

²¹⁰ Bloom Biological, Inc., *Interim Report of Winter Surveys*; Guthrie, *Bird Surveys along the Santa Clara River*, 1998; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*, 1998; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2004.

²¹¹ Bloom Biological, *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

²¹² Guthrie, *Bird Surveys along the Santa Clara River*, 1994; Guthrie, *Bird Surveys along the Santa Clara River*, 1997; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2002.

²¹³ Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|---------------|-------|--------------|--|--|
| Scientific Name | Federal | State | Other | | |
| | | | | | Grapevine Mesa ²¹³ and Homestead Canyon. ²¹⁴ Suitable habitat occurs on site, mostly in High Country with some open woodland areas in Potrero Canyon as well. The project site is within this species' year-long range. |
| Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i> | FE, USBC, BCC | CE | ABC, NT, Aud | Riparian vegetation with extensive willows below 2,000 ft. | This species has been observed almost every year along the Santa Clara River within the NRSP. It has been observed nesting within NRSP during annual bird surveys; on-site nesting sites in willow riparian habitats associated with the Santa Clara River and Castaic Creek. Suitable nesting and foraging habitat present with NRSP. |
| Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i> | — | CSC | LC | Nests in freshwater marsh and forages in annual grassland, native grassland and agriculture. | This species has been observed within the NRSP. ²¹⁵ All observations were thought to be migrants. While suitable nesting and foraging habitat occurs on the project site, this species is expected to occur very rarely on site. |

²¹⁴ Guthrie, *Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas*.

²¹⁵ Guthrie, *Bird Surveys along the Santa Clara River, 1996*; Guthrie, *Bird Surveys along the Santa Clara River, 1997*; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; Guthrie, *Bird Surveys along the Santa Clara River, 2001*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------------|---------|---------------------|--|--|
| | Scientific Name | Federal | State | | |
| MAMMALS | | | | | |
| Pallid bat <i>Antrozous pallidus</i> | — | CSC | WBWG High, LC | Arid habitats, including grasslands, shrublands, woodlands and forests; prefers rocky outcrops, cliffs and crevices with access to open habitats for foraging. | This species was detected within NRSP during ANABAT surveys ²¹⁶ and in 2006; on-site habitats and structures (e.g., oak woodlands, buildings, SR-126 bridge) provide suitable roosting habitat within NRSP and Salt Creek. |
| Western mastiff bat <i>Eumops perotis</i> | — | CSC | LC, WBWG High | Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub and urban. | This species was not detected within NRSP during Anabat surveys, ²¹⁷ but it was observed in 2006 within the NRSP; ²¹⁸ suitable roosting and foraging habitat is present within the project site. |
| Western red bat <i>Lasiurus blossevillii</i> | — | CSC | WBWG High | Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas. | There were three acoustic detections of the western red bat in the project area. Two 2004 detections ²¹⁹ were in willow riparian habitat, and the 2006 detection was under The Old Road Bridge. ²²⁰ Suitable roosting and foraging habitat is present throughout the project site. |
| San Diego black- | — | CSC | — | Open chaparral and | Observed at mouth of |

²¹⁶ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

²¹⁷ Ibid.

²¹⁸ H.L. Johnson, "Bat Survey; August 7–10, 2006 for the Newhall Ranch, Valencia, California."

²¹⁹ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

²²⁰ Johnson, "Bat Survey; August 7–10, 2006 for the Newhall Ranch, Valencia, California."

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name <i>Scientific Name</i> | Status | | | Habitat Requirements | On-Site Status |
|--|---------|-------|-------|--|---|
| | Federal | State | Other | | |
| tailed jackrabbit <i>Lepus californicus bennettii</i> | | | | California sagebrush scrub, grassland and agriculture. | Potrero Canyon within NRSP. ²²¹ Suitable habitat is present within California sagebrush scrub and chaparral habitats within NRSP, Salt Creek, and High Country. |
| Fringed myotis <i>Myotis thysanodes</i> | — | *** | — | Occurs in a wide variety of habitats. Optimal habitats include pinyon-juniper, valley foothill hardwood and hardwood-conifer woodlands. Forms maternity colonies and roosts in caves, mines, buildings and crevices. | This species was detected within NRSP in coast live oak habitat during ANABAT surveys, ²²² suitable roosting and foraging habitat is present within the project site in oak woodlands scattered throughout NRSP and larger concentrations in High Country. |
| Yuma myotis <i>Myotis yumanensis</i> | — | *** | — | Inhabits open forests and woodlands with sources of water. Species is closely tied to bodies of water, over which it feeds. Forms maternity colonies in caves, mines, buildings, or crevices. | This species was not detected within NRSP during ANABAT surveys, ²²³ but it was observed in 2006 within the NRSP, ²²⁴ suitable roosting and foraging habitat is present within the project site. |
| San Diego desert woodrat <i>Neotoma lepida intermedia</i> | — | CSC | — | Open chaparral, California sagebrush scrub, cactus patches and the understory of tree thickets. | A species of desert woodrat was observed during 2004 small mammal surveys within NRSP. ²²⁵ Single woodrat midden was |

²²¹ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area.*

²²² Ibid.

²²³ Ibid.

²²⁴ Johnson, "Bat Survey; August 7–10, 2006 for the Newhall Ranch, Valencia, California."

²²⁵ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area.*

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name | Status | | | Habitat Requirements | On-Site Status |
|---|-----------------|---------|----------------|---|---|
| | Scientific Name | Federal | State | | |
| | | | | | observed within High Country. ²²⁶ Moderate potential to occur within Salt Creek. Based on the known range of this species, it is assumed that the animals observed were the San Diego (<i>intermedia</i>) subspecies. |
| Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i> | — | CSC | WBWG Medium | Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas. | The pocketed free-tailed bat was acoustically detected in 2006 in lower Potrero Creek. ²²⁷ It roosts in crevices in cliffs and forages in open air in all habitats. The project area is at the extreme northwestern part of pocketed free-tailed bat range in California and does not contain the desert habitats typically used by this species. Though present on site, it is probably and occasional visitor. |
| Mule deer <i>Odocoileus hemionus</i> | — | † | — | Variety of habitats including forests, woodlands, brush, meadows and standing waters. | This species has been observed during surveys within Entrada, ²²⁸ NRSP, ²²⁹ and High Country and Salt Creek. ²³⁰ Suitable habitat exists |

²²⁶ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

²²⁷ Johnson, "Bat Survey; August 7–10, 2006 for the Newhall Ranch, Valencia, California."

²²⁸ Dudek and Associates, Inc., *Biological Resources Technical Report for the Entrada Site*.

²²⁹ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

²³⁰ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

Table 4.3-5 (Continued)
Special-Status Wildlife Species Observed on or Adjacent to the Project Site

| Common Name <i>Scientific Name</i> | Status | | | Habitat Requirements | On-Site Status |
|---|---------|-------|-------|--|--|
| | Federal | State | Other | | |
| | | | | | throughout the project site. |
| Mountain lion <i>Puma concolor</i> | — | † | — | Occurs in a variety of scrub and forested habitats. | This species has been observed within NRSP, ²³¹ and High Country and Salt Creek; ²³² the project site is expected to host transient individuals and to be part of local lion(s)' home range. |
| American badger <i>Taxidea taxus</i> | — | CSC | — | Grasslands, agriculture, drier open stages of shrub, forest, and herbaceous habitats with friable soils. | Observed during small mammal surveys within NRSP. ²³³ Suitable habitat exists within central portions of NRSP. |
| Black bear <i>Ursus americanus</i> | — | † | — | Dense forests; forages in brush forests, valley foothill riparian and wet meadows. | Observed within High Country in 2005. ²³⁴ Some suitable habitat occurs within the southern portion of High Country. |

STATUS KEY:

Federal:

FE: Federally Endangered

FT: Federally Threatened

BCC: Bird of Conservation Concern

USBC: United States Bird Conservation

Watch List

State:

CE: California Endangered

CFP: California Fully Protected

CSC: California Species of Special

Concern

WL: Watch List

***: Special Animal

Other:

LC = Least Concern (IUCN)

NT = Near Threatened (IUCN)

Aud = Audubon Watch List

ABC = American Bird Conservancy Green List

WBWG = Western Bat Working Group

†: Trust resource

²³¹ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area.*

²³² Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area.*

²³³ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area.*

²³⁴ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area.*

(2) **Special-Status Wildlife Species Not Observed but with Potential to Occur on the Project Site**

Fifteen special-status wildlife species have been identified as having the *potential* to occur on the site, based on the presence of suitable habitat and known occurrences in the area, despite the fact that they have not been observed during general or focused surveys of the project site. **Table 4.3-6, Special-Status Wildlife Species with Potential to Occur on the Project Site**, identifies these species and provides the species' listing status, habitat requirements, and an explanation of why the species has the potential to occur on the site as a resident, over-wintering, nesting, or roosting species.

**Table 4.3-6
Special-Status Wildlife Species Not Observed but with *Potential* to Occur on the Project Site**

| Common Name <i>Scientific Name</i> | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|---|---|
| | Federal | State | | |
| MOLLUSKS | | | | |
| Trask shoulderband snail <i>(Helminthoglypta traskii traskii)</i> | — | *** | The ecology and distribution of terrestrial land snails, including shoulderband snails in most of Southern California, are poorly understood. The available literature indicates that Trask shoulderband snail occurs in areas supporting coastal scrub, riparian, and chaparral communities. | Surveys were conducted in the project area for this species from November 2009 to January 2010. Although surveys were negative for this terrestrial mollusk species, the presence of suitable microhabitats, such as a woodrat nests, decaying yucca, downed tree limbs and branches, and two other non-special-status shoulderband snail species—Southern California shoulderband snail and Vasquez rocks shoulderband snail—indicate that the Trask shoulderband potentially occurs in the project area. ²³⁵ |
| FISH | | | | |
| Southern steelhead <i>Oncorhynchus mykiss</i> | FE | — | As juveniles and for spawning: relatively cool freshwater streams, well oxygenated water with adequate depth and cover in the way of gravel, cobble, boulder, undercut | Within the Santa Clara River drainage, southern steelhead historically inhabited Piru Creek, Sespe Creek, Santa Paula Creek, Hopper Creek, and possibly Pole Creek. ²³⁶ Presently, southern |

²³⁵ C. Huntley, "Re: Snail Methods, etc." Email from C. Huntley (Aspen) to P. Behrends (Dudek), A.C. Lynch (Sohagi Law Group), D. Bedford (CDFG), K. Drewe (CDFG), S. White (Aspen), M. Carpenter (Newhall Land), S. Rojas (Newhall Land), and S. Miller (Dudek), March 12, 2010.

²³⁶ R.G. Titus, D.C. Erman, and W.M. Snider. *History and Status of Steelhead in California Coastal Drainages South of San Francisco Bay*. Forthcoming.

Table 4.3-6 (Continued)
Special-Status Wildlife Species Not Observed but with *Potential* to Occur on the Project Site

| Common Name <i>Scientific Name</i> | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|---|---|
| | Federal | State | | |
| | | | banks, large and small woody debris, and overhanging vegetation. As non-spawning adults: Pacific Ocean. | steelhead occur downstream of the proposed project in the Santa Clara River watershed in Piru Creek between the confluence with the Santa Clara River and Santa Felicia Dam, in Sespe Creek, in Santa Paula Creek, and possibly in Hopper and Pole Creeks. ²³⁷ Although reconnaissance surveys conducted along the Santa Clara River and tributary drainages within the Specific Plan area of the RMDP were negative in 2004 and 2005, ²³⁸ this species was included in this category (Potential to Occur on Site) due to potential downstream effects of the proposed project. |
| AMPHIBIANS | | | | |
| California red-legged frog <i>Rana aurora draytonii</i> | FT | CSC | Water sources such as ponds, lakes, reservoirs, streams and adjacent riparian woodlands. | Field investigations indicate that potential breeding or summer habitat is generally absent from the portion of the Santa Clara River within NRSP, ²³⁹ the species generally avoids large river channels with widely fluctuating flows because such habitat does not permit successful reproductive activity. ²⁴⁰ Not documented in the Santa Clara River in 1995 ²⁴¹ and 2001 ²⁴² with negative results. |

²³⁷ M. Stoeker and E. Kelly. *Santa Clara River Steelhead Trout: Assessment and Recovery Opportunities* (prepared for The Nature Conservancy and The Santa Clara River Trustee Council).

²³⁸ ENTRIX, Inc., *Focused Special-Status Fish Species Habitat Assessment*.

²³⁹ Ibid.

²⁴⁰ M.P. Hayes and M.R. Jennings, "Habitat Correlates of Distribution of the California Red-Legged Frog (*Rana aurora draytonii*) and the Foothill Yellow-Legged Frog (*Rana boylei*): Implications for Management," in *Proceedings of the Symposium on the Management of Amphibians, Reptiles, and Small Mammals in North America*, technical coordinators R. Sarzo, K.E. Severson, and D.R. Patton, U.S. Forest Service, 144-158)

²⁴¹ SMEA, *Sensitive Aquatic Species Survey*.

²⁴² Sandburg, "Field Summary of Santa Clara River Surveys for *Bufo californicus* and *Rana aurora draytonii*."

Table 4.3-6 (Continued)
Special-Status Wildlife Species Not Observed but with *Potential* to Occur on the Project Site

| Common Name <i>Scientific Name</i> | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|--|--|
| | Federal | State | | |
| | | | | The species has been documented within the Piru Creek and San Francisquito Creek tributaries to the River; given the occurrence of California red-legged frog in nearby upstream and downstream tributaries, non-breeding frogs could occur within the portion of the Santa Clara River (and other drainages) on the project site. Additionally, the stock ponds on the NRSP provide suitable habitat and could support breeding frogs, although none have been found there. |
| REPTILES | | | | |
| Rosy boa <i>Charina trivirgata</i> ssp. <i>roseofusca</i> | — | *** | Inhabits desert and chaparral habitats with rocky soils in coastal canyons and hillsides, desert canyons, washes and mountains. | Suitable scrub and chaparral habitat occurs within the project site with large concentrations in the northeastern portion of High Country, and some in Potrero Canyon; riverbank habitat occurs on site along the Santa Clara River and Castaic Creek; oak woodlands are sparsely scattered throughout the NRSP with larger concentrations in High Country; this species is known to occur in the project region and is presumed to occur on site. |
| San Bernardino ringneck snake <i>Diadophis punctatus modestus</i> | -- | *** | Inhabits open, relatively rocky areas, often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation. | Suitable habitat occurs within the project site in association with oak woodland and riverbank habitats; riverbank habitat occurs on site along the Santa Clara River and Castaic Creek; oak woodlands are sparsely scattered throughout the NRSP with larger concentrations in High Country; species is known to occur in the project region and is presumed to occur on site. |
| Coast patch-nosed snake <i>Salvadora hexalepis virgulata</i> | — | CSC | Inhabits brushy or shrubby vegetation. Requires small mammal burrows for refuge and overwintering sites. | Suitable habitat occurs throughout the project site in association with shrub habitats (upland and riparian scrub, chaparral and riverwash); California ground |

Table 4.3-6 (Continued)
Special-Status Wildlife Species Not Observed but with *Potential* to Occur on the Project Site

| Common Name <i>Scientific Name</i> | Status | | Habitat Requirements | Habitat Suitability |
|--|-----------|-------|---|---|
| | Federal | State | | |
| | | | | squirrel and Botta's pocket gopher burrows occur on site; species is known to occur in the project region and is presumed to occur on site. |
| South coast garter snake <i>Thamnophis sirtalis</i> spp. | — | CSC | Inhabits scrub, chaparral, annual and native grassland, freshwater marsh, and agriculture. | Suitable habitat occurs throughout the project site in association with scrub, chaparral, grassland, and agriculture habitats. |
| BIRDS | | | | |
| Grasshopper sparrow <i>Ammodramus</i> <i>savannarum</i> | — | *** | Dense, dry or well-drained annual and native grasslands with mix of grasses and forbs. May occur in fallow agricultural fields, especially those periodically planted in oats and barley. | The project site is just south of the southern edge of the portion of this species' summer range which occurs at approximately the Los Angeles/Kern County boundary. There is at least moderate potential for this species to breed/forage in grasslands and some agricultural areas which occur mostly in the central portion of NRSP, San Martinez Grande, along portions of the Santa Clara River and Castaic Creek. |
| Bell's sage sparrow (nesting) <i>Amphispiza belli belli</i> | BCC | WL | Coastal scrub and chaparral. | This species has been observed off site in Castaic Mesa, ²⁴³ near Soledad Canyon in 2002, ²⁴⁴ and in the Legacy Village project site, adjacent to the NRSP and Salt Creek area. ²⁴⁵ Suitable nesting and foraging habitat present on the project site with concentrations of coastal scrub and chaparral in the northeastern portion of the NRSP and southeastern portion of High Country. |
| Black-chinned sparrow (nesting) <i>Spizella atrogularis</i> | BCC, USBC | *** | Chaparral and sagebrush scrub. | Suitable habitat occurs within project site in association with chaparral and coastal scrub habitats which are concentrated in the northeastern portion of the |

²⁴³ Compliance Biology, Inc., *Results of Focused Coastal California Gnatcatcher Surveys; Castaic Mesa Project*.

²⁴⁴ Compliance Biology, Inc., *Results of Focused Survey for Coastal California Gnatcatcher Surveys; River Park Project*.

²⁴⁵ Guthrie, *Bird Observations in the Stevenson Ranch*.

Table 4.3-6 (Continued)
Special-Status Wildlife Species Not Observed but with *Potential* to Occur on the Project Site

| Common Name <i>Scientific Name</i> | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|---|--|
| | Federal | State | | |
| | | | | NRSP and the southeastern portion of High Country. |
| MAMMALS | | | | |
| Ringtail <i>Bassariscus astutus</i> | — | CFP | Mixture of forest and shrubland in close association with rocky areas and riparian habitats; uses hollow trees, snags, and logs for cover and reproduction. | This species was surveyed for during the mammal surveys in 2004. ²⁴⁶ Cameras, scent/track stations and spotlight survey techniques were used to detect these species. Low potential to occur based on lack of suitable habitat, such as hollow trees, logs, snags and abundant rocky areas. In addition, these species are not usually found more than 1 kilometer away from permanent water; therefore these species would most likely have been detected during the numerous studies performed near the Santa Clara River and its tributaries. ²⁴⁷ |
| Townsend's big-eared bat <i>Corynorhinus townsendii</i> | — | CSC | Utilizes a variety of communities, including conifer and oak woodlands and forests, arid grasslands and deserts and high-elevation forests and meadows. Requires appropriate roosting, maternity and hibernacula sites free from human disturbance. | This species was not detected on the project site during ANABAT surveys. ²⁴⁸ Suitable roosting and foraging habitat is present on the site. |
| Western small-footed myotis <i>Myotis ciliolabrum</i> | — | CSC | Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian | Impact Sciences identified the 40 kHz frequency range species in 2004 as the western small-footed myotis, ²⁴⁹ but without additional |

²⁴⁶ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

²⁴⁷ Haglund and Baskin, *Fish and Wildlife Survey and Habitat Assessment*; Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., *Biological Resources Technical Report for the Valencia Commerce Center*; Dudek and Associates, Inc., *Biological Resources Technical Report for the Entrada Site*.

²⁴⁸ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

²⁴⁹ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

Table 4.3-6 (Continued)
Special-Status Wildlife Species Not Observed but with *Potential* to Occur on the Project Site

| Common Name <i>Scientific Name</i> | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|---|---|
| | Federal | State | | |
| | | | areas. Requires appropriate roosting, maternity and hibernacula sites free from human disturbance. | information (<i>e.g.</i> , longer time-series recording or capture), this identification could not be confirmed because this frequency is characteristic of at least two other species that could occur on site: long-legged myotis and little brown bat. In 2006, 40 kHz bat species were recorded in all three survey locations along Potrero Creek, along the Santa Clara River at Walcott Road, and at the plant nursery site in upper Long Canyon. Without definitive presence/absence information, for the purpose of this analysis, it is assumed that the western small-footed myotis occurs in the project area. |
| Long-legged myotis <i>Myotis volans</i> | — | CSC | Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas. Requires appropriate roosting, maternity and hibernacula sites free from human disturbance. | The presence of the long-legged myotis was not confirmed in the project area during the acoustic and mist netting surveys conducted in 2004 and 2006. ²⁵⁰ However, bats with acoustic signatures in the 40 kHz range, which is the range for the long-legged myotis, were detected on site in 2004 and 2006. Impact Sciences identified the 40 kHz frequency-range species in 2004 as the western small-footed myotis, ²⁵¹ but without additional information (<i>e.g.</i> , longer time-series recording or capture), this identification could not be confirmed. Based on the frequency data alone, the 40 kHz species could be western small-footed myotis, long-legged myotis, or little brown bat; therefore, all three |

²⁵⁰ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*; Johnson, "Bat Survey; August 7–10, 2006 for the Newhall Ranch, Valencia, California."

²⁵¹ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

Table 4.3-6 (Continued)
Special-Status Wildlife Species Not Observed but with *Potential* to Occur on the Project Site

| Common Name <i>Scientific Name</i> | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|---|---|
| | Federal | State | | |
| | | | | species should be considered to be potentially present on site. In 2006, 40 kHz bat species were recorded in all three survey locations along Potrero Creek, along the Santa Clara River at Walcott Road, and at the plant nursery site in upper Long Canyon. |
| Southern grasshopper mouse <i>Onychomys torridus ramona</i> | — | CSC | Inhabits desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. | This species has not been detected within the NRSP during small mammal trapping. ²⁵² This species has potential to occur at least in low densities on site within coastal scrub and grassland vegetation communities; it is not expected to occur within other habitats on the project site. |

STATUS KEY:**Federal**

FE: Federally Endangered

FT: Federally Threatened

FC: Federal Candidate for listing as Threatened or Endangered

BCC: Bird of Conservation Concern

USBC: United States Bird Conservation Watch List

State

CE: California Endangered

CT: California Threatened

CFP: California Fully Protected

CSC: California Species of Special Concern

**: Over wintering (or roosting) sites should be protected, butterfly probably not at risk currently

***: Special Animal

252 Ibid.

(3) Special-Status Wildlife Species Not Expected or Rarely Occurring on the Project Site

The project site lacks suitable habitat to support the species addressed in **Table 4.3-7, Special-Status Wildlife Species Not Expected or Rarely Occurring on the Project Site**, as a resident or nesting species or is expected to support the species only on rare occasions, such as during migration. **Table 4.3-7** provides the species' regulatory status, habitat requirements, and an explanation of why the species is not expected to reside on or substantially utilize the project site. As these species are not expected to breed, nest, or otherwise reside on or substantially utilize the project site, they are not discussed further in this document.

**Table 4.3-7
Special-Status Wildlife Species Not Expected or Rarely Occuring on the Project Site**

| Common Name | Status | | | |
|--|---------|-------|----------------------|---|
| Scientific Name | Federal | State | Habitat Requirements | Habitat Suitability |
| INVERTEBRATES | | | | |
| Crustacea Order Anostraca (fairy shrimp) | | | | |
| Vernal pool fairy shrimp <i>Branchinecta lynchi</i> | FT | — | Vernal pools. | Wet season vernal pool surveys were conducted in December 2007 to March 2008 in five previously identified depressions associated with western spadefoot surveys, including three in Potrero Canyon, one between Grapevine Mesa and Lion Canyon, and one east of Lion Canyon ²⁵³ . Two of the five pools retained adequate water for testing, and results were negative. One depression located between Grapevine Mesa and Lion Canyon was a detention basin, and the other depression in Potrero Canyon was located on an oil well pad and storage area where water collected next to a bermed area. Neither of these depressions exhibited typical fairy shrimp habitat characteristics. |
| San Diego fairy shrimp <i>Branchinecta sandiegonensis</i> | FE | — | Vernal pools. | |
| Riverside fairy shrimp <i>Streptocephalus woottoni</i> | FE | — | Vernal pools. | |

²⁵³ Compliance Biology, Inc., *Results of the Focused Western Spadefoot Toad Surveys on the Mission Village Project Site*; Dave Crawford, Compliance Biology, Inc., telephone call to Sherri Miller (Dudek), November 2007.

²⁵⁴ R.P. Root, "Acknowledgement of Request for Formal Consultation on the Proposed Newhall Ranch Specific Plan, Santa Clarita, Los Angeles County, California" (letter from R.P. Root, USFWS, to A.O. Allen, Corps, November 12, 2008).

Table 4.3-7 (Continued)
Special-Status Wildlife Species Not Expected or Rarely Occuring on the Project Site

| Common Name | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|---|---|
| Scientific Name | Federal | State | | |
| | | | | <p>No discernable depressions that could collect water were found at the other three previously identified locations, and water was not retained at these sites. All three were on dirt access roads.</p> <p>There is no indication of vernal or other seasonal pools on site that are suitable for fairy shrimp. The nearest documented vernal pools in relation to the project area that could be source populations for fairy shrimp include at least two vernal pools located in the Plum Canyon area of Los Angeles County (Cruzan Mesa), approximately 10 miles from the project area, and the Carlsberg vernal pools in Moorpark in Ventura County, approximately 15 miles from the project Area²⁵⁴. Both the Carlsberg and Cruzan Mesa pools support the vernal pool fairy shrimp²⁵⁵. The USFWS is in concurrence that the project is not likely to adversely affect listed fairy shrimp because these species are not known to occur in the project area and suitable habitat is not known to occur in the project area²⁵⁶.</p> |
| Insecta Order Lepidoptera (butterflies and moths) | | | | |
| Quino checkerspot butterfly (Wright's <i>Euphydryas</i>) <i>Euphydryas</i> <i>editha quino</i> | FE | — | Occurs in localized colonies, always closely associated with the larval foodplant dot-seed plantain (<i>Plantago erecta</i>) and clay or cryptobiotic | Based on a focused habitat assessment, it was concluded that the primary larval food plant (<i>Plantago erecta</i>) does not occur on the site ²⁵⁷ . This butterfly was last documented in the Santa Susana |

²⁵⁵ USFWS. *Vernal Pools of Southern California Recovery Plan* (Portland, Oregon: USFWS, 1998).

²⁵⁶ Root, "Acknowledgement of Request."

²⁵⁷ Compliance Biology, Inc., *Results of Butterfly Surveys on the Newhall Ranch Project Site*; Compliance Biology, Inc. *Results of Butterfly Surveys on Magic Mountain Entertainment Site*.

Table 4.3-7 (Continued)
Special-Status Wildlife Species Not Expected or Rarely Occuring on the Project Site

| Common Name | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|---|---|
| Scientific Name | Federal | State | | |
| | | | soils. | Mountains, approximately 10 miles south and southwest of the project site in 1954. |
| AMPHIBIANS | | | | |
| Sierra Madre (Mountain) yellow-legged frog <i>Rana muscosa</i> | FE | CSC | Southern California, populations are restricted to streams in ponderosa pine, montane hardwood-conifer, and montane riparian habitats at elevations above 1,200 feet. | Does not occur in the project area. project site is outside its range and does not support montane habitats. |
| Coast range newt <i>Taricha torosa torosa</i> | — | CSC | Often occurs in areas where streams and ponds dry up in the summer. Occurs beneath logs, boards, rocks, and in rodent burrows, but adults must return to water to breed. May be found in drier habitats, such as oak forests, chaparral, and rolling grasslands. Commonly found in or near ditches, ponds, lakes, and streams; however, a permanent water source is not necessary. Stream-breeding populations typically breed in slow moving or stagnant pools in streams. | While suitable habitat occurs in the project area, this species is not known to occur in the project area. The nearest current occurrences range from 20 to 25 miles from the project site, in the Santa Monica Mountains. Other Southern California occurrences are in the Angeles National Forest in the San Gabriel Mountains, the Coast Ranges in Santa Barbara County, and the Cuyamaca Range in San Diego County. |
| BIRDS | | | | |
| Coastal (San Diego) cactus wren <i>Campylorhynchus brunneicapillus sandiegensis</i> | BCC | CSC | Southern cactus scrub, maritime succulent scrub, cactus thickets in coastal sage scrub. | No observations of cactus wrens have been made in the project area, and the coastal (San Diego) cactus wren subspecies is not expected to occur on site based on its range. There are no large concentrations of cactus thickets on site that provide the necessary habitat constituent for nest sites. |
| Great egret (rookery) <i>Ardea alba</i> | — | *** | Nests colonially in large trees. Rookery sites are typically located near | Individuals commonly observed over multiple years foraging within the Santa Clara River in NRSP; |

Table 4.3-7 (Continued)
Special-Status Wildlife Species Not Expected or Rarely Occuring on the Project Site

| Common Name | Status | | Habitat Requirements | Habitat Suitability |
|---|-----------|-------|---|---|
| Scientific Name | Federal | State | | |
| | | | marshes, tide-flats, irrigated pastures, and margins of rivers and lakes. | moderate potential for foraging within Salt Creek. Recent observations were made in 2006. ²⁵⁸ No rookery sites have been observed on the project site during annual bird surveys. |
| Great blue heron (rookery) <i>Ardea herodias</i> | — | *** | Nests colonially in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites are usually in close proximity to foraging areas such as marshes, lake margins, tide-flats, wet meadows, rivers, and streams. | Individuals commonly observed over multiple years foraging within the Santa Clara River within NRSP; moderate potential for foraging within Salt Creek. Recent observations were made in 2006. ²⁵⁹ No rookery sites have been observed on the project site during annual bird surveys. |
| Swainson's hawk <i>Buteo swainsoni</i> | BCC, USBC | CT | Open grassland, shrublands, croplands. | This species is a seasonal migrant. One individual (thought to be a migrant) was observed in 2000 in the NRSP. ²⁶⁰ Another observation was made within the vicinity of the project site east of Old Road bridge. ²⁶¹ Although suitable foraging habitat is present on the project site, this species has not been documented to nest in Southern California and is expected to rarely forage over the site. |
| Mountain plover <i>Charadrius montanus</i> | BCC, USBC | CSC | Nests in open, shortgrass prairies or grasslands; winters in shortgrass plains, plowed fields, open sagebrush, and sandy deserts. | Some suitable habitat exists on site in agriculture and California annual grassland communities, which primarily are located in the central portion of the NRSP, San Martinez Grande, and adjacent to the Santa Clara River riparian areas. These communities have marginal habitat quality on site to |

²⁵⁸ Guthrie, *Bird Surveys along the Santa Clara River, 2006*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2006).

²⁵⁹ Guthrie, *Bird Surveys along the Santa Clara River, 2006*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2006).

²⁶⁰ Guthrie, *Bird Surveys along the Santa Clara River, 2000*.

²⁶¹ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997*.

Table 4.3-7 (Continued)
Special-Status Wildlife Species Not Expected or Rarely Occuring on the Project Site

| Common Name | Status | | Habitat Requirements | Habitat Suitability |
|--|--------------|------------|--|---|
| Scientific Name | Federal | State | | |
| | | | | support this species. This species only winters in Southern California and only rarely occurs. It is not expected to breed on the project site. |
| Bald eagle <i>Haliaeetus leucocephalus</i> | Delisted | CE, CFP | Seacoasts, rivers, swamps, large lakes; winters at large bodies of water in lowlands and mountains. | No suitable lake habitat exists on the project site and no records of nesting on the project site. There are no large bodies of water, large rivers, or seacoasts within the vicinity of the project site. |
| Least bittern (nesting) <i>Ixobrychus exilis</i> | — | CSC | Dense emergent wetlands of cattails and tules are essential. | Cattails and tules occur within the Santa Clara River corridor; however, these areas do not contain the dense emergent vegetation characteristic of nesting habitat of this species. |
| Long-billed curlew (nesting) <i>Numenius americanus</i> | BCC, USBC | WL | Nests in grazed, mixed grass and short-grass prairies. Localized nesting along the California coast. Coastal estuaries, mudflats, open grasslands and croplands are used in winter for foraging. | Some suitable habitat exists on site in agriculture and California annual grassland communities, which primarily are located in the central portion of the NRSP, San Martinez Grande, and adjacent to the Santa Clara River riparian areas. This species may occur rarely in the winter in the project vicinity, but the project site is outside its nesting range. |
| Osprey (nesting) <i>Pandion haliaetus</i> | — | WL | Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast. | Ospreys need areas that support fish for long periods of time. There are no large bodies of water on site or adjacent to the project site that could support fish for long periods of time. One individual was observed on March 31 ²⁶² and was probably in migration. |
| Double-crested cormorant <i>Phalacrocorax auritus</i> | — | WL | Lakes, rivers, reservoirs, estuaries, ocean; nests in tall trees, rock ledges on cliffs, rugged slopes. | No suitable lake habitat exists on the project site and no records of nesting on the project site. There are no large bodies of water, large rivers, estuaries or seacoasts within the vicinity of the project site. |
| White-faced ibis | — | WL | Nests in dense emergent | Very little marsh habitat exists on |

²⁶²Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*.

Table 4.3-7 (Continued)
Special-Status Wildlife Species Not Expected or Rarely Occuring on the Project Site

| Common Name | Status | | Habitat Requirements | Habitat Suitability |
|--|-----------|-------|---|---|
| Scientific Name | Federal | State | | |
| (rookery site) <i>Plegadis chihi</i> | | | wetlands and marshes; winter foraging in shallow lacustrine waters, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields and estuaries. | site, and is primarily located south of the Santa Clara River in Potrero Canyon. This species is not known to regularly breed in California anymore, and there is not enough suitable habitat on the project site to support rookery sites. |
| Purple martin (nesting) <i>Progne subis</i> | — | CSC | Nests in tall sycamores, pines, oak woodlands, coniferous forest; forages over riparian, forest and woodland. | This species may occasionally forage in the project vicinity, but the site is outside its nesting range. There is limited suitable nesting habitat because there are no tall sycamores, pines, or coniferous forest communities on the project site, and this species is not expected to nest on site. One individual was observed within NRSP. ²⁶³ |
| Bank swallow (nesting) <i>Riparia riparia</i> | — | CT | Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes or the ocean to dig a nesting hole. | The project site is not within this species' range. The required nesting habitat does exist on the project site, and no recent records of nesting in the area. Typically these species nest in areas such as the Sacramento and Feather rivers. |
| California spotted owl <i>Strix occidentalis occidentalis</i> | BCC, USBC | CSC | Old growth oak and oak-conifer habitats. | The project site is within the species' yearlong range. However, this species generally requires dense, old growth forest areas for foraging and cover; breeds in mature, multi-layered forest stands and nests generally in a tree or snag cavity. No conifer habitats occur on site. Oak woodlands exist on site, but are generally more open and often occur as oak savannahs. Dense, mature coast live oak woodlands exist within canyons in High Country and Salt Creek that may be suitable habitat for these species; however in the Angeles |

²⁶³ Guthrie, *Bird Surveys along the Santa Clara River*, 1994.

Table 4.3-7 (Continued)
Special-Status Wildlife Species Not Expected or Rarely Occuring on the Project Site

| Common Name | Status | | Habitat Requirements | Habitat Suitability |
|--|---------|-------|---|---|
| Scientific Name | Federal | State | | |
| | | | | National Forest (east of the project site), these species have been documented using canyon live oak habitats with co-dominant conifer species. ²⁶⁴ In the Cleveland National Forest in San Diego, they have been documented in woodlands dominated by both coast and canyon live oak, but also with co-dominant conifer species. ²⁶⁵ Overall, there is limited dense oak woodland on site to support this species. |
| MAMMALS | | | | |
| Mexican long-tongued bat <i>Choeronycteris mexicana</i> | — | CSC | Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland. Roosts in caves, mines, and buildings. | The project site is not within this species' range. The closest range (and only known range in California) is in coastal San Diego County, approximately 100 miles southwest. This species requires habitats associated with desert habitats, and these are not found within the project site. |
| Spotted bat <i>Euderma maculatum</i> | — | CSC | Occupies a wide variety of habitats from arid deserts and grasslands, to mixed conifer forests. Feeds over water and along washes. Needs rock crevices in cliffs or caves for roosting. | The project site is within the species' yearlong range. This species was not detected within NRSP during ANABAT surveys conducted in 2004 ²⁶⁶ or in 2006 ²⁶⁷). There are no cliffs or caves on site; therefore, there is limited suitable roosting habitat on or bordering the project site. Some suitable foraging habitat may occur in grasslands on site; however no desert or mixed conifer habitats occur on site or near the project site. Only rare to occasional spotted |

²⁶⁴ Stephenson, John, *Spotted Owl Surveys on the National Forests of Southern California: A Status Report and Recommendations for the Future* (1991).

²⁶⁵ Stephenson, *Spotted Owl Surveys*.

²⁶⁶ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

²⁶⁷ Johnson, "Bat Survey; August 7-10, 2006 for the Newhall Ranch, Valencia, California."

Table 4.3-7 (Continued)
Special-Status Wildlife Species Not Expected or Rarely Occuring on the Project Site

| Common Name | Status | | Habitat Requirements | Habitat Suitability |
|---|---------|-------|--|--|
| Scientific Name | Federal | State | | |
| | | | | bat sightings have been recorded in the project vicinity. |
| Lodgepole chipmunk <i>Neotamias speciosus speciosus</i> | — | *** | Southern California population occurs in mountains in open-canopy forests of mixed conifer, Jeffrey pine, lodgepole and limber pine, and occasionally in chaparral at elevations above 6,400 feet. | Does not occur in the project area. project site is outside its range and does not support montane habitats. |
| Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i> | — | CSC | Inhabits lower elevation grasslands and California sagebrush communities on open ground with fine sandy soils. May not dig extensive burrows, hiding instead under weeds and dead leaves. | This species has not been detected within NRSP during small mammal trapping. ²⁶⁸ Some suitable habitat may exist on site in grasslands; however there are no fine sandy soils associated with grassland or coastal scrub communities on site. The coastal scrub communities may be too in high elevation for the species. This species is not expected to occur on other portions of the project site because the known range is south of project site. |
| Big free-tailed bat <i>Nyctinomops macrotis</i> | — | CSC | Rugged, rocky canyons. | This species has not been observed during wildlife surveys within the project site. The closest range is in southwest San Diego County and is rare in California. This species is not expected to occur on site due to the distance from its known range. |
| STATUS KEY: Federal FE: Federally listed as Endangered FT: Federally listed as Threatened FC = Federal Candidate for listing as Threatened or Endangered BCC = Bird of Conservation Concern USBC = United States Bird Conservation Watch List | | | State CE: California-listed as Endangered CT: California-listed as Threatened CFP: California Fully Protected CSC: California Species of Special Concern WL: Watch List ***: Special Animal | |

²⁶⁸ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area.*

e. Jurisdictional Wetlands and Drainages

(1) U.S. Army Corps of Engineers Jurisdiction

Wetlands, creeks, streams, and permanent and intermittent drainages are generally subject to the jurisdiction of the Corps under Section 404 of the federal Clean Water Act. The Corps has jurisdiction up to the “ordinary high water mark” of rivers, creeks, and streams that are considered “waters of the U.S.” as defined by the Clean Water Act. If adjacent wetlands occur, the limits of jurisdiction extend beyond the ordinary high water mark to the outer edge of the wetlands. Wetlands are defined by the Corps as “those areas that are inundated or saturated by surface or groundwater at a frequency or duration to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”²⁶⁹ The presence and extent of wetland areas are normally determined by examination of the vegetation, soils, and hydrology of a site. The Corps definition of wetlands requires that all three wetland identification parameters be met.

In 2003, URS staff completed field investigations and conducted a delineation of waters of the United States and CDFG jurisdictional streams present within the RMDP site, which encompasses the Mission Village project site. The 2003 delineation was conducted using sub-meter accurate GPS units and the data were transferred into a GIS database. The URS December 2003 Jurisdictional Delineation report is found in **Appendix 4.3** of this EIR. The corps’ letter, dated February 4, 2004, concurring with the URS delineation also is attached in **Appendix 4.3** of this EIR. Between 2004 and 2009, URS completed multiple delineation efforts on the RMDP and Entrada sites in support of the EIS/EIR process for the RMDP/SCP project. These efforts resulted in subsequent mapping refinements to the jurisdictional boundaries (discussed below).

URS staff delineated Corps jurisdictional wetlands in 2007, which had not been delineated previously. The extent of wetlands within the site was determined through a combination of fieldwork and analysis of high-resolution (6” pixels) aerial photography. Wetlands were identified within the Santa Clara River corridor and in the Potrero Canyon and Salt Creek drainages, as well as in a spring complex near the mouth of Middle Canyon. Where fieldwork was conducted, the wetland delineation was performed in accordance with the Corps’ Wetland Delineation Manual (Environmental Laboratory, 1987) and the Arid West Regional Supplement (Corps, 2006).

In 2008, Glenn Lukos Associates conducted a field delineation of the limits of waters of the United States, Corps jurisdictional wetlands, and CDFG jurisdictional streams within the Entrada planning area. In

²⁶⁹ U.S. Army Corps of Engineers (Corps), *Corps of Engineers Wetlands Delineation Manual*, 1987.

addition to the Entrada planning area, the Glenn Lukos Associates study delineated jurisdictional drainages within the footprint of the extension of Magic Mountain Parkway. The Lukos delineation letter report dated October 18, 2006 (as revised September 15, 2008), is attached in **Appendix 4.3** of this EIR.

In 2009, URS prepared a preliminary jurisdictional determination encompassing the entire RMDP site and Entrada planning area. This report combined the results of previous studies conducted in 2003, 2006, 2007, and 2008 to produce a comprehensive, planning-level delineation. **Appendix 4.3** of this EIR contains the URS preliminary jurisdictional determination, dated April 8, 2009. In addition, as part of the Draft EIS/EIR, URS compiled a “Composite Wetland Delineation” for the RMDP and Entrada sites; this composite delineation is also attached in **Appendix 4.3**.

Subsequent to release of the Draft EIS/EIR in April 2009, the Corps and CDFG received comments from the public regarding the boundary of a riparian area along the Santa Clara River mainstem near the proposed site for the Potrero Canyon Bridge. In the 2009 preliminary composite wetlands delineation, this area had been previously surveyed for wetlands by interpreting aerial photographs. To address these comments, additional wetland delineation field work was performed in this location. In addition, the boundaries of waters of the United States and wetlands at some other locations were refined to reflect the most recent data available (generally, 2006 data replacing 2004 data). A revised preliminary Jurisdictional Determination was submitted to the Corps on June 7, 2010. This Jurisdictional Determination is found in **Appendix 4.3** of this EIR.

The URS preliminary Jurisdictional Determination identified a total of 180.6 acres on the project site as falling under the jurisdiction of the Corps. As shown in **Figure 4.3-7, Jurisdictional Resources**, within the project boundaries Corps jurisdiction includes the Santa Clara River and Castaic Creek, an agricultural ditch, three unnamed seasonal drainages, and seasonal drainages within Middle Canyon, Exxon Canyon, Lion Canyon, Magic Mountain Canyon, Dead-End Canyon, and Mid-Martinez Canyon.

(2) CDFG Jurisdiction

Streambeds within the project site are subject to regulation by CDFG under Section 1602 of the California Fish and Game Code. A stream is defined under these regulations as a body of water that (1) flows at least periodically or intermittently through a bed or channel having banks, and (2) supports fish or other aquatic life. CDFG’s jurisdiction typically overlaps substantially with the Corps jurisdiction, but also includes all riparian vegetation associated with creeks, drainages, and rivers.

The jurisdictional delineation conducted by URS also identified areas under the jurisdiction of CDFG (see **Figure 4.3-7**). CDFG jurisdiction on the project site encompasses the 180.6 acres under Corps jurisdiction (as discussed above), plus an additional 53.4 acres of riparian vegetation on the site.

(3) RMDP/SCP Project

As noted in **Section 1.0, Project Description**, certain permits and approvals from agencies other than the County are needed to implement various project components. These agencies include the USACE and CDFG, the Regional Water Quality Control Board and U.S. Fish and Wildlife Service. Many of these additional approvals are part of the project applicant's Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP) project and related joint EIS/EIR (discussed below).

The RMDP/SCP is a separate but related project that encompasses the Newhall Ranch Specific Plan area (including Mission Village) and two planning areas in the Specific Plan's immediate vicinity, the Valencia Commerce Center (VCC) and Entrada. The RMDP/SCP Project consists of two components. The first is the proposed RMDP, which is a conservation, mitigation, and permitting plan for sensitive biological resources within the previously approved Newhall Ranch Specific Plan area. The RMDP would be relied upon to obtain federal and state permits to implement infrastructure improvements required to facilitate buildout of the approved Specific Plan. The RMDP is intended to direct both resource management and development on the Specific Plan site. The second component is the SCP, which is a conservation and management plan to permanently protect and manage a system of preserves designed to maximize the long-term existence of the San Fernando Valley spineflower (*Chorizanthe parryi* ssp. *fernandina*; spineflower or SFVS), a federal candidate and a state-listed endangered plant species. The SCP would address known spineflower located within the Specific Plan area and the two planning areas, VCC and a portion of Entrada.

The joint EIS/EIR has been prepared to assess the environmental implications of implementing the RMDP/SCP project, with the USACE acting as the lead agency under the NEPA and the CDFG acting as the lead agency under CEQA. The joint EIS/EIR is available for public review at CDFG's website: <http://www.dfg.ca.gov/regions/5/newhall/docs/>.

The Draft EIS/EIR for the RMDP/SCP project was publicly circulated by the USACE and CDFG on April 27, 2009, and the public comment period closed on August 25, 2009 (after an extension). The Final EIS/EIR for the RMDP/SCP project was released for additional public review/comment on June 18, 2010. This additional review period for the Final EIS/EIR began on June 19, 2010 and ended on August 3, 2010 (after an extension). The total public review period on the Final EIS/EIR was 45 days. County staff has been monitoring, and will continue to monitor, the processing of the Mission Village proposed project, as well as the RMDP/SCP project.

f. Characteristics of Surrounding Areas

Plant communities in the immediate vicinity of the Mission Village project site include coastal scrub, coast live oak woodland, valley oak/grass, undifferentiated chaparral, big sagebrush scrub, alluvial scrub, California annual grassland, southern cottonwood-willow riparian, southern willow scrub, and mulefat scrub.

Similar to those on the project site, the surrounding riparian plant communities are of high biological value and provide suitable habitat for numerous common and special-status wildlife species. The latter include the Santa Ana sucker, unarmored threespine stickleback, arroyo chub, southwestern pond turtle, two-striped garter snake, least Bell's vireo, Cooper's hawk, Lawrence's goldfinch, yellow warbler, white-tailed kite, and yellow-breasted chat. (See **Tables 4.3-5 and 4.3-6.**) Additionally, the portion of the Santa Clara River (and associated riparian habitats) that is located on and borders the project site is an important migration and genetic dispersion corridor for many wildlife species, including aquatic taxa, riparian obligate species (resident and migratory) and larger, more mobile terrestrial animals.

The upland habitats surrounding the project site also provide suitable habitat for numerous common and special-status wildlife species, including the silvery legless lizard, coastal western whiptail, coast horned lizard, southern rufous-crowned sparrow, northern harrier, California horned lark, loggerhead shrike, pallid bat, western mastiff bat, pocketed free-tail bat, and San Diego desert woodrat. (**Tables 4.3-5 and 4.3-6.**) The upland habitats surrounding the project site also support populations of San Fernando Valley spineflower, slender mariposa lily, and Peirson's morning glory.

8. PROPOSED PROJECT IMPROVEMENTS

The Mission Village project is proposed on 1,261.8 acres of land, located within the boundaries of the approved Specific Plan. At buildout, the project would contain 4,412 dwelling units, 1,555,100 square feet of commercial space, 9.5-acre elementary school, library, fire station, 25.5 acres of Community and Neighborhood Parks, three private recreation facilities, open space, and trails. To facilitate development of this site, several off-site, project-related components would be implemented within an additional 592.8 acres of land located beyond the tract map site. These off-site improvements include a 396-acre underground utility corridor proposed along State Route (SR)-126 extending from the Valencia Water Reclamation Plan (WRP) (Plant 32) on the east to the proposed Newhall Ranch WRP on the west, which would extend utility services to the tract map site and ultimately the Newhall Ranch Specific Plan development.



Legend

- NRSP Boundary
- Mission Village Project Boundary
- Mission Village VTTM Boundary
- Permanent Impact Limits
- Temporary Impact Limits

Jurisdictional Resources

- USACE/CDFG
- CDFG only

NOTE: A jurisdictional delineation of Castaic Creek has not been conducted; therefore, jurisdictional areas within the boundaries of the project site associated with Castaic Creek have been estimated.

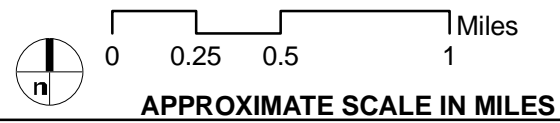


IMAGE SOURCE: DigitalGlobe 2007

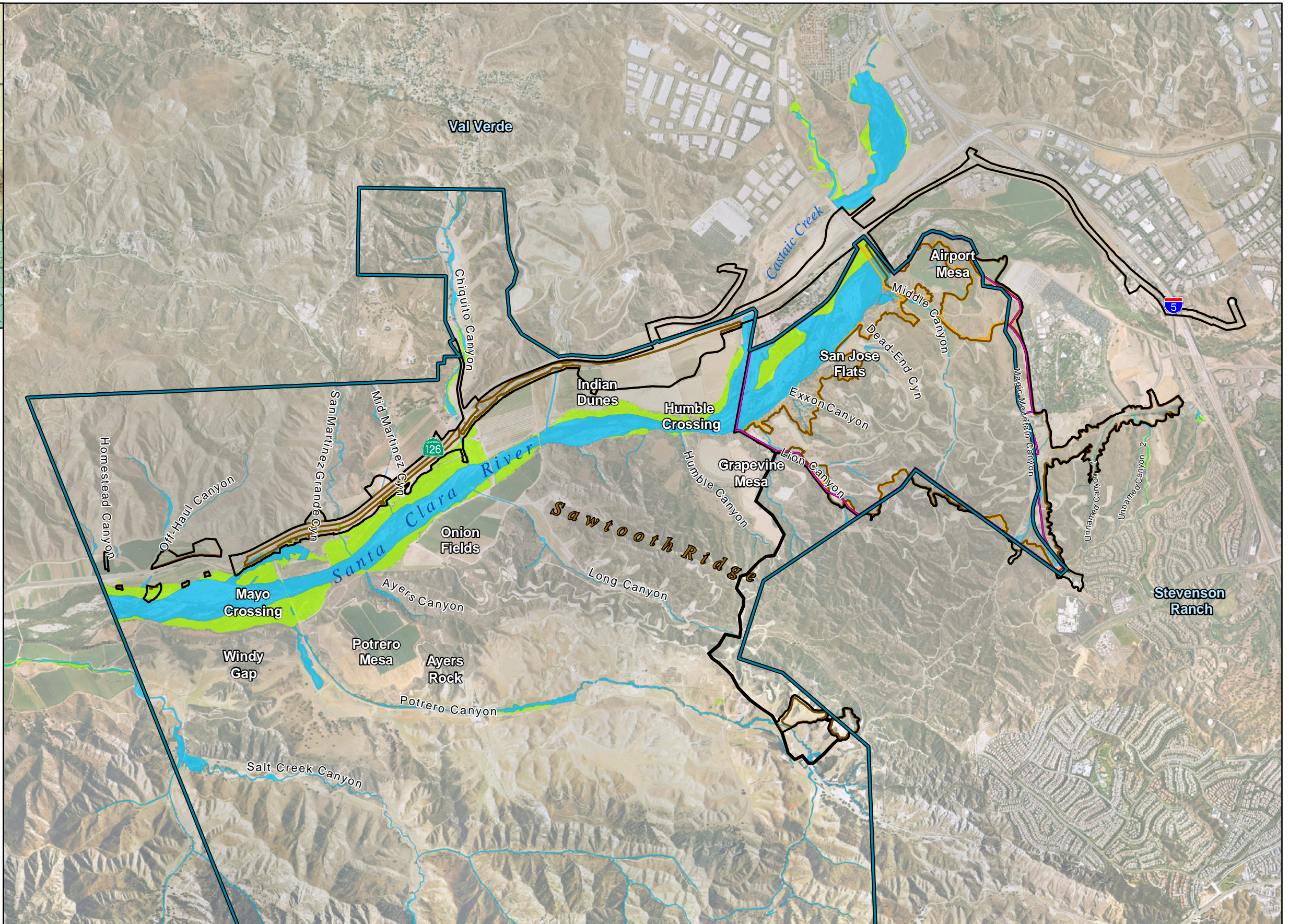


FIGURE 4.3-7

Mission Village EIR

Jurisdictional Resources

Project-related off-site components include:

- Magic Mountain Parkway and related improvements would be extended west from the parkway's present terminus to a location within the tract map site.
- Three water tanks are proposed. A portion of two tank sites lie on site.
- Two power substation site options are proposed within the Potrero portion of the Newhall Ranch Specific Plan and Legacy Village.
- A Water Quality Basin is proposed to the northeast of the tract map site. A small portion of the water quality basin and a portion of the access road to the site are located within the tract map site. Most of the basin would be located outside of the tentative tract boundary.
- Two debris basins located south of the site.
- Additional proposed off-site activities include: (1) work associated with Lion Canyon drainage, (2) grading associated with construction of the northerly extension of Westridge Parkway and southerly extension of Commerce Center Drive, and (3) miscellaneous earthwork to tie proposed grades into natural grades.

For the purposes of this report, the "tract map site" refers only to the proposed location of the Mission Village development itself, and the "project site" includes the tract map site, plus the off-site components discussed above.

9. PROJECT IMPACTS

a. Significance Threshold Criteria

The significance criteria listed below derive from Appendix G of the State CEQA Guidelines but have been modified to better suit the proposed project. The lead agencies for the Newhall Ranch RMDP-SCP EIS/EIR applied these criteria when determining the significance of the RMDP/SCP project's impacts on biological resources. Biological impacts would be significant if implementation of the proposed Mission Village project or its alternatives would:

- Have a substantial adverse effect, either directly or via 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 CDFG or USFWS, or violate any federal, state, or local law which protects biological resources;

- Have a substantial adverse effect on any riparian habitat or other special-status natural community identified by federal, local, or state agencies;
- Substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) or substantial change to state-protected streambeds through direct removal, filling, hydrological interruption, loss of functions or services, or other means;
- 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;
- Conflict with any local plans, policies, or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Cause scouring of the riverbed to the point of removing a substantial amount of aquatic, wetland, or riparian habitats from the river channel;
- Have the potential to substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

These significance criteria are applied to the proposed project.

b. Impact Analysis

Direct impacts represent the physical alteration (i.e., typically habitat degradation or loss) of biological resources that occur on site as a result of project implementation. Indirect impacts are those reasonably foreseeable effects caused by project implementation on remaining or adjacent biological resources. The significance of this alteration, with respect to CEQA, is determined by evaluating the impact in terms of each of the significance threshold criteria defined above. For example, if habitat alteration results in a direct or indirect loss or causes an otherwise substantial adverse effect on a species identified as a “candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG or USFWS,” the impacts would be considered significant, assuming appropriate compensatory or other mitigation is not available or feasible. Similarly, if the alteration of habitat results in a substantial

adverse effect on a natural community identified as sensitive "...in local or regional plans, policies, or regulations, or by the CDFG or USFWS," then this alteration would be considered a significant impact.

When evaluating whether an impact on biological resources would be "substantial," and, therefore, a significant impact, this Draft EIR must consider both the resource itself and the significance threshold criteria that apply. For example, because most plant and animal species are dependent on native habitats to satisfy various life cycle requirements, a habitat-based approach that addresses the overall biological value of a particular vegetation community or habitat area is appropriate when determining whether alteration of that habitat will "substantially" affect special-status species, sensitive habitats, wetlands, or movement corridors. The relative biological value of a particular habitat area can be determined by such factors as disturbance history, biological diversity, its importance to particular plant and wildlife species, its uniqueness or sensitivity status, the surrounding environment and the presence or absence of special-status resources.

However, direct impacts to specific plant and wildlife resources (e.g., active nests and individual plants and animals) are also evaluated and discussed when impacts to these resources, in and of themselves, could be considered significant or in conflict with local, state, and federal statutes or regulations. The significance of direct impacts on individuals or populations of plant and animal species takes into consideration the number of individual plants or animals potentially affected, how common or uncommon the species is both on the project site and within the region, and the species' sensitivity status according to resource agencies. These factors are evaluated based on the results of on-site biological surveys and studies, results of literature and database reviews, discussions with biological experts, and recognized theories and assumptions within the fields of ecology and biodiversity.

(1) Direct Impacts

The following section focuses on the direct effects of proposed project implementation on plant communities, common and special-status plant and wildlife species, special-status habitats, and wildlife movement corridors. The calculation of impacts to plant communities includes required fire/fuel management areas. **Table 4.3-8, Plant Community/Land Use Impact Summary**, shows the acreage of each plant community/land use that would be developed and/or temporarily disturbed during construction of the proposed project.

An analysis of the “significance” of project impacts on biological resources is provided below. In addition, each impact discussion notes whether the findings of this analysis are consistent with the findings of the previously certified Newhall Ranch Specific Plan Program EIR. If approved, the Mission Village project would be subject to the mitigation measures/conditions of approval contained in the RMP of the Newhall Ranch Specific Plan and the Newhall Ranch Specific Plan Program EIR. These mitigation measures and conditions were adopted by the County Board of Supervisors in association with approval of the Newhall Ranch Specific Plan and WRP (May 27, 2003). These adopted measures, as well as additional mitigation measures proposed to further mitigate significant impacts, are included in **Section 10.0, Project Mitigation Measures**.

**Table 4.3-8
Plant Community/Land Use Impact Summary**

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | Total Acres Present | Acres Developed | Acres Temporarily Disturbed ¹ | Total Acres Developed/Disturbed | Percent Acres Developed or Disturbed |
|--|----------------------------------|---|--|---------------------|-----------------|--|---------------------------------|--------------------------------------|
| Grass and Herb Dominated Communities (40.000.00) | Non-Native Grassland (42.000.00) | California annual grassland (42.040.00) | Not mapped to association level | 82.4 | 53.3 | 12.8 | 66.1 | 80% |
| Scrub and Chaparral (30.000.00) | Coastal Scrub (32.000.00) | California sagebrush scrub (32.010.00) | Not mapped to association level | 517.2 | 379.1 | 34.3 | 413.4 | 80% |
| | | | California sagebrush– <i>Artemesia</i> (32.010.01) | 16.1 | 14.8 | 1.3 | 16.1 | 100% |
| | | | California sagebrush–purple sage (32.010.04) | 132.9 | 124.7 | 2.2 | 127.0 | 96% |
| | | California sagebrush–black sage scrub (32.120.00) | California sagebrush–black sage (32.120.01) | 12.9 | 11.9 | 1.1 | 12.9 | 100% |
| | | California sagebrush–California buckwheat scrub (32.110.00) | Not mapped to association level | 84.7 | 73.2 | 10.0 | 83.2 | 98% |
| | | California Sagebrush–Undifferentiated Chaparral | Not mapped to association level | | | | | 90% |
| | | | | | 15.5 | 12.6 | 1.3 | 13.9 |

Table 4.3-8 (Continued)
Plant Community/Land Use Impact Summary

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | Total Acres Present | Acres Developed | Acres Temporarily Disturbed ¹ | Total Acres Developed/Disturbed | Percent Acres Developed or Disturbed |
|--|---|---|-------------------------------------|---------------------|-----------------|--|---------------------------------|--------------------------------------|
| | | (32.300.00) | | | | | | |
| | | Disturbed California sagebrush scrub | Not mapped to association level | 0.1 | 0 | 0.1 | 0.1 | 100% |
| | Undifferentiated Chaparral Scrubs (37.000.00) | Not mapped to alliance level | Not mapped to association level | 35.9 | 31.3 | 3.0 | 34.3 | 96% |
| | Chamise with Chaparral (37.100.00) | Chamise Chaparral (37.101.00) | Not mapped to association level | 2.6 | 2.5 | 0.1 | 2.6 | 100% |
| | | Chamise-hoaryleaf ceanothus chaparral (37.107.00) | Not mapped to association level | 1.8 | 1.5 | 0.4 | 1.8 | 100% |
| | Other Scrubs | Eriodictyon Scrub | Not mapped to association level | 0.6 | 0.6 | 0 | 0.6 | 100% |
| Broad Leafed Upland Tree Dominated (70.000.00) | Oak Woodland and Forest (71.000.00) | Coast live oak forest and woodland (71.060.00) | Coast live oak woodland (71.060.19) | 31.7 | 4.4 | 3.4 | 7.8 | 25% |
| | | Valley oak forest and woodland (71.040.00) | Valley oak woodland (71.040.08) | 2.3 | 0 | 0 | 0 | 0% |
| | | | Valley oak/grass (71.040.05) | 3.3 | 1.9 | 0 | 1.9 | 58% |

Table 4.3-8 (Continued)
Plant Community/Land Use Impact Summary

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | Total Acres Present | Acres Developed | Acres Temporarily Disturbed ¹ | Total Acres Developed/Disturbed | Percent Acres Developed or Disturbed |
|---|--|--------------------------------------|---------------------------------|---------------------|-----------------|--|---------------------------------|--------------------------------------|
| Riparian and Bottomland Habitat (60.000.00) | Other Riparian/Wetland | Herbaceous wetland | Not mapped to association level | 4.0 | 0.4 | 1.2 | 1.6 | 40% |
| | | River wash | Not mapped to association level | 115.1 | 9.7 | 10.0 | 19.7 | 17% |
| | | Alluvial scrub | Not mapped to association level | 0.5 | 0 | 0.5 | 0.5 | 100% |
| | | Big sagebrush scrub (35.110.00) | Not mapped to association level | 24.6 | 15.8 | 6.5 | 22.3 | 91% |
| | | Giant reed (42.080.00) | Not mapped to association level | 5.6 | 0 | 0.1 | 0.1 | 2% |
| | Low to High Elevation Riparian Scrub (63.000.00) | Arrow weed scrub (63.710.00) | Not mapped to association level | 7.6 | 4.9 | 2.0 | 6.9 | 91% |
| | | Mexican elderberry scrub (63.410.00) | Not mapped to association level | 5.8 | 5.3 | 0.3 | 5.6 | 97% |
| | | Mulefat scrub (63.510.00) | Not mapped to association level | 1.8 | 0.5 | 1.2 | 1.8 | 100% |
| | | Disturbed mulefat scrub | Not mapped to association level | 1.1 | 0 | 1.1 | 1.1 | 100% |
| | | | Not mapped to association level | 1.1 | 0 | 1.1 | 1.1 | 100% |

Table 4.3-8 (Continued)
Plant Community/Land Use Impact Summary

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | Total Acres Present | Acres Developed | Acres Temporarily Disturbed ¹ | Total Acres Developed/Disturbed | Percent Acres Developed or Disturbed |
|--|--|---|---|---------------------|-----------------|--|---------------------------------|--------------------------------------|
| | Riparian Forest and Woodland (61.000.00) | Southern willow scrub (61.208.00) | Not mapped to association level | 1.5 | 0.7 | 0.1 | 0.7 | 47% |
| | | Tamarisk scrub and woodland (63.810.00) | Shrub tamarisk (63.810.02) | 1.1 | 0 | 0 | 0 | 0% |
| | | Fremont cottonwood riparian forest and woodland (61.130.00) | Southern cottonwood-willow riparian (61.130.02) | 109.2 | 6.4 | 22.4 | 28.8 | 26% |
| Man-Made Land Cover Types | Agriculture | NA | 224.4 | 172.0 | 48.0 | 219.9 | 98% | |
| | Developed Land | NA | 8.1 | 1.0 | 7.0 | 8.0 | 99% | |
| | Disturbed Land | NA | 404.3 | 225.2 | 169.1 | 394.3 | 98% | |
| Total: | | | | 1,854.5 | 1,153.4 | 339.7 | 1,493.1 | 81% |

¹ Temporarily disturbed by bank stabilization and/or haul roads, but would be revegetated to native vegetation following completion of construction.

(a) Common Plant Communities and Land Covers

Grass and Herb Dominated Communities (40.000.00)**Non-Native Grassland (42.000.00)**

California Annual Grassland (42.040.00). The project site contains 82.4 acres of California grassland, of which 53.3 acres would be permanently developed and 12.8 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated following completion of construction). Given that this plant community already exists in an altered condition and is not considered a sensitive natural community by resource agencies, the loss of California grassland would be a less than significant impact. The Newhall Ranch Specific Plan Program EIR included the loss of this plant community as part of the analysis of the overall loss of wildlife habitat (**subsection b, Wildlife Habitat Loss**, below).

Scrub and Chaparral (30.000.00)**Coastal Scrub (32.000.00)**

California Sagebrush Scrub (32.010.00). The project site contains 517.2 acres of California sagebrush scrub, of which 379.1 acres would be permanently developed and 34.3 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated as coastal sage scrub following completion of construction). Of the total acreage present within the boundaries of the SMA/SEA 23, 4.8 acres would be developed and 0.7 acre would be temporarily disturbed.

California Sagebrush–*Artemesia* (32.010.01): The project site contains 16.1 acres of California sagebrush–*Artemesia*, of which 14.8 acres would be permanently developed and 1.3 acres would be temporarily converted.

California Sagebrush–Purple Sage (32.010.04): The project site contains 132.9 acres of California sagebrush–purple sage, of which 124.7 acres would be permanently developed and 2.2 acres would be temporarily converted.

California Sagebrush–Black Sage Scrub (32.120.00): The project site contains 12.9 acres of California sagebrush–black sage scrub, of which 11.9 acres would be permanently developed and 1.1 acres would be temporarily converted.

California Sagebrush–California Buckwheat Scrub (32.110.00). The project site contains 84.7 acres of California sagebrush–California buckwheat scrub, of which 73.2 acres would be permanently developed

and 10.0 acres would be temporarily converted. Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 0.1 acre would be temporarily converted.

California Sagebrush–Undifferentiated Chaparral (32.300.00). The project site contains 15.5 acres of California sagebrush–undifferentiated chaparral, of which 12.6 acres would be permanently developed and 1.3 acres would be temporarily converted.

Disturbed California Sagebrush Scrub. The project site contains 0.1 acre of disturbed California sagebrush scrub, of which 0.1 acre would be temporarily converted.

Given the acreage that would be developed (616.3 acres of the 779.4 acres on site) and the habitat value this plant community provides for common and special-status plant and wildlife species, the loss of coastal scrub would be a significant impact. Additionally, the Newhall Ranch Specific Plan Program EIR previously identified a significant unavoidable impact to coastal sage scrub habitat. The magnitude of impacts to this plant community would be reduced by:

Implementation of Specific Plan Mitigation Measures 4.6-37 through 4.6-42 (which would protect 1,311 acres of California sagebrush scrub in the High Country SMA/SEA 20); and

Implementation of additional proposed Mitigation Measures MV²⁷⁰ 4.3-24 (preservation of 616.3 acres of coastal scrub off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village), and

The protection of the Salt Creek Area (which contains 631 acres of this habitat type).

These mitigation measures will reduce impacts to this vegetation type to a level that is less than significant.

Undifferentiated Chaparral Scrub (37.000.00).

The project site contains 35.9 acres of undifferentiated chaparral, of which 31.3 acres would be permanently developed and 3.0 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated to native vegetation following completion of construction). This plant community is a common natural vegetation type in the region and is not considered sensitive by resource agencies. Given the small amount of undifferentiated chaparral scrub that would be removed, and the common nature of this plant community in the project region, the impact would be less than significant.

²⁷⁰ Mitigation measures specific to the Mission Village project are denoted by the abbreviation “MV.”

The Newhall Ranch Specific Plan Program EIR included the loss of undifferentiated chaparral scrub as part of the analysis of the overall loss of wildlife habitat (**subsection b, Wildlife Habitat Loss**, below).

Chamise with Chaparral (37.100.00)

Chamise Chaparral (37.101.00). The project site contains 2.6 acres of chamise chaparral, of which 2.5 acres would be permanently developed and 0.1 acre would be temporarily converted. This plant community is a common natural vegetation type in the region and is not considered sensitive by resource agencies. Given the small amount of chamise chaparral that would be removed by the project, and the common nature of this plant community in the project region, the impact would be less than significant. The Newhall Ranch Specific Plan Program EIR included the impacts to chamise with chaparral as part of the analysis of the overall loss of wildlife habitat (**subsection b, Wildlife Habitat Loss**, below).

Chamise–hoaryleaf ceanothus chaparral (37.107.00). The project site contains 1.8 acres of chamise–hoaryleaf ceanothus chaparral, of which 1.5 acres would be permanently developed and 0.4 acre would be temporarily converted. This plant community is a common natural vegetation type in the region and is not considered sensitive by resource agencies. Given the small amount of chamise–hoaryleaf ceanothus chaparral that would be removed by the project, and the common nature of this plant community in the project region, the impact would be less than significant. The Newhall Ranch Specific Plan Program EIR included the impacts to chaparral as part of the analysis of the overall loss of wildlife habitat (**subsection b, Wildlife Habitat Loss**, below).

Other Scrubs

Eriodictyon Scrub. The project site contains 0.6 acre of eriodictyon scrub, all of which would be permanently developed. This plant community is a subset of a common natural vegetation type in the region and is not considered sensitive by resource agencies. Given the small amount of other scrub that would be removed by the project, and the common nature of this plant community in the project region, the impact would be less than significant. The Newhall Ranch Specific Plan Program EIR included the impacts to this plant community as part of the analysis of the overall loss of wildlife habitat (**subsection b, Wildlife Habitat Loss**, below).

Broad Leafed Upland Tree Dominated (70.000.00)

Oak Woodland and Forest (71.000.00)

Coast Live Oak Forest and Woodland (71.060.00). The project site contains 31.7 acres of coast live oak forest and woodland. For purposes of this EIR, oak woodland is defined as areas with 20% to 50% cover

by oak trees. Oak/grass includes areas where oak trees comprise less than 20% of the total cover. The proposed project would result in permanent impacts to 4.4 acres and the temporary conversion of 3.4 acres. Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 0.7 acre would be developed and 0.6 acre would be temporarily disturbed. Coast live oak woodlands (71.060.19) are a significant biological resource because they provide nesting and roosting habitat for a number of *special-status* species (including raptors), nesting habitat and food sources for a number of *common* wildlife species, and provide general cover for a number of larger *mammal* species. For these reasons, the removal of coast live oak woodland is considered a significant impact. Implementation of proposed Mitigation Measures **MV 4.3-22** (protective fencing around oaks during clearing and grading activities) and **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation) would reduce impacts on coast live oak woodland to a less than significant level. The Newhall Ranch Specific Plan Program EIR included the impacts to this plant community as part of its analysis of the overall loss of wildlife habitat (**subsection b, Wildlife Habitat Loss**, below).

Valley Oak Forest and Woodland (71.040.00). The project site contains 5.6 acres of valley oak forest and woodland, consisting of the valley oak woodland and valley oak/grass alliances, of which 1.9 acres would be permanently developed and 0 acres would be temporarily converted. Valley oak forest and woodland are significant biological resources because they provide nesting and roosting habitat for a number of *special-status* species (including raptors), nesting habitat and food sources for a number of *common* wildlife species, and provide general cover for a number of larger *mammal* species. For these reasons, the removal of valley oak forest and woodland is considered to be a significant impact. Implementation of proposed Mitigation Measures **MV 4.3-22** (protective fencing around oaks during clearing and grading activities) and **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation) would reduce impacts to coast live oak woodland to a less than significant level. The Newhall Ranch Specific Plan Program EIR included the impacts to this plant community as part of its analysis of the overall loss of wildlife habitat (**subsection b, Wildlife Habitat Loss**, below).

Man-Made Land Cover Types

Agriculture. The project site contains 224.4 acres of agricultural land, of which 172.0 acres would be permanently developed and 48.0 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated to native vegetation following completion of construction). Of the total acreage of agricultural land present within the boundaries of the River Corridor SMA/SEA 23, 17.1 acres would be developed and 9.9 acres would be temporarily disturbed. Given that the agricultural land is already disturbed, and that this habitat type is not considered a natural community by resource agencies, the loss of agricultural land would be a less than significant impact. The Newhall Ranch Specific Plan

Program EIR included the loss of this plant community as part of the analysis of the overall loss of wildlife habitat (**subsection b, Wildlife Habitat Loss**, below).

Developed Land. The project site contains 8.1 acres of developed land, of which 1.0 acre would be permanently developed and 7.0 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated to native vegetation following completion of construction). Because developed land provides little, if any, wildlife habitat value, the permanent and temporary conversion of 8.0 acres of developed land would be a less than significant impact.

Disturbed Land. The project site contains 404.3 acres of disturbed land, of which 225.2 acres would be permanently developed and 169.1 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated to native vegetation following completion of construction). Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 9.6 acres would be developed and 7.0 acres would be temporarily disturbed. Given that these lands are already disturbed, and that this habitat type is not considered a natural community by resource agencies, the loss of disturbed land would be a less than significant impact. The Newhall Ranch Specific Plan Program EIR included the loss of this plant community as part of the analysis of the overall loss of wildlife habitat (**subsection, Wildlife Habitat Loss**, below).

(b) Wildlife Habitat Loss

(1) Riparian Habitat

The proposed project would result in the permanent conversion of 43.6 acres of riparian habitat, including 9.7 acres of river wash, 0.4 acre of herbaceous wetland, 15.8 acres of big sagebrush scrub, 4.9 acres of arrow weed scrub, 5.3 acres of Mexican elderberry scrub, 0.5 acre of mulefat scrub, 0.7 acre of southern willow scrub, and 6.4 acres of southern cottonwood–willow riparian. An additional 48.6 acres of riparian habitat would be temporarily disturbed by bank stabilization and/or haul roads, but would be revegetated with native plants following completion of construction activities. As summarized in **Table 4.3-8**, the riparian habitat on the Mission Village project site (and the greater Newhall Ranch Specific Plan area) provides habitat for numerous special-status wildlife species, and is designated critical habitat for least Bell's vireo. Given the amount of riparian habitat to be developed or temporarily disturbed, the loss of habitat for riparian-associated wildlife species would be a significant impact absent mitigation. Implementation of the following mitigation measures would replace any riparian vegetation temporarily or permanently removed:

- RMP Mitigation Measures **SP 4.6-1** through **SP 4.6-16** (habitat restoration/enhancement in the River Corridor SMA/SEA 23);

- RMP Mitigation Measure **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23);
- RMP Mitigation Measures **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23);
- RMP Mitigation Measure **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23); and
- RMP Mitigation Measures **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23).

Additional proposed mitigation measures include:

- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas);
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan);
- **MV 4.3-29** (monitoring and control of invasive, non-native aquatic wildlife species for up to 5 years);
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation); and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Further, the River Corridor SMA/SEA 23 (totaling 977.5 acres) would be protected in perpetuity. Combined, these measures would reduce the project impacts on riparian habitat to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Final Additional Analysis (May 2003).

(2) Upland Habitat

The proposed project would permanently convert 1,110.0 acres of upland wildlife habitat into developed uses, including 53.3 acres of California annual grassland, 616.3 acres of coastal scrub alliances and associations, 31.3 acres of undifferentiated chaparral scrubs, 2.5 acres of chamise chaparral, 1.5 acres of chamise-hoaryleaf ceanothus chaparral, 0.6 acre of eriodictyon scrub, 4.4 acres of coast live oak woodland, 1.9 acres of valley oak/grass, 172.0 acres of agricultural land, 1.0 acre of developed land, and 225.2 acres of disturbed land (see **subsection 9.b.(1)(a), Common Plant Communities**, and **9.b.(1)(i)**

Sensitive Plant Communities). An additional 294.1 acres of upland habitat would be temporarily disturbed during construction but would be revegetated with native plants following completion of construction activities. While these upland plant communities vary in botanical value, each provides habitat for a multitude of wildlife species. When viewed in isolation, the impacts on a single plant community within the project site does not represent a substantial loss of wildlife habitat. However, as most wildlife species depend on a variety of habitat types to meet various ecological and life history requirements (i.e., food, shelter, nesting), the project's impact on the habitat provided by these upland plant communities, when considered as a whole, is substantial. To address this potential impact, the Newhall Ranch Specific Plan Program EIR and this EIR recommend mitigation measures which, when implemented, will result in a large, permanent open space system that will conserve habitat for numerous upland-associated common and special-status wildlife species, including silvery legless lizard, rosy boa, San Bernardino ringneck snake, coast horned lizard, coast patch-nosed snake, northern harrier, white-tailed kite, southern rufous-crowned sparrow, Bell's sage sparrow, western burrowing owl, San Diego desert woodrat, pallid bat, and San Diego black-tailed jackrabbit. (See **subsection 9.b.(1)(h), Special-Status Wildlife Species**, for a discussion of direct impacts to these species.) A total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Therefore, after mitigation, the loss of 1,110 acres of currently undeveloped upland habitat would be adverse but not significant.

This finding is not consistent with the findings of the Newhall Ranch Specific Plan Program EIR, which identified the loss of wildlife habitat as a significant unavoidable impact; however, the mitigation required by the Newhall Ranch Specific Plan Program EIR was not as extensive as that recommended in this EIR. Additional mitigation measures proposed in this EIR are set forth below:

- The Newhall Ranch Specific Plan Program EIR identified several mitigation measures that would mitigate permanent and temporary impacts to habitat for general wildlife. The following previously incorporated mitigation measures will reduce impacts to wildlife habitat: **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23); **SP 4.6-27** (removal of grazing and enhancement of riparian habitat in the High Country SMA/SEA 20); **SP 4.6-28** (mitigation banking for various habitat types in the High Country SMA/SEA 20); **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23); **SP 4.6-29** (recreational usage and access restrictions within the High Country SMA/SEA 20); **SP 4.6-33** (protection of transition areas along the High Country SMA/SEA 20, including planting palettes and FMZs); **SP 4.6-20**, **SP 4.6-34**, and **SP 4.6-35** (guidelines for grading activities in the River Corridor SMA/SEA 23 and the High Country SMA/SEA 20); **SP 4.6-36** through **SP 4.6-42** (open space dedication of the High Country SMA/SEA 20); **SP 4.6-43** (Open

Area use for mitigation of riparian or oak resources or elderberry scrub); and **SP 4.6-48** (restoration and enhancement of oak resources in the High Country SMA/SEA 20 and Open Area).

- This EIR recommends additional mitigation measures that would help reduce significant impacts to general wildlife individuals and upland habitat: **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation).
- This EIR recommends a mitigation measure that ensures that impacts to nesting birds, including adults, nests, eggs, nestlings, and fledglings, do not occur during construction activities, in accordance with the Migratory Bird Treaty Act (MBTA): **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests).

Implementation of these mitigation measures would reduce impacts to upland habitat to a level that is adverse but not significant.

(c) Buffers/Setbacks from Riparian Resources

Due to their structural diversity, the various riparian and aquatic vegetation communities in the Santa Clara River drainage provide habitat for a large variety of wildlife species, including a number of special-status bird species. Each of these species has a different home range and differing natural history requirements. While some species are riparian-obligate (i.e., satisfy their forage, cover, and breeding habitat needs almost entirely within riparian vegetation communities), other species utilize the riparian habitat as well as adjacent upland vegetation as part of their home range. A number of studies have found that even the more riparian-dependent wildlife species also require adjacent upland habitats to meet home range foraging and breeding requirements.²⁷¹

However, the characteristics, quality, and extent of upland habitat that is necessary to protect the wildlife species dependent upon riparian habitat may differ depending on the geographic region and the particular requirements of the riparian species of concern. A study conducted by Impact Sciences²⁷²

²⁷¹ A.T. Doyle, "Use of Riparian and Upland Habitats by Small Mammals," (1990); J.M. Schaefer and M.T. Brown, "Designing and Protecting River Corridors for Wildlife," (1992).

²⁷² Impact Sciences, Inc., *North Valencia Annexation Buffer Study*.

along the Santa Clara River recommended preserving (and restoring, if necessary) a buffer or setback of at least 100 feet of high-quality upland habitat (upland preserve zone), as measured from the outer edge of the riparian habitat associated with the Santa Clara River (resource line). This upland preserve zone would provide adequate forage and breeding habitat for riparian-associated bird and small mammal species, and would help maintain species diversity within the riparian ecosystem, inclusive of the riparian/upland ecotone. The conclusions of this study were partially based on focused bird surveys (1,100 man-hours over a 62-calendar-day period) and small-mammal trapping (a total of 1,210 cumulative trap-nights were conducted).

Note also that the proposed 100-foot upland preserve zone is consistent with CDFG (Northern California-North Coast [Region 1]) buffer criteria for avoiding significant impacts to riparian species and habitats adjacent to urban development.^{273,274} In developing the buffer criteria, CDFG stated that “[d]epartment biologists have relied on scientific research and literature and professional experience to develop the following recommendations to protect the public’s fish, wildlife and native plant resources.” For example, CDFG recommended a 75-foot buffer from the outside edge of the riparian habitat for the Sacramento River, a 50-foot buffer for main tributaries, and a 25-foot buffer for secondary tributaries. CDFG also stated that “[i]f development restrictions related to mandatory requirements do not allow a project to completely avoid the area of the buffer zone outside the riparian vegetation, the project proponent may average the setback distance along the riparian habitat for the length of the project.” Therefore, there is some flexibility in the minimum buffer width as long as the average width criteria are met.

In addition, the buffer between the Santa Clara River and development was addressed and heavily debated during the Newhall Ranch Specific Plan environmental review and approval process. Prior to final Specific Plan approval, the County Board of Supervisors required that the Specific Plan design be revised to incorporate a 100-foot-wide setback to protect riparian habitat and special-status species within the River Corridor SMA/SEA 23 boundaries. The Board of Supervisors arrived at this conclusion after evaluating the potential impacts of the proposed land uses along the entire length of the River, in light of the existing habitat protection and enhancement provisions contained in the Specific Plan’s Resource Management Plan and Design Guidelines. The overall buffer area is comprised of the following five components: (1) the Salt Creek wildlife corridor connection and the High Country 0.5-mile-wide buffer at

²⁷³ CDFG, *Recommendations to Help Avoid Significant Fish, Wildlife, and Native Plant Resource Impacts for the California Environmental Quality Act (CEQA) Projects in Del Norte, Humboldt, Trinity, Siskiyou, Shasta, Tehama, Lassen, and Modoc Counties* (2001).

²⁷⁴ Please see Appendix A of this Final EIR for the CDFG (Northern California-North Coast, Region 1) buffer criteria.

the westerly end of the Specific Plan on the south side of the River; (2) native upland habitats in the Open Area along the south side of the River; (3) disturbed areas in the River corridor that will be restored or enhanced as riparian habitat; (4) buried bank stabilization that will be revegetated with native riparian and upland plant species; and (5) landscaped open space areas such as community parks, the Regional River Trail, and community trails.

In approving the Specific Plan and Conditional Use Permit No. 94-087-(5), the Board of Supervisors found that the Specific Plan contained sufficient natural vegetative cover and open space to buffer critical resources in the River Corridor SMA/SEA 23 from the development shown in the Specific Plan. The Board of Supervisors further found that the Specific Plan incorporated extensive buffer areas to protect critical resources within the Santa Clara River. The Specific Plan's adopted Resource Management Plan requires a minimum 100-foot-wide setback adjacent to the Santa Clara River between (a) the river side of the top of bank stabilization and (b) development within certain specified land use designations (including those of the Mission Village project site). This requirement may be modified if the Planning Director, in consultation with the County staff biologist, determines that a smaller buffer would adequately protect the riparian resources within the River Corridor SMA/SEA 23, or that a 100-foot-wide setback is infeasible for physical infrastructure planning. Again, these buffer criteria are consistent with the Buffer Study²⁷⁵ and CDFG recommendations described above.

This buffer analysis does not presume that the project's indirect effects on sensitive biological resources in the river corridor will be avoided completely. Therefore, in combination with the 100-foot setback, the Specific Plan's Resource Management Plan provides standards by which biological resources will be managed during construction and for the life of the community, including provisions for (1) restoration and enhancement of disturbed areas; (2) restrictions on pedestrian and vehicular access to the river corridor; (3) design standards for transition areas between development and the river; (4) conveyance of conservation easements; and (5) preparation of a financial plan and the long-term management of the riparian resources by the Center for Natural Lands Management.

As stated above, the Mission Village project would maintain a 100-foot setback between the top of the bank and proposed residential, mixed-use, and commercial development. Based on the site-specific analysis conducted, the Mission Village buffer is consistent with the approved Specific Plan. Again, however, the 100-foot-wide buffer will not eliminate the potential for indirect effects. Specific to the Mission Village project, potential long-term indirect effects are analyzed below, including (1) increased use of pesticides, herbicides, and pollutants; (2) increased lighting and glare; (3) increased potential for introduction of non-native plant and wildlife species; and (4) increased human and domestic pet activity.

²⁷⁵ Impact Sciences, Inc., *North Valencia Annexation Buffer Study*.

The Project Design Features (PDFs) and mitigation measures to reduce these potential indirect impacts are also discussed below.

PDFs to address urban runoff from irrigation and stormwater include site design, source control, treatment control, and hydromodification control Best Management Practices (BMPs). Stormwater runoff from all urban areas within the Mission Village project will be routed to bioretention areas, vegetated swales, and/or extended detention basin treatment controls BMPs. The effectiveness of these water quality PDFs was analyzed by GeoSyntec Consultants.²⁷⁶

The mitigation measures to address the other identified potential indirect effects include previously incorporated measures from the Newhall Ranch Specific Plan Program EIR, and additional measures recommended by this EIR. Significant impacts related to buffers and edge effects and mitigation measures to reduce the level of impact include the following:

- Restriction of Wildlife Habitat Linkages – mitigated by previously incorporated Mitigation Measure **SP 4.6-18** (provision of transition areas adjacent to the River Corridor SMA/SEA 20).
- Increased Light and Glare – mitigated by previously incorporated Mitigation Measure **SP 4.6-56** (downcast lighting design along the boundaries of natural areas).
- Increase in Populations of Non-Native Plant and Wildlife Species – mitigated by this EIR's Mitigation Measures **MV 4.3-21** (installation of waste and recycling receptacles that discourage wildlife foraging in common areas/parks), **MV 4.3-57** (review of plant palettes and inspection of container plants for use within 200 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation), and **MV 4.3-45** (develop an integrated pest management plan that addresses pesticide use).
- Increased Human and Domestic Animal Presence Within River Corridor SMA/SEA 23 – mitigated by previously incorporated Mitigation Measures **SP 4.6-17** through **SP 4.6-19** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23; transition areas along the River Corridor SMA/SEA 23) and EIR this EIR's Mitigation Measures **MV 4.3-46** (trash and debris removal from riparian habitats) and **MV 4.3-47** (control of pet, stray, and feral cats and dogs in or near open space areas).

²⁷⁶ GeoSyntec Consultants. September 2006. *Landmark Village Water Quality Technical Report* (see Draft EIR, Appendix 4.3).

In regard to the adequacy of the buffer/setback for particular special-status wildlife species, arroyo toads generally burrow within (1) sand or loam substrates with no associated canopy cover, (2) mulefat scrub, (3) willow patches, (4) under woody debris left by fallen, dead willows, or (5) woodrat nests.²⁷⁷ Should arroyo toad occur on the project site, most would be expected to burrow within the preserved riparian habitats. Arroyo toads have been found in agricultural fields²⁷⁸ and can occur within portions of the site outside of the proposed riparian setback zone. However, agricultural fields may constitute “sinks” (areas where mortality rates are higher than reproduction rates) over the long term, due to tilling, pesticide and fertilizer applications, and heavy equipment use, especially during the winter aestivation period.²⁷⁹ Consequently, the agricultural portions of the project site under existing conditions would not be expected to contribute to the species’ persistence on the site.

With regard to western spadefoot, the species rarely moves extensively between breeding ponds and upland areas used for burrowing.²⁸⁰ Accordingly, should western spadefoot breed in seasonal pools located within the riparian zone, the proposed riparian setbacks should preserve associated burrow habitat.

As shown in **Figure 4.3-8, Riparian Habitat Buffer**, below, the proposed project generally maintains a 100-foot setback between top of bank and proposed residential, mixed-use, and commercial development, and up to a 600-foot buffer between top of bank and toe of slope (e.g., riparian resources). One area of reduced buffer width (90 feet) is characterized by disturbed sandy soils and areas of sparse, disturbed riparian vegetation. This area is located south of SR-126 and to the north of the cottonwood-willow riparian forest associated with the confluence of Chiquito Canyon Creek and the Santa Clara River.

Given the proximity of the reduced buffer area to SR-126, and the disturbed condition and limited extent of riparian habitat present, current use of the reduced-buffer area by special-status bird or other wildlife species is expected to be limited. A minimum 100-foot buffer is present along all other portions of the tract map site and in all areas bordering mature cottonwood-willow riparian forest and willow scrub habitats. Furthermore, the vegetation within portions of the setback or buffer area will be restored and/or enhanced to increase habitat values when compared to existing conditions.

²⁷⁷ R. Ramirez, *Arroyo toad (Bufo californicus) Radio Telemetry Study, San Juan Creek, Orange County, California, Final Report* (prepared for Rancho Mission Viejo, Orange County, California, October 2003).

²⁷⁸ P.C. Griffin, “*Bufo californicus*, Arroyo Toad Movement Patterns and Habitat Preferences” (Master’s thesis, University of California, San Diego, 1999).

²⁷⁹ P.C. Griffin, and T. Case. “Terrestrial Habitat Preferences of Adult Arroyo Southwestern Toads,” *Journal of Wildlife Management* 65 (2001), 633–644.

²⁸⁰ CDFG, “California Wildlife Habitat Relationships System,” <http://www.dfg.ca.gov/biogeodata/cwhr/morecwhr.asp>. 2002.

Given the above, the proposed riparian buffers are sufficient to maintain the functions and values of the adjacent riparian habitat and to protect the diversity of riparian-associated wildlife species occurring within these areas. This finding is consistent with the findings of the Newhall Ranch Final Additional Analysis (May 2003) that concluded the proposed land use plan and other design features were sufficient to maintain the function and values of the riparian habitat within the River Corridor SMA/SEA 23.

(d) Impacts to Common Wildlife

In addition to the impacts to vegetation and wildlife habitat, construction and grading activities associated with the proposed project would directly disturb common wildlife species on the project site. In particular, species of low mobility (particularly small mammals, amphibians, reptiles, and gastropods) would be eliminated during site preparation and construction. In addition, some wildlife species may emigrate from the project site and become vulnerable to mortality by predation, auto collisions, and unsuccessful competition for food and territory.

Because of the common nature of wildlife species that would be affected by construction activities, project implementation is not expected to reduce regional populations to below self-sustaining levels. Consequently, impacts to common fish, mammal, amphibian, and reptile species would be less than significant. Nonetheless, implementation of **MV 4.3-7** (surveys to capture and relocate special-status reptiles) would provide more mobile wildlife species the opportunity to move from the disturbance area into adjacent undisturbed habitat. The Newhall Ranch Specific Plan Program EIR did not address the construction-related loss of common wildlife as an individual topic, but did include an analysis of the overall loss of wildlife habitat (**subsection 9.b.1.(b), Wildlife Habitat Loss**).

Construction activities also could result in the direct loss or abandonment of active nests by adult birds of common bird species. These species include several birds that were identified by Los Angeles Audubon Society as Los Angeles County's Sensitive Bird Species.²⁸¹ Although the local Audubon Society considers these birds at risk locally, they are not otherwise designated by federal, state, or local agencies as special-status species. For this reason, the EIR treats these birds as common wildlife species. The Migratory Bird Treaty Act and the California Fish and Game Code protect active nests of native bird species.²⁸² Therefore, any construction-related loss of active nests of common bird species would conflict with these federal and state laws and would constitute a significant impact. Implementation of **Mitigation Measure MV 4.3-15** (pre-construction surveys for nesting native bird species and construction

²⁸¹ Los Angeles Audubon, Los Angeles County's Sensitive Bird Species (2009).

setbacks for active nests) would ensure compliance with state and federal laws protecting active bird nests and would eliminate this potential impact.

(e) Wildlife Habitat Linkages

The proposed project design would *preserve the integrity of the Santa Clara River as a wildlife movement corridor* and minimize impacts on regional wildlife movement by maintaining nearly all of the Santa Clara River as open space with a minimum width of about 1,000 feet. The River corridor will retain sufficient dimensions to convey a variety of larger, mobile wildlife species, such as mule deer, coyote, gray fox, bobcat, and mountain lion, as well as allow for dispersal of many smaller and less mobile species, including birds, small mammals, reptiles, and amphibians that live in the river.

The Specific Plan RMP includes mitigation measures that will minimize impacts to riparian vegetation and replace any vegetation temporarily or permanently removed. These include the following:

- Mitigation Measures **SP 4.6-1** through **SP 4.6-16** (habitat restoration/enhancement in the River Corridor SMA/SEA 23),
- Mitigation Measure **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- Mitigation Measures **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23), **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23), and
- Mitigation Measures **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23).

With these mitigation measures in place, the project's impacts on riparian vegetation will not substantially affect the long-term ability of resident and non-resident species to use the river as a movement corridor. When confronted with bridges or overpasses along a preferred movement corridor, wildlife, particularly larger mammals, will generally move under these structures as long as there is adequate vertical and horizontal spacing, a natural (dirt, sand, vegetation) substrate on which to travel while under the structure, and an "openness" effect that allows the animal to detect light, open space and habitat at the exiting end of the structure. Specific Plan measures SP 4.6-37 through SP 4.6-42 would protect a large area of habitat south of the River Corridor SMA/SEA 23 (i.e., the High Country SMA/SEA 20), which would be linked to the River Corridor SMA/SEA 23 by the preservation of the Salt Creek Area. Additionally, the Specific Plan RMP (Mitigation Measure SP 4.6-18) requires a transition area between the

River Corridor SMA/SEA 23 and adjacent development to reduce adverse affects to wildlife use of the river corridor.

The Commerce Center Drive Bridge is proposed to be approximately 1,300 feet in length and a maximum of 129 feet in width. It will range from approximately 11 to 22 feet in height above the riverbed with an estimated 12 vertical support columns or piers extending into the riverbed. The piers will be approximately 100 feet apart from one another. This design should prevent the bridge from obstructing or deterring wildlife movement along the riverbed. In combination with measure **SP-4.6-56**, the proposed bridge will adequately meet these requirements and is not expected to significantly alter wildlife movement along the river corridor.

Further, the conceptual regional open space connectivity identified by Penrod et al.²⁸³ that provides for landscape-scale habitat connectivity between the Santa Susana Mountains to the south and the Los Padres National Forest to the north (see **subsection 4.3.9.b.1.e**) encompasses the High Country SMA/SEA 20 and the Salt Creek area and the Santa Clara River. The High Country SMA/SEA 20 and Salt Creek area comprise an important part of the least cost path linkage design identified by Penrod et al.²⁸⁴ They provide a key part of the east–west linkage that crosses I-5 and connects to the Angeles National Forest in the San Gabriel Mountains to the east and to Ventura County SOAR open space to the southwest. They also provide a significant part of the north–south linkage between the Santa Susana Mountains and the “Fillmore Greenbelt” to the northwest that further links to the Los Padres National Forest and the Angeles National Forest to the north.

Development of the proposed project would preclude wildlife movement between the Santa Clara River and undeveloped lands to the south. Dead-End Canyon, Middle Canyon, and Magic Mountain Canyon would be developed and eliminated as potential wildlife movement corridors. Lion Canyon and Exxon Canyon would not be developed, but would become dead-ends, thus preventing movement between large habitat areas. Although the Mission Village portion of the Specific Plan area would be developed and preclude wildlife movement, regional habitat connectivity would not be significantly affected provided the mitigation measures adopted with the Newhall Ranch Specific Plan are applied. The conceptual regional open space connectivity identified by Penrod et al.²⁸⁵ that provides for landscape-scale habitat connectivity between the Santa Susana Mountains to the south and the Los Padres National Forest to the north (see **Figure 4.3-9, South Coast Wildlands Open Space Connectivity and Linkage**) encompass the High Country SMA/SEA 20 and the Salt Creek area and the Santa Clara River west of Mission Village, as shown in **Figure 4.3-1**. The High Country SMA/SEA 20 and Salt Creek

²⁸³ Penrod et al., *South Coast Missing Linkages Project*.

²⁸⁴ Penrod et al., *South Coast Missing Linkages Project*.

²⁸⁵ Penrod et al., *South Coast Missing Linkages Project*.

area comprise an important part of the least cost path linkage design identified by Penrod et al.²⁸⁶ They provide a key part of the east–west linkage that crosses I-5 and connects to the Angeles National Forest in the San Gabriel Mountains to the east and to Ventura County SOAR open space to the southwest. They also provide a significant part of the north–south linkage between the Santa Susana Mountains and the “Fillmore Greenbelt” to the northwest that further links to the Los Padres National Forest and the Angeles National Forest to the north.

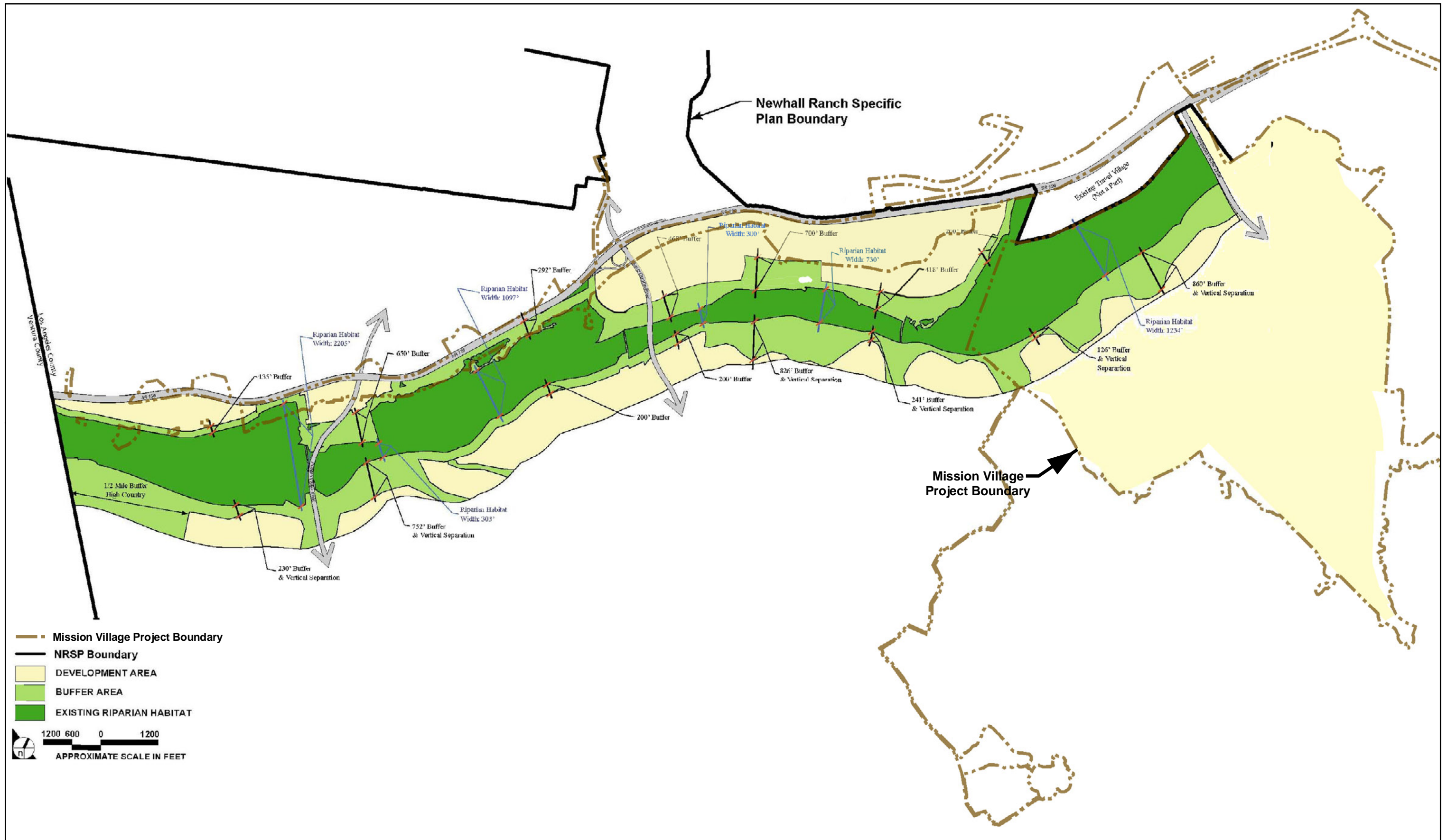
In light of the above, impacts to regional and local wildlife movement would be less than significant.

(f) Special-Status Plant Species

As shown in **Table 4.3-4**, above, the following special-status plant species were eliminated from further consideration because they were not observed on or adjacent to the project site during focused plant surveys conducted on the site in 2001, 2002, 2004, and 2005: marsh sandwort, Braunton’s milk-vetch, Coulter’s saltbrush, Davidson’s saltscale, Malibu baccharis, Nevin’s barberry, thread-leaved brodiaea, Plummer’s mariposa lily, late-flowering mariposa lily, southern tarplant, island mountain-mahogany, Santa Susana tarplant, slender-horned spineflower, Blochman’s dudleya, marcescent dudleya, Santa Monica Mountains dudleya, many-stemmed dudleya, Conejo dudleya, round-leaved filaree, Palmer’s grappling hook, Los Angeles sunflower, mesa horkelia, southwestern spiny rush, Davidson’s bush mallow, California muhly, mud nama, spreading navarretia, chaparral nolina, short-joint beavertail, California orcutt grass, Lyon’s pentachaeta, Pringle’s yampah, Gambel’s watercress, rayless ragwort, salt spring checkerbloom, and Sonoran maiden fern. Given the thoroughness of the previous survey efforts (**Table 4.3-2**), it is unlikely that any of these species are present on the site and, therefore, no significant impacts to these plant species are expected to occur.

Special-status plant species that were observed on the project site during the focused special-status plant surveys include San Fernando Valley spineflower, slender mariposa lily, mainland cherry, Parish’s sagebrush, island mountain-mahogany, southwestern spiny rush, Peirson’s morning-glory, Newhall sunflower, and undescribed everlasting. Given the low sensitivity status of mainland cherry, Parish’s sagebrush, island mountain-mahogany, Peirson’s morning-glory, and southwestern spiny rush, observations were not mapped. Impacts to these species are discussed below.

²⁸⁶ Ibid.



RIPARIAN HABITAT BUFFER SOURCE: Forma Systems 2001

FIGURE 4.3-8

Mission Village EIR

Riparian Habitat Buffer

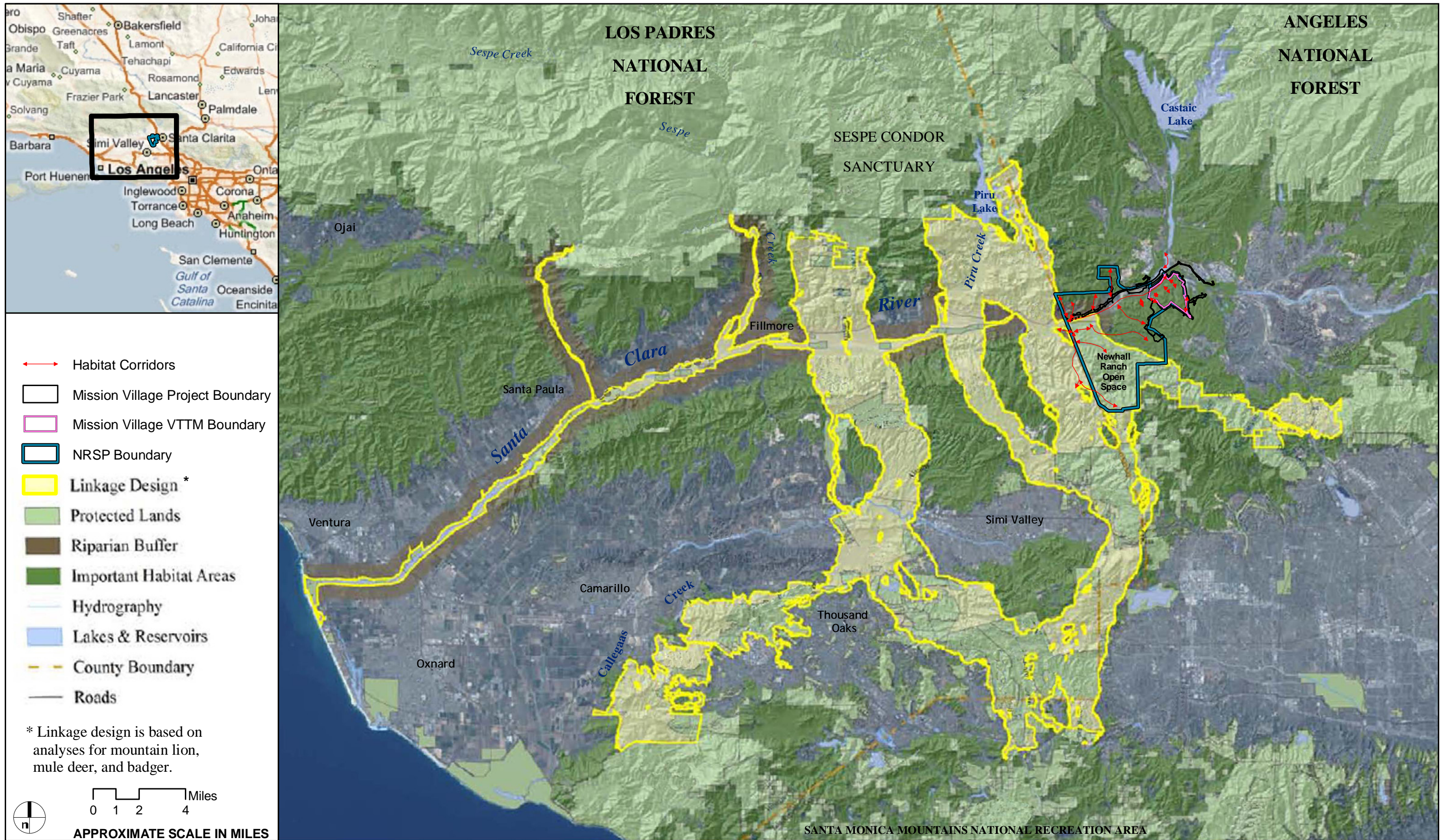
San Fernando Valley spineflower is a federal candidate plant species, is state-listed as endangered, and is a CNPS List 1B species. San Fernando Valley spineflower has been observed in the Airport Mesa area within the Specific Plan area. This species has also been observed on the Entrada and VCC planning areas. Within the Mission Village project area, most of the plants were found on slopes with a south-facing aspect within openings in sparsely vegetated habitat characterized as open California sagebrush scrub and associations, California annual grasslands, or at the edge of agricultural fields on mesas. Most of the observed San Fernando Valley spineflower within the Specific Plan area, Entrada, and VCC were found on soils mapped by the USDA as slightly eroded to eroded Castaic-Balcom silty clay loam (30 to 50 percent slopes) or Terrace Escarpments.²⁸⁷ Within the Mission Village project site, spineflower is associated with Castaic-Balcom silty clay loams (30 percent to 50 percent slopes), terrace escarpments, and Hanford sandy loam (2 percent to 9 percent slopes). Vegetative cover in the area of San Fernando Valley spineflower occurrences ranged from 2 to 60 percent, but was most commonly between 35 and 40 percent.²⁸⁸ Elevations at San Fernando Valley spineflower locations on site range from approximately 1,000 to 1,300 feet AMSL. Based on spineflower occurrence data collected annually from 2002 through 2007, the mapped acreage of this plant species on the project site has varied from a low of 0.42 acre up to 7.14 acres, with a cumulative spineflower footprint of 8.57 acres. The acreage of spineflower on site varies considerably from year to year (see **subsection 7.a.(1)**), most likely based on precipitation levels; therefore, potential impacts to this species are evaluated in terms of loss of occupied habitat, rather than number of individual plants. Based on the 2002–2007 survey data, the proposed project would result in the loss of 3.29 acres of occupied cumulative spineflower footprint. Given the rarity of San Fernando Valley spineflower, without mitigation, the project-related loss of the species would be a significant impact.

When the County of Los Angeles approved the Specific Plan, it adopted a Spineflower Special Study Mitigation Overlay and Preserve Program. To implement this program, the applicant has prepared a Spineflower Conservation Plan (SCP) which ensures the long-term survival of spineflower populations on the project site and greater NRSP. The SCP is included in its entirety in **Appendix 4.3** and is summarized below. The SCP establishes five San Fernando spineflower preserves, four within the Newhall Ranch Specific Plan site and one within a portion of the Entrada planning area. Of these preserves, the Airport Mesa Preserve is located on the Mission Village project site. The locations of the preserves are shown in **Figure 1.0-18, Spineflower Preserves**. As described in the SCP, the five proposed preserves would encompass a total of 164.8 acres of land. The preserve areas have been designed to accommodate natural spineflower population fluctuations and include 13.26 acres of occupied

²⁸⁷ USDA, *Soil Survey*.

²⁸⁸ Dudek, *2007 Sensitive Plant Survey Results for the Entrada Site, Los Angeles County, California* (2007).

spineflower habitat and 152.6 acres of buffer area (unoccupied spineflower habitat). In total, the five proposed preserves encompass 68.6 percent of the cumulative occupied spineflower habitat within the SCP area. No urban development would be permitted within the preserve areas and mitigation funds would be provided for the management and monitoring of the preserves. Each preserve area and incorporated buffer will be placed into a permanent conservation easement to ensure its long-term protection. The conservation easement will be to CDFG and will contain appropriate restrictions to ensure that the preserve land remains in a natural condition in perpetuity. It should be noted that the SCP describes spineflower preserves proposed under Newhall Ranch RMDP-SCP EIS/EIR Alternative 2, which would create greater impacts than the proposed Mission Village project. The Mission Village project includes the proposed Airport Mesa preserve; the Mission Village Airport Mesa preserve as proposed would be larger than the Airport Mesa preserve described in the SCP. The Mission Village Airport Mesa preserve would occupy 65.62 acres, including 5.28 acres of occupied spineflower habitat, 24.39 acres of core expansion area (unoccupied spineflower habitat), and 35.96 acres of buffer area (unoccupied spineflower habitat) (see **Figure 4.3-10, Airport Mesa Preserve Core Population**). It is unknown if any of the unoccupied open space included in the preserves is suitable for spineflowers. The proposed Airport Mesa preserve was designed to conserve the areas of greatest concentration of spineflower within the general Airport Mesa occurrence.

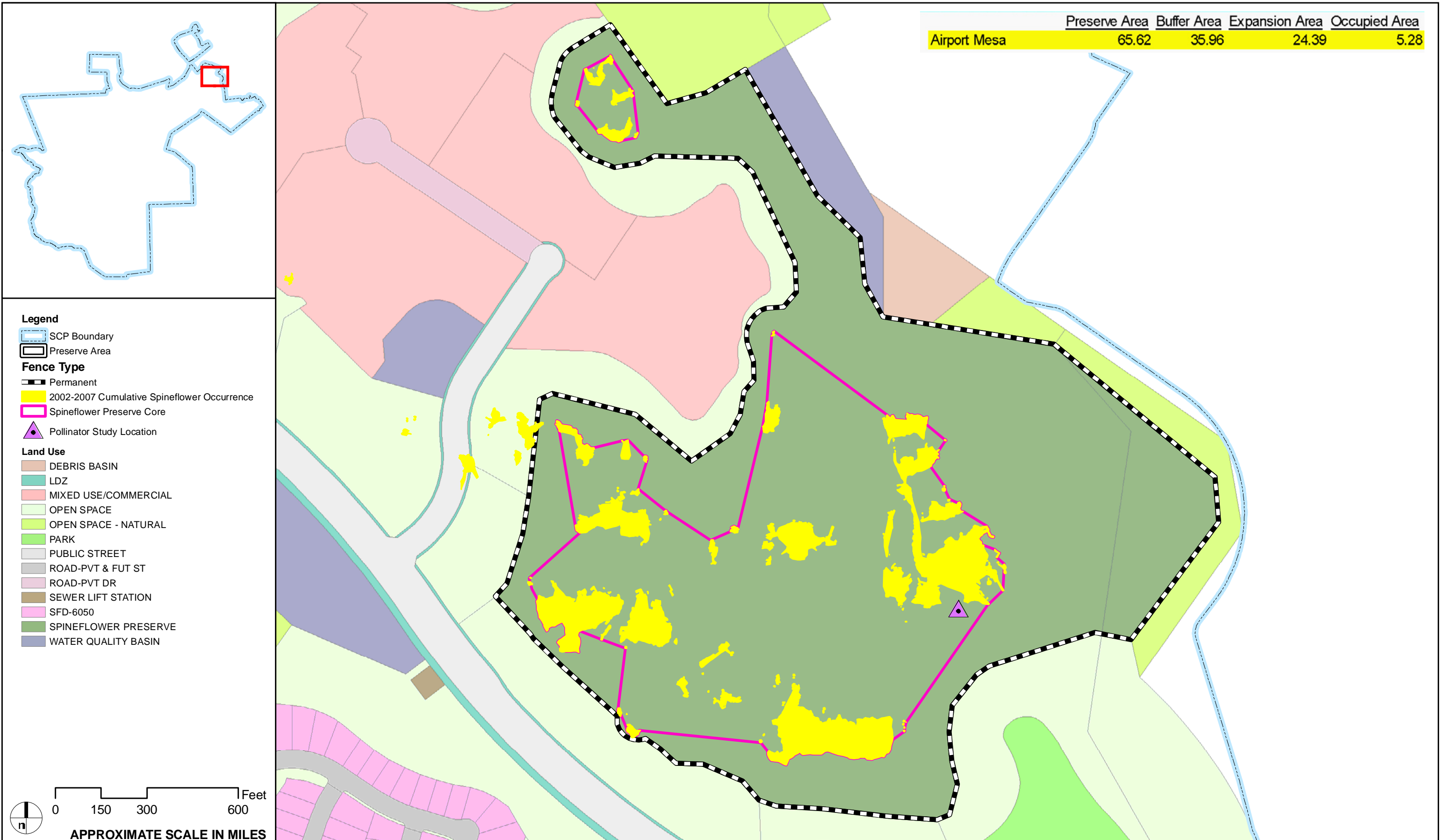


SOURCE: South Coast Wildlands, 2006

FIGURE 4.3-9

Mission Village EIR

South Coast Wildlands Open Space Connectivity and Linkage



AERIAL SOURCE: Digital Globe, 2007

FIGURE 4.3-10

Mission Village EIR

Airport Mesa Preserve Core Population

The proposed preserves would provide habitat for potential spineflower pollinators and dispersal agents. The management of the preserves would include restoration of degraded and/or damaged spineflower habitats and the establishment of site-specific buffers (which are included in the above acreages) aimed at neutralizing and controlling adverse edge effects (including Argentine ants) from adjacent changes in land use. A spineflower preserve manager would be contracted with and funded by the Applicant to perform environmental monitoring, oversee the proposed spineflower preserve areas, and ensure the monitoring and management activities outlined in the proposed SCP are implemented.

In the Draft SCP and this EIR, buffer areas are defined as land within proposed spineflower preserves, between the spineflower cumulative occupied habitat areas and the preserve boundaries. That is, the buffer areas are preserve lands that “buffer” the rare plants from adverse effects of surrounding land uses. Adjacent land uses such as roads, trails, or fuel modification zones were not considered buffer areas.

Based on the professional judgment of staff and consultants with relevant expertise, buffer widths of 80 to 100 feet, in combination with active management activities and other mitigation measures (SP-4.6-53, SP-4.6-59, SP-4.6-65 through SP-4.6-80, MV 4.3-58 through MV 4.3-64, MV 4.3-66 through MV 4.3-72, and MV 4.3-48), were determined to be effective in buffering spineflower from most adverse edge effects, such as: invasion by newly introduced non-native landscaping plants into cumulatively occupied spineflower habitat, adverse effects of adjacent vegetation clearing for fuel modification, trampling or crushing, and overspray of landscaping chemicals from surrounding areas.

Further, in order to expand the effective buffer distance between cumulative occupied spineflower habitat and adverse edge effects of surrounding land uses, the mitigation measures included in this EIR restrict adjacent land uses, including: restrictions on landscape palettes; irrigation; drainage/runoff control; and use of herbicides, pesticides, and fertilizers. These measures are also described in Section 9 of the Draft SCP.

This EIR also includes management actions within the proposed spineflower preserves, such as fencing and signage at the boundaries to prohibit trespass, control of weeds, native habitat restoration, prohibitions against alterations to existing hydrology, excluding fuel modification zones within preserves and preparation of a fire management plan and post-fire rehabilitation plan. These measures are also described in Section 9 of the Draft SCP.

Applicable mitigation measures include the following:

- Mitigation Measures **SP 4.6-53** and **SP 4.6-59** (requires current, updated, site-specific surveys for special-status species in consultation with CDFG),

- Mitigation Measure **SP 4.6-65** (requiring subdivision maps responsive to spineflower characteristics),
- Mitigation Measure **SP 4.6-66** (guidelines for the design, establishment, and management of spineflower preserves),
- Mitigation Measure **SP 4.6-67** (open space connections and setbacks for spineflower preserves; prohibition of disturbance within spineflower preserves or buffers; revegetation requirements),
- Mitigation Measure **SP 4.6-68** (temporary fencing and signage around the spineflower preserve(s), open space connections, and buffer areas; permanent fencing and signage along the spineflower preserve boundary),
- Mitigation Measure **SP 4.6-69** (storm drain system requirements for spineflower preserve areas),
- Mitigation Measure **SP 4.6-70** (road construction requirements to reduce or avoid impacts to spineflowers),
- Mitigation Measure **SP 4.6-71** (engineering, design, and grading modifications around spineflower preserves),
- Mitigation Measure **SP 4.6-72** (fire management plan to avoid and minimize impacts to the spineflower),
- Mitigation Measure **SP 4.6-73** (minimization of changes in surface water flows to spineflower preserves),
- Mitigation Measure **SP 4.6-74** (biweekly biological monitoring of grading and fence/utility installation activities; submission of monthly monitoring reports),
- Mitigation Measure **SP 4.6-75** (water control and stormwater flow redirection during construction activities)
- Mitigation Measure **SP 4.6-76** (reassessment of impacts to spineflower populations)
- Mitigation Measure **SP 4.6-77** (spineflower monitoring and management plan),
- Mitigation Measure **SP 4.6-78** (spineflower translocation and reintroduction program),

- Mitigation Measure **SP 4.6-79** (consultation with the County and CDFG regarding ongoing agricultural operations), and
- Mitigation Measure **SP 4.6-80** (San Martinez Grande spineflower preserve area).

This impact would also be reduced through the implementation of the following:

- Mitigation Measures **MV 4.3-58** and **MV 4.3-59** (spineflower preserve establishment and management),
- Mitigation Measures **MV 4.3-60**, **MV 4.3-61**, **MV 4.3-62**, **MV 4.3-64**, and **MV 4.3-66** (spineflower preserve temporary fencing requirements and education of construction workers),
- Mitigation Measures **MV 4.3-60**, **MV 4.3-62**, **MV 4.3-65**, and **MV 4.3-66** (control of construction-related dust, erosion, and water quality within spineflower preserve, and quarterly monitoring for Argentine ants along the construction–open space interface),
- Mitigation Measures **MV 4.3-68** through **MV 4.3-70** (restricting access to spineflower preserves through fencing and signage),
- Mitigation Measures **MV 4.3-71** and **MV 4.3-72** (restrictions on storm drains within spineflower preserves),
- Mitigation Measure **MV 4.3-63** (pre-construction review of construction plans and specifications),
- Mitigation Measure **MV 4.3-67** (review of plant palettes used within 200 feet of spineflower preserves and inspection of all container plants within 200 feet for disease and pests),
- Mitigation Measure **MV 4.3-73** (guidelines for restoration and enhancement of degraded and/or damaged spineflower habitat), and
- Mitigation Measure **MV 4.3-74** (emergency fire response plan and response strategies for wildfire or mass movement (*e.g.*, landslides, slope sloughing, or other geologic events) within the spineflower preserves).

Given the preservation and protection measures outlined in the SCP (see **Mitigation Measures MV 4.3-58** through **Mitigation Measures MV 4.3-74**), and implementation of Specific Plan RMP Measures **SP 4.6-53**, **SP 4.6-59**, and **SP 4.6-65** through **4.6-80**, all of which are consistent with the Spineflower Overlay and Mitigation Program, impacts to San Fernando Valley spineflower would be reduced to below a level of significance. Additionally, the project would be required to comply with all requirements of the

associated Incidental Take Permit under CESA Section 2081. The finding that impacts to San Fernando Valley spineflower can be reduced to below a level of significance with mitigation is consistent with the findings of the Newhall Ranch Specific Plan Program EIR and Additional Analysis.

Slender mariposa lily has no state or federal status, but is a CNPS List 1B (S1.1) plant. This species is typically found in chaparral, coastal scrub, and grasslands, often on clay and/or rocky soils. The proposed project would result in the loss of 15.3 acres of the 17.4 acres of cumulative occupied slender mariposa lily habitat on site (see **Figure 4.3-6**). Given the sensitivity of this species, these impacts would be significant. The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan²⁸⁹ is attached in Appendix 4.3. A Mission Village Slender Mariposa Lily Mitigation and Monitoring Plan will be prepared and submitted to CDFG and the County for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The approved plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open space (i.e., the Salt Creek area or High Country SMA/SEA 20, spineflower preserves, or River Corridor SMA/SEA 23) without conflicting with other resource management objectives. Habitat replacement/enhancement will be at a 1:1 ratio (acres restored/enhanced to acres impacted). In addition, the applicant would implement a number of mitigation measures designed to avoid and minimize construction-related indirect impacts to the slender mariposa lily. Applicable mitigation measures include the following:

- Mitigation Measure **SP 4.6-27** (enhancement of habitat values within the High Country SMA/SEA 20),
- Mitigation Measures **SP 4.6-29** through **SP 4.6-32** (recreation and access restrictions within the High Country SMA/SEA 20),
- Mitigation Measure **SP 4.6-33** (protection of transition areas between the development edge and the High Country SMA/SEA 20),
- Mitigation Measure **SP 4.6-34** (clear marking of grading perimeters within or adjacent to the High Country SMA/SEA 20),
- Mitigation Measures **SP 4.6-37** through **SP 4.6-42** (long-term management of the High Country SMA/SEA 20), and

²⁸⁹ Dudek, *Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan* (2007).

- Mitigation Measures **SP 4.6-53** and **SP 4.6-59** (requires current, updated, site-specific surveys for special-status species in consultation with CDFG).

This impact would also be reduced through the implementation of the following:

- Mitigation Measure **MV 4.3-27** (implementation of an approved slender mariposa lily mitigation plan) to be implemented by the applicant. The plan shall be subject to the approval of the County prior to the issuance of a grading permit.
- Mitigation Measure **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities).

Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR and Additional Analysis.

Mainland cherry. The mainland cherry has no state or federal sensitivity status, but it is locally protected through the County of Los Angeles. On site, this species is found as an occasional component of undifferentiated chaparral, big sagebrush scrub, and river wash. Given the low sensitivity status of the species, observations were not mapped. In order to reduce direct impacts to this species (loss of individual mainland cherry trees and shrubs), the applicant would implement a series of mitigation measures designed to replace impacted mainland cherry trees and shrubs, and restore, enhance, and maintain natural woodland communities in perpetuity, consistent with the Newhall Ranch Specific Plan Oak Resources Replacement Program.²⁹⁰ Applicable mitigation measures include the following previously incorporated measures:

- Mitigation Measures **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-21** through **SP 4.6-26** (habitat restoration, enhancement, and preservation of the River Corridor SMA/SEA 23);
- Mitigation Measure **SP 4.6-17** (restrictions on human and pet access to the River Corridor SMA/SEA 23);
- Mitigation Measures **SP 4.6-18** and **SP 4.6-19** (establishment of transition areas between the River Corridor SMA/SEA 23 and development);
- Mitigation Measure **SP 4.6-28** (mitigation banking for riparian habitats);

²⁹⁰ County of Los Angeles. *Newhall Ranch Specific Plan* (2003).

- Mitigation Measures **SP 4.6-29** through **SP 4.6-32** (recreation and access restrictions within the High Country SMA/SEA 20);
- Mitigation Measure **SP 4.6-33** (protection of transition areas between the development edge and the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-34** and **SP 4.6-35** (clear marking of grading perimeters and avoidance of inadvertent impacts to biological resources outside the grading area within or adjacent to the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-37** through **SP 4.6-42** (long-term management of the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-43** through **SP 4.6-47** (acceptable uses of and long-term management of the Open Area);
- Mitigation Measure **SP 4.6-48** (standards for the restoration and enhancement of mainland cherry resources) and
- Mitigation Measure **SP 4.6-61** (site-specific survey for mainland cherry at County request).

This impact would also be reduced through the implementation of the following:

- Mitigation Measure **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas);
- Mitigation Measure **MV 4.3-23** (development of a conceptual wetlands mitigation plan);
- Mitigation Measure **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village);
- Mitigation Measure **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities);
- Mitigation Measure **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation);

- Mitigation Measures **MV 4.3-31** through **MV 4.3-43** (wetlands mitigation plan and riparian restoration activities on the project site); and
- Mitigation Measure **MV 4.3-50** (replacement of mainland cherry trees or shrubs outside riparian areas).

Implementation of these mitigation measures would reduce project impacts to mainland cherry trees to a level that is adverse but not significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Island mountain-mahogany. The island mountain-mahogany is a CNPS List 4 (S3.3) plant, but it has no federal status. Within the project site, island mountain-mahogany occurs as an occasional component of chaparral communities at the base of north-facing slopes. Given the low sensitivity status of the species, observations were not mapped. Because of the common occurrence of island mountain-mahogany within the Newhall Ranch Specific Plan area, and because CNPS List 4 plants are not considered Rare from a statewide perspective, are not defined as Rare, Threatened or Endangered, and at this time face low-level threats on a statewide basis,²⁹¹ the loss of island mountain-mahogany would not be considered a substantial adverse effect on a special-status species. Nor would it be expected to reduce regional populations of the species to below self-sustaining numbers. Therefore, impacts to island mountain-mahogany (loss of individual island mountain-mahogany shrubs), would be less than significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR and Additional Analysis, which found that impacts to this species would not be significant assuming implementation of Specific Plan Mitigation Measures **SP 4.6-27** (removal of grazing and enhancement of riparian habitat in the High Country SMA/SEA 20), **SP 4.6-34** (marking and inspection of grading perimeters prior to impacts within or adjacent to the High Country SMA/SEA 20), **SP 4.6-35** (avoidance of inadvertent impacts to biological resources within or adjacent to the High Country SMA/SEA 20), and **SP 4.6-53** (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request).

Parish's sagebrush is considered special status by the County of Los Angeles, but it has no federal, state, or CNPS status. This species grows intermixed with the big sagebrush scrub community within the Salt Creek watershed,²⁹² co-occurring with the more common big sagebrush (*Artemisia tridentata* ssp. *tridentata*). Given the low sensitivity status of the species, observations were not mapped. Implementation

²⁹¹ CNPS, CNPS Vegetation Committee, "California Native Plant Society Relevé Protocol," http://www.cnps.org/cnps/vegetation/pdf/Releve_protocol.pdf. 2004.

²⁹² Dudek and Associates, Inc., *Sensitive Plant Survey Results for the Salt Creek Site*.

of the proposed project would result in the loss of 15.8 of the 24.6 acres of big sagebrush scrub on site, including the loss of individual Parish's sagebrush shrubs. This impact would (1) constitute a substantial direct adverse effect on this species, (2) conflict with local policies and ordinances protecting biological resources, and (3) substantially reduce the number and range of this species. Thus, this impact is significant, absent mitigation. The project applicant would implement a series of mitigation measures designed to reduce the impact to a level that is adverse but not significant. These mitigation measures include the following previously incorporated measures:

- Mitigation Measures **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-21** through **SP 4.6-26** (habitat restoration, enhancement, and preservation of the River Corridor SMA/SEA 23); and
- Mitigation Measure **SP 4.6-28** (mitigation banking for riparian habitats).

This impact would also be reduced through the implementation of the following:

- Mitigation Measure **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas);
- Mitigation Measure **MV 4.3-23** (development of a conceptual wetlands mitigation plan);
- Mitigation Measure **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village);
- Mitigation Measure **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities); and
- Mitigation Measures **MV 4.3-31** through **MV 4.3-43** (wetlands mitigation plan and riparian restoration activities on the project site).

Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. Impacts to this species were not previously analyzed as part of the Newhall Ranch Specific Plan Program EIR and Additional Analysis because the plant was identified after that environmental documentation was certified.

Southwestern spiny rush. The southwestern spiny rush is a CNPS List 4 (S3.2) plant, but it has no federal status. Within the Specific Plan area, southwestern spiny rush individuals were observed annually from 2001 through 2006 in mesic riparian areas along the Santa Clara River. Given the low sensitivity status of

the species, individual plants have not been mapped. The loss of individual spiny rush plants is not considered a significant impact for the following reasons: the species has a scattered distribution along the Santa Clara River floodplain within the Newhall Ranch Specific Plan area; CNPS List 4 plants are not considered Rare from a statewide perspective, are not defined as Rare, Threatened, or Endangered pursuant to the California Endangered Species Act, and are not eligible for state listing as Threatened or Endangered; and the species faces only low-level threats on a statewide basis.²⁹³ Nor would the impact be expected to reduce regional populations of the species to below self-sustaining numbers. Impacts to this species were not previously analyzed as part of the Newhall Ranch Specific Plan Program EIR and Additional Analysis because the plant was identified after that environmental documentation was certified.

Peirson's morning-glory has no state or federal status, but is a CNPS List 4 (S3.2) plant. This species is typically found in chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, and grasslands. Given the low sensitivity status of the species, observations were not mapped. The proposed project would result in the loss of Peirson's morning-glory from the project site. While never abundant, Peirson's morning-glory occurs throughout the Newhall Ranch Specific Plan area on virtually all ridges and slopes, weakly climbing over chaparral, coastal scrub, and grasslands, including throughout the Mission Village project site.²⁹⁴ Given the low sensitivity status of the species, observations were not mapped. The loss of individual Peirson's morning-glory plants is not considered a significant impact for the following reasons: the species has a common occurrence within the Newhall Ranch Specific Plan area; CNPS List 4 plants are not considered Rare from a statewide perspective, are not defined as Rare, Threatened, or Endangered pursuant to the California Endangered Species Act, and are not eligible for state listing as Threatened or Endangered; and the species faces only low-level threats on a statewide basis.²⁹⁵ Nor would the impact be expected to reduce regional populations of the species to below self-sustaining numbers. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR and Additional Analysis, which found that impacts to this species would not be significant assuming implementation of Specific Plan Mitigation Measures **SP 4.6-27** (removal of grazing and enhancement of riparian habitat in the High Country SMA/SEA 20), **SP 4.6-34** (marking and inspection of grading perimeters prior to impacts within or adjacent to the High Country SMA/SEA 20),

²⁹³ CNPS, "California Native Plant Society Relevé Protocol."

²⁹⁴ Dudek and Associates, Inc., 2002 *Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., 2003 *Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., 2004 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., 2005 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., 2006 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area*; Dudek, 2007 *Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area*.

²⁹⁵ CNPS, "California Native Plant Society Relevé Protocol."

SP 4.6-35 (avoidance of inadvertent impacts to biological resources within or adjacent to the High Country SMA/SEA 20), and **SP 4.6-53** (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request).

Newhall sunflower. The Newhall sunflower is a CNPS List 1B.1 plant (S1), but has no federal status. This EIR considers it a special-status species. Approximately 10 individuals of the Newhall sunflower occur at Middle Canyon Spring, on the south side of the Santa Clara River between Middle Canyon and San Jose Flats within the Specific Plan site. Although the spring will be avoided, potential indirect impacts to the Newhall sunflower as a result of implementation of the proposed project (accidental clearing, trampling, and grading; runoff, sedimentation, erosion, and chemical and toxic compound pollution; and exposure to fugitive dust, as well as from hydrologic alterations and water quality impacts), would (1) constitute a substantial direct adverse effect on this species, (2) conflict with local policies and ordinances protecting biological resources, and (3) substantially reduce the number and range of this species. Thus, this impact is significant, absent mitigation. In order to reduce direct impacts to this species, the applicant would implement a series of mitigation measures designed to avoid or minimize the impact of project implementation on Parish's sagebrush to a level that is adverse but not significant. Applicable mitigation measures include the following previously incorporated measures:

- Mitigation Measures **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-21** through **SP 4.6-26** (habitat restoration, enhancement, and preservation of the River Corridor SMA/SEA 23); and
- Mitigation Measure **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23), **SP 4.6-18**(provision of transition areas adjacent to the River Corridor SMA/SEA 23), and **SP 4.6-19** (requirements for transition areas adjacent to the River Corridor SMA/SEA 23).

This impact would also be reduced through the implementation of the following:

- Mitigation Measure **MV 4.3-11** (regulating stream diversion bypass channels and dewatering);
- Mitigation Measure **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities);
- Mitigation Measures **MV 4.3-52** (project design features, construction notes, erosion and dust control, and SWPPP BMPs to ensure protection of vegetation communities and special-status species) and **MV 4.3-53** (dust control measures to protect vegetation communities and special-status aquatic wildlife species);

- Mitigation Measure **MV 4.3-57** (review of plant palettes and inspection of container plants for use within 200 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation), **MV 4.3-54** (permanent fencing along trails in the River Corridor SMA/SEA 23), and **MV 4.3-55** (fencing and signage around the Middle Canyon Spring); and
- Mitigation Measure **MV 4.3-56** (Middle Canyon Spring Habitat Management Plan (Dudek 2007), which prescribes monitoring and management related to water quality and water quantity) and **MV 4.3-51** (bridges of the Santa Clara River will be designed to minimize impacts to natural areas and riparian resources from associated lighting and stormwater runoff).

Implementation of these mitigation measures would reduce project impacts to the Newhall sunflower to a level that is adverse but not significant. Impacts to this species were not previously analyzed as part of the Newhall Ranch Specific Plan Program EIR and Additional Analysis because the plant was identified after that environmental documentation was certified.

Undescribed everlasting. Because this plant is undescribed (a physical description of the plant with known distribution and species name has not been published in a peer-reviewed publication) and its extent and distribution are unknown, this EIR considers it a special-status species. The undescribed everlasting was documented within the Specific Plan area during the 2003, 2004, 2005, and 2007 field seasons. Two main populations of this undescribed species, totaling about 530 individuals, were documented in 2003 in the Santa Clara River corridor near the mouth of Long Canyon and in Castaic Creek south of SR-126 within the Specific Plan area. During the 2004 surveys, these two occurrences were noted again with about 700 plants. In addition, a population of about 250 individuals was observed in the portion of Castaic Creek west of the I-5 Bridge and east of Commerce Center Drive within the VCC planning area. In 2005, the two Specific Plan area occurrences consisted of approximately 800 individuals and five individuals, while the VCC occurrences consisted of approximately 65 individuals. During 2007 surveys, the VCC occurrence was estimated at approximately 350 individuals; one main occurrence and a number of smaller occurrences were documented within the Specific Plan area, totaling approximately 85 individuals. These occurrences are primarily on secondary alluvial benches. The vegetation around these plants consists of sparsely vegetated open river wash. Implementation of the proposed project would result in temporary impacts at the location where 8 individuals were mapped in 2004 and 3 individuals were mapped in 2007.

Impacts to this species would be reduced through implementation of the following:

- **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities);

- **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation);
- **MV 4.3-75** (surveys in undescribed everlasting habitat prior to grading/construction activities); and
- **MV 4.3-76** (undescribed everlasting mitigation and monitoring plan).

Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. Impacts to this species were not previously analyzed as part of the Newhall Ranch Specific Plan Program EIR and Additional Analysis because the plant was identified after that environmental documentation was certified.

(g) Protected Oaks and Live Oak Woodland

As previously discussed (**subsection 7.b., Oaks**), CLAOTO protects any species in the genus *Quercus* that are at least 8 inches in diameter or has a combined trunk circumference of any two trunks of at least 38 inches (12 inches in diameter), as measured 4.5 feet above the mean natural grade. A heritage oak, as defined by CLAOTO, is an oak tree that measures 36 inches or more in diameter as measured 4.5 feet above natural ground, or any oak of 36 inches or greater in diameter having a significant historical or cultural importance to the community. CLAOTO requires that all potential impacts to oak trees be preceded by an application to the County that includes a detailed oak tree report and that loss of or damage to protected oaks be mitigated at a minimum 2:1 ratio.

With respect to oak woodlands, vegetation community and land cover classifications used in this EIR generally follow the Vegetation Classification and Mapping Program “List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database” system.²⁹⁶ Community classifications were selected based on site factors, descriptions, distribution, and characteristic species present within an area.

Public Resources Code section 21083.4 addresses oak woodlands conservation, and requires counties to mitigate impacts to oak woodlands that would be significant under CEQA. Under this Section, an “oak” is defined as a “native tree species in the genus *Quercus*, not designated as Group A or Group B commercial species pursuant to regulations adopted by the State Board of Forestry and Fire Protection pursuant to Section 4526, and that is 5 inches or more in diameter at breast height.” Although, the statute

²⁹⁶ CDFG, “List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database,” (2003), updated by CDFG, “Vegetation Classification and Mapping Program, List of California Vegetation Alliances” (2007).

does not provide a definition of “oak woodland,” Public Resources Code Section 12220(g) provides helpful guidance. It defines “forest land” – which would include oak woodland -- as any “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.”

Using Section 12220(g) as a guide, this EIR defines “oak woodland” as an area with at least 10% cover by oak trees with an understory of non-grass vegetation and at least 20 percent cover by oak trees with an understory of grass vegetation. Oak/grass includes areas where oak trees comprise between 10 percent and 20 percent of the total cover with an understory of grass vegetation. As part of this EIR’s Vegetation Communities analysis, biologists surveyed the site and identified all oak woodlands meeting this definition. Note that these surveys not only captured the oak woodland habitat, but also the entire range of oak trees in terms of size and maturity, including all trees with trunk diameters of five (5) inches or more, measured at breast height, as required under Public Resources Code 21083.4(a). These surveys indicate that the project site supports 37.3 acres of oak woodland, as defined.

Based on the proposed grading plan, 7.8 acres of coast live oak woodland would be developed (including permanent and temporary impacts) and 1.9 acres of valley oak/grass would be developed (including permanent and temporary impacts), for a total of 9.7 acres of impact. This is considered a potentially significant effect under CEQA, thus triggering the mitigation requirements set forth in Public Resources Code Section 21083.4.

In addition, the project will remove 12 “heritage” and 131 non-heritage oak trees. Under CLAOTO, an Oak Tree permit will be required to encroach upon and/or remove the 12 heritage oaks and 40 of the non-heritage oaks. However, 214 oak trees (of which 29 are considered heritage) occur within 200 feet from the grading limit line and will be preserved. Given the biological value of oak woodlands and savannah, the project’s impacts to oak trees and oak woodlands are considered a significant impact under CLAOTO.

As discussed in the Newhall Ranch Specific Plan, 2.6 Resource Management Plan, an estimated 13,660 oak trees would be protected within the SMA, particularly in the High Country SMA/SEA 20. Further, as discussed in the *Draft Newhall Ranch Mitigation Feasibility Study*,²⁹⁷ Dudek has identified the opportunity of creating 11 acres of coast live oak woodland and planting an additional 189 oak trees within the High Country SMA/SEA 20 and Salt Creek area (see Appendix A). The actual number of trees to be planted would correspond to that necessary to (1) comply with the Oak Tree Permit issued by the County pursuant to CLAOTO, and (2) provide adequate mitigation acreage for losses to oak woodland per

²⁹⁷ Dudek, *Draft Middle Canyon Spring Survey and Status Report*.

Section 21083.4. Note that Section 21083.4 provides counties and project applicants with a number of mitigation alternatives, including the preservation of oak woodlands under conservation easements and the planting of oak trees to replace those lost or damaged. (Pub. Res. Code Section 21083.4(b)(1) and (2).)

In order to reduce direct impacts to oak resources, the project applicant would implement a series of mitigation measures designed to replace impacted oak trees in accordance with CLAOTO; restore, enhance, and maintain natural woodland communities in perpetuity; and create new woodlands in areas that supported oaks and oak woodlands prior to development, as required under Public Resources Code section 21083.4. Applicable mitigation measures include the following previously incorporated measures:

- Mitigation Measures **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-21** through **SP 4.6-26** (habitat restoration, enhancement, and preservation of the River Corridor SMA/SEA 23);
- Mitigation Measure **SP 4.6-17** (restrictions on human and pet access to the River Corridor SMA/SEA 23);
- Mitigation Measures **SP 4.6-18** and **SP 4.6-19** (establishment of transition areas between the River Corridor SMA/SEA 23 and development);
- Mitigation Measure **SP 4.6-27** (habitat enhancement of the High Country SMA/SEA 20);
- Mitigation Measure **SP 4.6-28** (mitigation banking for oak resources);
- Mitigation Measures **SP 4.6-29** through **SP 4.6-32** (recreation and access restrictions within the High Country SMA/SEA 20);
- Mitigation Measure **SP 4.6-33** (protection of transition areas between the development edge and the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-34** and **SP 4.6-35** (clear marking of grading perimeters and avoidance of inadvertent impacts to biological resources outside of the grading area within or adjacent to the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-37** through **SP 4.6-42** (long-term management of the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-43** through **SP 4.6-47** (acceptable uses of and long-term management of Open Area);

- Mitigation Measure **SP 4.6-48** (standards for the restoration and enhancement of oak resources); and
- Mitigation Measure **SP 4.6-62** (any changes to an approved oak tree permit would require that the oak tree report for that oak tree permit be amended for the area of change).

This impact would also be reduced through the implementation of the following:

- Mitigation Measure **MV 4.3-22** (protective fencing around oaks during clearing and grading activities);
- Mitigation Measure **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities); and
- Mitigation Measure **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation).

Compliance with the permit conditions and implementation of Specific Plan Mitigation Measure **SP 4.6-48**, as well as the Mitigation Measures proposed above, would reduce project impacts to oak trees and oak woodlands to below a level of significance, thereby meeting the requirements of both CLAOTO and Public Resources Code Section 21083.4. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

For discussion of the temporary loss of carbon sequestration through vegetation removal, including oak woodlands, please see **Section 4.23, Global Climate Change**, of this EIR.

(h) Special-Status Wildlife Species

Certain special-status wildlife species known to occur in the project region were eliminated from further consideration in this analysis because the project site lacks suitable habitat to support them or because surveys have established that the species in question is not expected to utilize the project site. As shown in **Table 4.3-7**, these species include the following: vernal pool fairy shrimp, San Diego fairy shrimp, Riverside fairy shrimp, quino checkerspot butterfly, coast range newt, coastal (San Diego) cactus wren, great egret, great blue heron, Swainson's hawk, mountain plover, bald eagle, least bittern, long-billed curlew, osprey, double-crested cormorant, white-faced ibis, purple martin, bank swallow, California spotted owl, Mexican long-tongued bat, spotted bat, Los Angeles pocket mouse, and big free-tailed bat.

As noted in **Table 4.3-5**, above, the following special-status wildlife species were observed during the course of various field surveys conducted on or adjacent to the project site: monarch butterfly, San

Emigdio blue butterfly, *Pyrgulopsis castaicensis* n. sp., Santa Ana sucker, unarmored threespine stickleback, arroyo chub, arroyo toad, western spadefoot toad, silvery legless lizard, coastal western whiptail, southwestern pond turtle, coast horned lizard, two-striped garter snake, Cooper's hawk, sharp-shinned hawk, tricolored blackbird, Southern California rufous-crowned sparrow, golden eagle, short-eared owl, long-eared owl, western burrowing owl, oak titmouse, ferruginous hawk, Costa's hummingbird, Lawrence's goldfinch, turkey vulture, northern harrier, western yellow-billed cuckoo, hermit warbler, yellow warbler, white-tailed kite, willow flycatcher, southwestern willow flycatcher, California horned lark, merlin, prairie falcon, American peregrine falcon, California condor, yellow-breasted chat, loggerhead shrike, black-crowned night-heron, Nuttall's woodpecker, summer tanager, coastal California gnatcatcher, vermilion flycatcher, Allen's/Rufous hummingbird, chipping sparrow, least Bell's vireo, yellow-headed blackbird, pallid bat, western mastiff bat, western red bat, San Diego black-tailed jackrabbit, fringed myotis, Yuma myotis, San Diego desert woodrat, pocketed free-tailed bat, mule deer, mountain lion, American badger, and black bear.

Based on the presence of suitable habitat on the project site, it is reasonable to conclude that certain special-status species could potentially occur on site prior to grading or construction activities associated with project implementation. As noted in **Table 4.3-6**, above, although not observed during surveys, the following species could occur on the project site: Trask shoulderband snail, southern steelhead, California red-legged frog, rosy boa, San Bernardino ringneck snake, coast patch-nosed snake, south coast garter snake, grasshopper sparrow, Bell's sage sparrow, black-chinned sparrow, ringtail, Townsend's big-eared bat, western small-footed myotis, long-legged myotis, and southern grasshopper mouse. For the purposes of the following analysis, these species are presumed to occur on the project site.

Impacts to Species Observed On or Adjacent to the Mission Village Site

Monarch butterfly (*Danaus plexippus*). The monarch butterfly is a listed *California Special Animal*. The species' distribution is controlled by the distribution of its larval host plants (*i.e.*, various milkweeds, genus *Asclepias*). Individual monarch butterflies were observed during surveys conducted in April and May of 2004 and 2005 as well as during various other wildlife and plant surveys. However, no wintering sites were observed, and, due to the site's distance from the coast, it is unlikely that the project area would be used by large numbers of overwintering adults.²⁹⁸ Further, the proposed project does not include any development or construction-related activities that would affect a wintering site. Therefore, impacts to this species would be less than significant. Impacts to this species were not previously analyzed as part of the Newhall Ranch Specific Plan Program EIR and Additional Analysis because the species was identified after that environmental documentation was certified.

²⁹⁸ Compliance Biology, Inc., *Results of Butterfly Surveys on the Newhall Ranch Project Site*.

San Emigdio blue butterfly (*Plebulina emigdionis*). The San Emigdio blue butterfly is designated by CDFG as a *California Special Animal*. This butterfly can be locally abundant in association with its primary host plant, four-wing saltbush (*Atriplex canescens*), but has also been observed in association with quail brush (*A. lentiformis*).²⁹⁹ During the 2004 surveys, San Emigdio blue butterfly was documented within the Specific Plan area in the west-central edge of Potrero Canyon. During the 2005 surveys, five adult San Emigdio blue butterflies were again observed at this location. One San Emigdio blue butterfly was also observed in the High Country SMA/SEA 20 at the northwestern edge of Salt Canyon during the 2005 surveys; however, no additional observations of the species were made at this location or other portions of Salt Canyon during the 2005 surveys.³⁰⁰ The proposed project does not include any development or construction-related activities that would affect a population or a concentration of the host plant. Therefore, impacts to this species would be less than significant. Impacts to this species were not previously analyzed as part of the Newhall Ranch Specific Plan Program EIR and Additional Analysis because the species was identified after that environmental documentation was certified.

***Pyrgulopsis castaicensis* n. sp.** In 2010, the undescribed species of snail was formally described as *Pyrgulopsis castaicensis* n. sp.³⁰¹ and is referred to by its new scientific name herein. The *Pyrgulopsis castaicensis* n. sp. has no current status. In addition, the snail's habitat requirements are unknown, and a comprehensive distribution survey has not yet been attempted. In 2006, the snail was observed within portions of the Middle Canyon Spring within the Mission Village project site. The species was first observed within Middle Canyon Spring by USFWS biologists in 2006. In 2007, Dudek biologists observed over 100 snails (these snails were not identified to genus or species, and it is not known whether they were the *Pyrgulopsis castaicensis* n. sp. or another freshwater snail) in Middle Canyon Spring and the lower-most reach of the Middle Canyon drainage, and immediately below the river terrace where the spring discharges into the upper river floodplain. At the time the unidentified snails were observed in the mouth of the Middle Canyon drainage (non-spring area), agricultural runoff from irrigated fields in the lower valley of Middle Canyon supported flow in the lower portion of the drainage.³⁰² Although the spring will be avoided, potential indirect impacts to *Pyrgulopsis castaicensis* n. sp. as a result of implementation of the proposed project (accidental clearing, trampling, and grading; runoff, sedimentation, erosion, and chemical and toxic compound pollution; and exposure to fugitive dust, as well as from hydrologic alterations and water quality impacts), would (1) constitute a substantial direct adverse effect on this species, (2) conflict with local policies and ordinances protecting biological

²⁹⁹ Compliance Biology, Inc., *Results of Butterfly Surveys on Magic Mountain Entertainment Site*; Compliance Biology, Inc., *Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area*.

³⁰⁰ Compliance Biology, Inc., *Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area*.

³⁰¹ Hershler and Liu, *Pyrgulopsis* (Gastropoda: Hydrobiidae).

³⁰² Dudek, *Draft Middle Canyon Spring Survey and Status Report*.

resources, and (3) substantially reduce the number and range of this species. Thus, this impact is significant, absent mitigation. In order to reduce direct impacts to this species, the project applicant would implement a series of mitigation measures designed to avoid or minimize the impact of project implementation on *Pyrgulopsis castaicensis* n. sp. to a level that is adverse but not significant. Applicable mitigation measures include the following previously incorporated measures:

- Mitigation Measures **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-21** through **SP 4.6-26** (habitat restoration, enhancement, and preservation of the River Corridor SMA/SEA 23); and
- Mitigation Measure **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23), **SP 4.6-18**(provision of transition areas adjacent to the River Corridor SMA/SEA 23), **SP 4.6-19** (requirements for transition areas adjacent to the River Corridor SMA/SEA 23).

This impact would also be reduced through the implementation of the following:

- Mitigation Measure **MV 4.3-11** (regulating stream diversion bypass channels and dewatering);
- Mitigation Measure **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities);
- Mitigation Measures **MV 4.3-52** (project design features, construction notes, erosion and dust control, and SWPPP BMPs to ensure protection of vegetation communities and special-status species) and **MV 4.3-53** (dust control measures to protect vegetation communities and special-status aquatic wildlife species);
- **MV 4.3-54** (permanent fencing along trails in the River Corridor SMA/SEA 23) and Mitigation Measure **MV 4.3-55** (fencing and signage around the Middle Canyon Spring);
- Mitigation Measure **MV 4.3-57** (review of plant palettes and inspection of container plants for use within 200 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation);
- Mitigation Measure **MV 4.3-56** (Middle Canyon Spring Habitat Management Plan (Dudek 2007), which prescribes monitoring and management related to water quality and water quantity) and **MV 4.3-51** (bridges of the Santa Clara River will be designed to minimize impacts to natural areas and riparian resources from associated lighting and stormwater runoff).

- Mitigation Measure **MV 4.3-44** (pre-construction surveys and relocation of the spring snail (*Pyrgulopsis castaicensis* n. sp.))

Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. Impacts to this species were not previously analyzed as part of the Newhall Ranch Specific Plan Program EIR and Additional Analysis because the snail was identified after that environmental documentation was certified.

Santa Ana sucker (*Catostomus santaanae*). The Santa Ana sucker is listed as a *California Species of Special Concern* throughout its range. Outside of the Newhall Ranch Specific Plan area, populations within the species' natural historic range, including the Los Angeles, San Gabriel, and Santa Ana River basins, are listed federally as threatened. It is also considered sensitive by the U.S. Forest Service, critically imperiled by the Natural Heritage Program, and vulnerable by the IUCN World Conservation Union. The fish are most abundant in cool, shallow streams with good water quality and with streamside riparian vegetation that can provide refuge during seasonal floods and repopulation after flooding.³⁰³ This species has been documented within the Specific Plan area throughout the Santa Clara River. . In their collections within the Specific Plan area of the NRSP Project site, ENTRIX found that the Santa Ana sucker was common. ³⁰⁴ Surveys conducted on June 3 and July 14, 2000, found this species within 500 meters upstream and downstream of the I-5 Bridge over the Santa Clara River.³⁰⁵ This species is not expected to occur in Salt Creek. Construction activities associated with the proposed Commerce Center Drive Bridge, bridge, and abutments could result in the loss of individual fish. The location of the proposed bank stabilization features is set back beyond the existing riparian corridor and would not interface with the active stream channel. Nevertheless, some impacts may occur to the fish. Depending on the number and extent of this species that may be disturbed or removed during construction of the bridge, the loss of Santa Ana sucker would be a significant impact. Mitigation measures to reduce these impacts below significant levels include the following:

- **SP 4.6-53** (surveys for special-status species),

³⁰³ D.G. Buth and C.B. Crabtree, "Genetic Variability and Population Structure of *Catostomus santaanae* in the Santa Clara Drainage," *Copeia* 2 (1982), 439–444; NatureServe, NatureServe Explorer: An Online Encyclopedia of Life, Version 6.2, <http://www.natureserve.org/explorer>. 2007.

³⁰⁴ ENTRIX, Inc., *Focused Special-Status Fish Species Habitat Assessment*.

³⁰⁵ (Impact Sciences, Inc., *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch; Impact Sciences, Inc., Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area; Haglund and Baskin, Fish and Wildlife Survey and Habitat Assessment*.

- SP 4.6-57 (exclusion/removal of fish from areas of proposed bridge construction),
- SP 4.6-58 (require compliance with water quality permits), and
- SP 4.6-59 (surveys for special-status species).
- MV 4.3-1 (restriction of construction activities in the riverbed to specified areas),
- MV 4.3-2 (pre-construction surveys and coordination with Corps and CDFG for unarmored threespine stickleback, arroyo chub, and Santa Ana sucker),
- MV 4.3-8 (patrol for stranded fish and aquatic organisms),
- MV 4.3-9 (development of a Stream Crossing and Diversion Plan),
- MV 4.3-10 (installation of structures within the riverbed not to impair movement of aquatic life),
- MV 4.3-11 (regulating stream diversion bypass channels and dewatering),
- MV 4.3-12 (creation of habitat for special-status fish during construction),
- MV 4.3-13 (prevention of mud and pollutants from entering streams and storm flows), and
- MV 4.3-53 (dust control measures to protect vegetation communities and special-status plant and aquatic wildlife species).

These mitigation measures would reduce direct impacts to the Santa Ana sucker to less than significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*). The unarmored threespine stickleback is listed as both state and federally endangered. It is also a California Fully Protected species. The USFWS notes that the unarmored threespine stickleback can be found in all areas of streams;³⁰⁶ however, they tend to gather in slow-moving and standing water or behind obstructions, at the edges of streams, or in vegetation in faster-moving water. This species has been documented in the portion of the Santa Clara River on and adjacent to the project site and within the Santa Clara River portion of the Specific Plan in 1988, 1995, 2000, 2002–2005, and 2007.³⁰⁷ Construction activities associated with the

³⁰⁶ USFWS, *Unarmored Threespine Stickleback Recovery Plan* (Portland, Oregon: USFWS, 1985)

³⁰⁷ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part II*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part III*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part IV*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part I*;

proposed Commerce Center Drive Bridge and bridge abutments could result in the loss of individual fish, and there is a potential for significant residual impacts to the unarmored threespine stickleback, including impacts to water quality such as sedimentation, dust, and other pollutants, and interference with natural flows and movement of the stickleback. However, the proposed bank stabilization features are set back beyond the existing riparian corridor at most of the project site and would not interface with the active stream channel. Mitigation measures to reduce impacts on the unarmored threespine stickleback to less than significant include the following:

- **SP 4.6-53** (surveys for special-status species),
- **SP 4.6-54** (consultation with USFWS),
- **SP 4.6-57** (exclusion/removal of fish from areas of proposed bridge construction),
- **SP 4.6-58** (require compliance with water quality permits),
- **SP 4.6-59** (surveys for special-status species).
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-2** (pre-construction surveys and coordination with Corps and CDFG for unarmored threespine stickleback, arroyo chub, and Santa Ana sucker),
- **MV 4.3-8** (patrol for stranded fish and aquatic organisms),
- **MV 4.3-9** (development of a Stream Crossing and Diversion Plan),
- **MV 4.3-10** (installation of structures within the riverbed not to impair movement of aquatic life),
- **MV 4.3-11** (regulating stream diversion bypass channels and dewatering),
- **MV 4.3-12** (creation of habitat for special-status fish during construction),
- **MV 4.3-13** (prevention of mud and pollutants from entering streams and storm flows), and

ENTRIX, Inc., Focused Special-Status Fish Species Habitat Assessment; Haglund, Current Status of the Unarmored Threespine Stickleback; SMEA, Sensitive Aquatic Species Survey; Haglund and Baskin, Fish and Wildlife Survey and Habitat Assessment; Impact Sciences, Inc., Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch; Impact Sciences, Inc., Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area; Impact Sciences, Inc., Annual Status Report for Unarmored Threespine Stickleback within the Natural River Management Plan Area.

- **MV 4.3-53** (dust control measures to protect vegetation communities and special-status plant and aquatic wildlife species).

Implementation of these mitigation measures would prevent direct impacts to the unarmored threespine stickleback. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Arroyo chub (*Gila orcutti*), The arroyo chub is listed as a California Species of Special Concern, is considered imperiled regionally and globally under the Natural Heritage Program methodology, and is considered sensitive by the U.S. Forest Service. It occurs in slow-moving or backwater sections of warm to cool (10°C to 24°C) streams with mud or sand substrates.³⁰⁸ This species has been documented in the Santa Clara River and could occur in the portion of the river adjacent to the project site. In their collections within the Specific Plan area of the NRSP Project site, ENTRIX found that the arroyo chub was common to abundant.³⁰⁹ ENTRIX describes the arroyo chub as the dominant species of the Santa Clara River within the project area.³¹⁰ Construction activities associated with the proposed Commerce Center Drive Bridge and bridge abutments could result in the loss of individual fish. Although the proposed bank stabilization features are set back beyond the existing riparian corridor at most of the project site and would not interface with the active stream channel, a significant impact could occur, depending on the number and extent of this species that may be disturbed or removed during construction of the bridge. Mitigation measures to reduce impacts to less than significant levels include the following:

- **SP 4.6-44** (soft bottoms for all flows greater than 2,000 cubic feet per second [cfs]),
- **SP 4.6-53** (surveys for special-status species),
- **SP 4.6-54** (consultation with USFWS),
- **SP 4.6-57** (removal of fish from areas of proposed bridge construction),
- **SP 4.6-58** (require compliance with water quality permits),
- **SP 4.6-59** (consultation with County and CDFG before surveys for special-status species).
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),

³⁰⁸ ENTRIX, Inc., *Focused Special-Status Fish Species Habitat Assessment*.

³⁰⁹ Ibid.

³¹⁰ Ibid.

- MV 4.3-2 (pre-construction surveys and coordination with Corps and CDFG for unarmored threespine stickback, arroyo chub, and Santa Ana sucker),
- MV 4.3-8 (patrol for stranded fish and aquatic organisms),
- MV 4.3-9 (development of a Stream Crossing and Diversion Plan),
- MV 4.3-10 (installation of structures within the riverbed not to impair movement of aquatic life),
- MV 4.3-11 (regulating stream diversion bypass channels and dewatering),
- MV 4.3-12 (creation of habitat for special-status fish during construction),
- MV 4.3-13 (prevention of mud and pollutants from entering streams and storm flows), and
- MV 4.3-53 (dust control measures to protect vegetation communities and special-status plant and aquatic wildlife species).

Implementation of these mitigation measures would reduce direct impacts to the arroyo chub to less than significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Arroyo toad (*Bufo californicus*). The arroyo toad is listed as a California Species of Special Concern and is federally endangered. The species utilizes aquatic, riparian, and upland habitats to different degrees depending on the individual's stage of development and the season. No adult or subadult arroyo toads have been observed in the project area. However, arroyo toad tadpoles were observed in the Specific Plan area during surveys conducted in 2000.³¹¹ Specifically, during the surveys conducted by Aquatic Consulting Services, arroyo toad tadpoles were observed in the Santa Clara River upstream and downstream of the proposed Commerce Center Drive Bridge site and near the Valencia Water Treatment Plant. Arroyo toad was not observed breeding or otherwise utilizing habitats on or bordering the project site during more recent protocol surveys.³¹² In addition, on April 13, 2005, the USFWS issued a revised critical habitat designation for the arroyo toad.³¹³ In that Final Rule, effective May 13, 2005, the USFWS

³¹¹ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part II*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part III*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part IV*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part I*.

³¹² Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, Newhall Ranch*; Bloom Biological, Inc., *Report on Arroyo Toad Surveys on Landmark Village, Newhall Land and Farming Company Property, Los Angeles County, California* (2007).

³¹³ 70 FR 19562.

deleted the entire Newhall Ranch Specific Plan area from the designated critical habitat for the arroyo toad. Note, however, that USFWS is currently reassessing the 2005 Final Rule to determine whether the critical habitat designation should be adjusted. The USFWS has proposed changes to the 2005 Final Rule, published in the Federal Register on October 13, 2009.

Given that the site provides suitable habitat for the arroyo toad, that this species has been recorded in low numbers upstream of the project site, and that tadpoles were documented in the river on and adjacent to the project site, construction-related activities could adversely affect individual toads, which would be a significant impact. In order to reduce impacts to this species, the project applicant would implement a series of mitigation measures designed to limit construction activities within high-quality habitat areas and capture and relocate animals away from the work area prior to construction. Equipment would not be operated within areas of ponded or flowing water (unless otherwise approved by the Corps and CDFG), and water containing mud, silt, and other pollutants would not be allowed to enter flowing water. Further, any arroyo toads potentially present would be removed from the disturbance footprint by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground disturbing activities in an effort to salvage animals that may be uncovered during construction activities. Applicable mitigation measures include the following:

- **SP 4.6-53** and **SP 4.6-59** (surveys for special-status species within the project area),
- **SP 4.6-55** (federal and state permits for wetland impacts), and
- **SP 4.6 58** (NPDES and water quality permits).
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-4** (surveys of riverbed area for arroyo toad),
- **MV 4.3-9** (development of a Stream Crossing and Diversion Plan),
- **MV 4.3-10** (installation of structures within the riverbed not to impair movement of aquatic life),
- **MV 4.3-11** (regulating stream diversion bypass channels and dewatering),
- **MV 4.3-12** (creation of habitat for special-status fish during construction),
- **MV 4.3-13** (prevention of mud and pollutants from entering streams and storm flows), and

- **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities).

Implementation of these mitigation measures would reduce impacts to arroyo toad to a less than significant level. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Western spadefoot toad (*Spea hammondi*). The western spadefoot toad is listed as a California Species of Special Concern. The species prefers open areas with sandy or gravelly soils in a variety of habitats, including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, river floodplains, alluvial fans, playas, and alkali flats.³¹⁴ In total, there have been four separate documented occurrences of the western spadefoot toad in the Specific Plan area based on the focused surveys and incidental observations. Two occurrences of tadpoles are known from the Mission Village development area.³¹⁵ A western spadefoot toad was also observed within an isolated pool along the Santa Clara River upstream of the Commerce Center Bridge.³¹⁶ Western spadefoot toads were observed off-site in the adjacent Potrero Village development area within a rain pool in winter 2005; this location is believed to be extant.³¹⁷ As western spadefoot toads have been observed in various locations in the Specific Plan area, and because suitable conditions for the species are expected elsewhere in unsurveyed portions of the Specific Plan area, there is a high potential for this species to occur on the project site where seasonal pools develop. Depending on the number and extent of western spadefoot on the site that would be disturbed or removed, the loss of this species would be a potentially significant impact. Mitigation measures to reduce these impacts below significant levels include the following:

- **SP 4.6-53** and **SP 4.6-59** (surveys for special-status species within the project area),
- **SP 4.6-55** (federal and state permits for wetland impacts), and
- **SP 4.6 58** (NPDES and water quality permits).
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-9** (development of a Stream Crossing and Diversion Plan),

³¹⁴ Robert C. Stebbins, *Western Reptiles and Amphibians*, 3rd ed. (New York: Houghton Mifflin, 2003); D.C. Holland and R.H. Goodman, *A Guide to the Amphibians and Reptiles of MCB Camp Pendleton, San Diego County, California* (1998).

³¹⁵ Compliance Biology, Inc., *Results of the Focused Western Spadefoot Toad Surveys on the Mission Village Project Site*.

³¹⁶ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part II*.

³¹⁷ Dave Crawford, Compliance Biology, Inc., telephone call to Sherri Miller (Dudek), November 2007.

- **MV 4.3-10** (installation of structures within the riverbed not to impair movement of aquatic life),
- **MV 4.3-25** (pre-construction surveys for western spadefoot toad), and
- **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities).

Implementation of these mitigation measures would reduce impacts to western spadefoot to a less than significant level. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Silvery legless lizard (*Anniella pulchra pulchra*). The silvery legless lizard is listed as a California Species of Special Concern. This species may be found in sparsely vegetated areas in a variety of habitats, including beach dunes, chaparral, California sagebrush scrub, oak woodlands, pine forests, pine-oak woodland, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.³¹⁸ This species has been observed on the project site within the leaf litter of coast live oak woodlands in Chiquito Canyon. Overall, 23 individual silvery legless lizards were captured and released.³¹⁹ Silvery legless lizard was also observed at two locations in Long Canyon in 2005.³²⁰ Because suitable habitat occurs on site in the form of riparian and riverbank habitats within the River Corridor SMA/SEA 23, as well as scrub, chaparral, and oak woodland habitats outside of the SMA/SEA boundary, silvery legless lizard could occur throughout those portions of the site with these habitat types. Construction-related activities could result in impacts to individual lizards.

In order to reduce impacts to this species, the project applicant would implement a series of mitigation measures designed to capture and relocate animals away from the work area prior to construction. The fossorial behavior of the silvery legless lizard would prevent the capture and relocation of all individuals occurring. Therefore, specific measures (e.g., seasonal timing and hand raking) are required to maximize capture rates. The captured animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground disturbing activities in an effort to salvage silvery legless lizards that may be uncovered during construction activities. Implementation of proposed **Mitigation Measures MV 4.3-7** (surveys to capture and relocate special-status reptiles) and **MV 4.3-26** (pre-construction

³¹⁸ D.C. Zeiner, W.F. Laudenslayer Jr., and K.E. Mayer. *California's Wildlife: Volume I. Amphibians and Reptiles* (Sacramento: California Department of Fish and Game, 1988); Stebbins, *Western Reptiles and Amphibians*; Holland and Goodman, *A Guide to the Amphibians and Reptiles of MCB Camp Pendleton*.

³¹⁹ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area*.

³²⁰ Chris Huntley, Aspen, personal communication with Sherri Miller, Dudek, October 2006.

educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities) would reduce this impact to a level that is adverse but not significant.

The Newhall Ranch Specific Plan Program EIR concluded that the substantial loss of habitat, and potentially the direct loss of individuals of this species, would be considered an unavoidable significant impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this Draft EIR. In addition to the project-specific mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Applicable mitigation measures include **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). As a result, this EIR's finding that impacts on the silvery legless lizard can be mitigated to a less than significant level is consistent with the findings set forth in the Newhall Ranch Specific Plan Program EIR. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Coastal western whiptail (*Aspidoscelis tigris stehnegeri*). The coastal western whiptail is designated as a California Special Animal. The coastal western whiptail is found in a variety of habitats, primarily in areas where plants are sparse and there are open areas for running. The species is also found in woodland and streamside growth and avoids dense grassland and thick shrub growth. While coastal western whiptails were not trapped or otherwise observed during pitfall trap surveys, the subspecies was identified as having the potential to occur in the project area.³²¹ The coastal western whiptail is assumed to be present in the project area because (1) the species has been observed in the High Country SMA/SEA 20 and nearby locations,³²² (2) the project site provides suitable habitat, (3) the project area is within the range of the subspecies as described by Stebbins,³²³ and (4) the entire project area was not surveyed by Impact Sciences³²⁴ at a level of detail necessary to determine presence or absence of a particular reptile species. Construction-related activities could result in impacts to individual whiptails.

³²¹ Impact Sciences, Inc., 2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area.

³²² Compliance Biology, Inc., Results of Focused the Western Spadefoot Toad Surveys on the Mission Village Project Site; Dudek and Associates, Inc., Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area.

³²³ Stebbins, *Western Reptiles and Amphibians*.

³²⁴ Impact Sciences, 2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area.

In order to reduce impacts to this species, the project applicant would implement four mitigation measures designed to capture and relocate animals away from the work area prior to construction. The captured animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the subspecies. In addition, the project applicant would conduct biological monitoring during ground disturbing activities in an effort to salvage animals that may be uncovered during construction activities. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (surveys for special-status species within the project area). Additional applicable mitigation measures are **MV 4.3-7** (surveys to capture and relocate special-status reptiles) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant.

Although the Newhall Ranch Specific Plan Program EIR concluded the substantial loss of habitat, and potential impacts to individuals of this species would be considered an unavoidable significant impact, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as that recommended in this EIR. In addition to the project-specific mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Applicable mitigation measures include **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. As a result, this EIR's finding that impacts on the whiptail can be mitigated to a less than significant level is consistent with the findings set forth in the Newhall Ranch Specific Plan Program EIR. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss. Impacts to this species were not previously analyzed as an individual topic at the program level in the Newhall Ranch Specific Plan Program EIR. **Southwestern pond turtle** (*Clemmys marmorata pallida*). The southwestern pond turtle is listed as a California Species of Special Concern. Western pond turtles use a variety of aquatic habitats, including lakes, natural ponds, rivers, oxbows, streams (perennial/ephemeral), marshes, vernal pools, freshwater and brackish estuaries, drainage ditches, reservoirs, mill ponds, ornamental park ponds, stock ponds, abandoned gravel pits, and sewage treatment plants.³²⁵ This species has been observed during visual surveys in the portion of the Santa

³²⁵ James Buskirk, "The Western Pond Turtle, *Emys marmorata*," *Radiata* 11(3) (May 2002), 30; NatureServe, "An

Clara River within the Newhall Ranch Specific Plan area.³²⁶ As these visual surveys were not conducted for purposes of estimating turtle populations, they did not follow U.S. Geological Survey (USGS) protocols for determining habitat suitability³²⁷ or for trapping individuals,³²⁸ neither of which is required under CEQA. However, these surveys have effectively documented the consistent presence of the southwestern pond turtle in the Santa Clara River. There are four documented occurrences of the southwestern pond turtle in the main channel of the Santa Clara River adjacent to the project site upstream and at the mouth of Castaic Junction. The species could also occur within the riparian habitats on and immediately bordering the project site. The removal of riparian vegetation and construction activities associated with the proposed bridge and/or bank protection could result in impacts to individual pond turtles. These impacts may be significant, depending on the number and extent of this species that may be disturbed or removed. To address these impacts, the following mitigation measures would be implemented:

- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-5** (surveys of riverbed area for southwestern pond turtle),
- **MV 4.3-10** (installation of structures within the riverbed not to impair movement of aquatic life),
- **MV 4.3-13** (prevention of mud and pollutants from entering streams and storm flows), and
- **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities).

These mitigation measures would reduce impacts to the southwestern pond turtle to a less-than-significant level. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Coast horned lizard (*Phrynosoma coronatum*). The coast horned lizard is listed as a California Species of Special Concern. The species is found in a wide variety of vegetation types with the requisite loose sandy soils, including California sagebrush scrub, annual grassland, chaparral, oak woodland, riparian

Online Encyclopedia of Life.”

³²⁶ Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project*.

³²⁷ U.S. Geological Survey, *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast ecoregion* (2006).

³²⁸ U.S. Geological Survey, *Western Pond Turtle (Emys marmorata) Trapping Survey Protocol for the Southcoast Ecoregion*, (2006).

woodland, and coniferous forest.³²⁹ One coast horned lizard was captured during the 2006 pitfall trap surveys and five additional coast horned lizards were incidentally observed during the 2004 reptile surveys.³³⁰ The coast horned lizard observed during the 2006 surveys was captured in the eastern portion of the Specific Plan area (in the vicinity of the Potrero Village development) at a location containing sandy soils and riparian and non-native grassland vegetation.³³¹ No location or habitat association information was provided for the coast horned lizards incidentally observed during the 2004 surveys. Coast horned lizard was also observed along the Santa Clara River floodplain, approximately 500 feet south of The Old Road Bridge in 2006.³³² Construction-related activities could result in impacts to individual horned lizards.

In order to reduce these impacts, the project applicant would implement a series of mitigation measures designed to capture and relocate animals away from the work area prior to construction. The captured animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground-disturbing activities in an effort to salvage animals that may be uncovered during construction activities. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (surveys for special-status species within the project area). Additional applicable mitigation measures are **MV 4.3-7** (surveys to capture and relocate special-status reptiles) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is less than significant.

The Newhall Ranch Specific Plan Program EIR concluded that the substantial loss of habitat, and potential impacts to individuals of this species, would be considered an unavoidable significant impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA

³²⁹ L.M. Klauber, "Studies of Reptiles Life in the Arid Southwest: Part I, Night Collecting on the Desert with Ecological Statistics; Part II, Speculations on Protective Coloration and Protective Reflectivity; Part III, Notes on Some Lizards of the Southwestern United States," *Bulletin of the Zoological Society of San Diego* 14 (1939); Robert C. Stebbins, *Amphibians and Reptiles of Western North America* (Boston: McGraw Hill, 1954).

³³⁰ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area*.

³³¹ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area*.

³³² Chris Huntley, Aspen, personal communication with Sherri Miller, Dudek, October 2006.

20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Therefore, this EIR's finding that impacts to the coast horned lizard can be mitigated to a less than significant level is consistent with the finding set forth in the Newhall Ranch Specific Plan Program EIR. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Two-striped garter snake (*Thamnophis hammondi*). The two-striped garter snake is a California Species of Special Concern. Two-striped garter snakes are found in a variety of perennial and intermittent freshwater streams within oak woodlands, shrublands, and sparse coniferous forests from sea level to 2,400 meters (7,874 feet) AMSL.³³³ This species was observed in the reach of the Santa Clara River within and adjacent to the Specific Plan area.³³⁴ The removal of riparian vegetation and construction activities associated with the proposed bridge and/or bank protection could result in impacts to individual two-striped garter snakes. This may be a significant impact, depending on the number and extent of this species that may be disturbed or removed. In order to reduce these impacts, the project applicant would implement a series of mitigation measures designed to limit construction activities within high quality habitat areas and capture and relocate animals away from the work area prior to construction. Mitigation measures to reduce impacts below significant levels include **SP 4.6-53** (surveys for special-status species) and **SP 4.6-58** (require compliance with water quality permits). In addition, equipment would not be operated within areas of ponded or flowing water (unless otherwise approved by the Corps and CDFG) and water containing mud, silt, and other pollutants would not be allowed to enter flowing water. Further, any two-stripe garter snakes potentially present would be removed from the disturbance footprint by qualified biologists and placed in a pre approved area capable of supporting the species. The project applicant would also conduct biological monitoring during ground disturbing activities in an effort to salvage animals that may be uncovered during construction activities. Other applicable mitigation measures recommended in this EIR include the following:

- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-6** (surveys of riverbed area for two-striped garter snake and south coast garter snake),

³³³ Stebbins, *Western Reptiles and Amphibians*; Zeiner, Laudenslayer Jr., and Mayer. *California's Wildlife: Volume I. Amphibians and Reptiles*.

³³⁴ Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part IV*; Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project*; ENTRIX, Inc., *Focused Special-Status Aquatic Species Assessment*.

- MV 4.3-9 (development of a Stream Crossing and Diversion Plan),
- MV 4.3-10 (installation of structures within the riverbed not to impair movement of aquatic life),
- MV 4.3-11 (regulating stream diversion bypass channels and dewatering),
- MV 4.3-12 (creation of habitat for special-status fish during construction),
- MV 4.3-13 (prevention of mud and pollutants from entering streams and storm flows), and
- MV 4.3-26 (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities).

Implementation of these mitigation measures would reduce impacts to the two-striped garter snake to a less than significant level. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Cooper's hawk (*Accipiter cooperii*). The Cooper's hawk is on the CDFG Watch List. Cooper's hawks are found in areas with dense stands of live oak, riparian, or other forest communities near water.³³⁵ The Cooper's hawk frequents landscapes where wooded areas occur in patches and groves and often uses patchy woodlands and edges with snags for perching.³³⁶ The Cooper's hawk has been regularly observed within riparian and oak woodland habitats over multiple years during bird surveys conducted from 1988 through 2006 along the Santa Clara River.³³⁷ This species is known to be a year-round resident

³³⁵ D.C. Zeiner et al., *California's Wildlife: Volume II. Birds* (Sacramento: California Department of Fish and Game, 1990).

³³⁶ Frank L. Beebe, *Field Studies of the Falconiformes of British Columbia: Vultures, Hawks, Falcons, Eagles* (Victoria, British Columbia: the British Columbia Provincial Museum, 1974).

³³⁷ Guthrie, *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1988*; Guthrie, *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1989*; Guthrie, *Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo*; Guthrie, *Surveys for Least Bell's Vireo*; Guthrie, *Surveys along Castaic Creek for least Bell's Vireo*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1992); Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1993); Guthrie, *Bird Surveys along the Santa Clara River, 1993*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1994); Guthrie, *Bird Surveys along the Santa Clara River, 1994*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995*; Guthrie, *Bird Surveys along the Santa Clara River, 1995*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996*; Guthrie, *Bird Surveys along the Santa Clara River, 1996*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997*; Guthrie, *Bird Surveys along the Santa Clara River, 1997*; Guthrie, *Bird Surveys along the Santa Clara River, 1998*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 1999*; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; Guthrie, *Bird Surveys along the Santa Clara River, 1999*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*; Guthrie, *Bird Surveys along the Santa Clara River, 2000*; Guthrie,

within the project area.³³⁸ If active hawk nests are present, the proposed removal of riparian vegetation and/or construction-related noise could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests would be a significant impact. In order to reduce impacts to this species, the project applicant would implement mitigation measures to reduce impacts to Cooper's hawk before and during construction. Previously incorporated mitigation measures include **SP 4.6-53** (updated site specific surveys) and **SP 4.6-59** (consultation with County and CDFG at important benchmarks). This impact would also be reduced through the implementation of **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to nesting Cooper's hawks to a level that is adverse but not significant. The finding that impacts to Cooper's hawk can be reduced to below a level of significance with mitigation is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Sharp-shinned hawk (*Accipiter striatus*). The sharp-shinned hawk is on the CDFG Watch List. Sharp-shinned hawks prefer riparian forest and woodlands.³³⁹ They are found in a variety of ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats.³⁴⁰ During migration, sharp-

Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000; Guthrie, Bird Surveys of Castaic Junction; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001; Guthrie, Bird Surveys along the Santa Clara River, 2001; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002; Guthrie, Bird Surveys along the Santa Clara River, 2002; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003; Daniel Guthrie, Bird Surveys along the Santa Clara River, 2003; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2004; Guthrie, Bird Surveys along the Santa Clara River, 2004; D.A. Guthrie, Bird Observations during 2004 at Castaic Junction, an Area on the North Side of the Santa Clara River at the Junction of State Route 126 and Interstate 5, near Valencia, California (2004); Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence (2005); Guthrie, Bird Surveys along the Santa Clara River, 2005; Guthrie, Bird Surveys along the Santa Clara River, 2006; Guthrie, Bird Surveys of The Old Road Phase III Environmental Project Study Area; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries (2006); Labinger, Greaves, and Haupt. Preliminary Results of Avian Surveys; Z. J. Labinger, J. Greaves, and D. Haupt. Results of 1995 Avian Surveys following the January 17, 1994, ARCO/Four Corners Oil Spill on the Santa Clara River, California (1996); Labinger, Greaves, and Haupt, 1996 Avian Survey Results; Labinger, Greaves, and Haupt, Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring; Labinger and Greaves, Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring.

³³⁸ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

³³⁹ NatureServe, "An Online Encyclopedia of Life."

³⁴⁰ S.M. Joy et al., "Feeding Ecology of Sharp-Shinned Hawks Nesting in Deciduous and Coniferous Forests in Colorado," *Condor* 96(2) (March 1984), 455-467; Zeiner et al., *California's Wildlife: Volume II*; NatureServe, "An Online Encyclopedia of Life."

shinned hawks also may forage in agricultural areas, scrub, and chaparral habitats.³⁴¹ Sharp-shinned hawks have been observed several times during the course of the avian surveys conducted along the Santa Clara River corridor. Guthrie observed two adults on two separate occasions in 1995 and again in 1997 and 1999.³⁴² Another sharp-shinned hawk was observed in March 2007 by Bloom Biological.³⁴³ Because sharp-shinned hawks are highly mobile and are a rare winter visitor on the site, the proposed project would not result in mortality of individuals occupying this habitat during construction and/or grading activities. Furthermore, because the species does not nest on site, construction and grading activities associated with the proposed project would not result in impacts to nesting birds of this species. Implementation of the proposed project would not directly impact this species. The Newhall Ranch Specific Plan Program EIR concludes that due to the substantial loss of habitat resulting from buildout of the Specific Plan, impacts to sharp-shinned hawk would be considered a significant unavoidable impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. For example, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Tricolored blackbird (*Agelaius tricolor*). The tricolored blackbird is a California Species of Special Concern and a Bird of Conservation Concern with regard to its nesting colony status. These birds prefer to breed in freshwater marshes with dense growths of emergent vegetation dominated by cattails (*Typha* spp.) or bulrushes (*Schoenoplectus* spp.), but have also established colonies in willows (*Salix* spp.), blackberries (*Rubus* spp.), thistles (*Cirsium* and *Centaurea* spp.), and nettles (*Urtica* spp.). This species has been observed on the project site during focused bird surveys. Labinger et al. observed a small nesting colony within the project site,³⁴⁴ however, the specific location is not known and was not mapped. Migrants

³⁴¹ D.C. Zeiner et al., *California's Wildlife: Volume II. Birds* (1990).

³⁴² Guthrie, *Bird Surveys along the Santa Clara River*, 1995; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries, near Valencia, California*, 1997; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*.

³⁴³ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

³⁴⁴ Labinger, Greaves, and Haupt, *Preliminary Results of Avian Surveys*.

have also been observed within the Specific Plan area along the Santa Clara River³⁴⁵ and within Potrero Canyon in 1994.³⁴⁶ Tricolored blackbird has been observed offsite along Castaic Creek,³⁴⁷ and at Castaic Junction.³⁴⁸ No breeding colonies have been observed since 1994, despite annual surveys through 2007 as described above. However, should this species nest on the site prior to development, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of bird nests on the site that may be disturbed or removed, the loss of active nests would be a potentially significant impact. In order to avoid impacts to this species, the project applicant would implement mitigation measures to reduce the loss of or harm to tricolored blackbird before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant.

The Newhall Ranch Specific Plan Program EIR concludes that given the potential to successfully relocate breeding colonies at new locations is relatively low, impacts to breeding colonies (if present) of tricolored blackbird would remain significant. However, given that no breeding colonies have been documented on or adjacent to the project site during annual bird surveys, and the requirements of proposed **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities), impacts to nesting tricolored blackbird (if present) can be reduced to below a level of significance at the project level.

³⁴⁵ Guthrie, *Bird Surveys along the Santa Clara River*, 1996; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; County of Los Angeles, *Newhall Ranch Specific Plan* (2003).

³⁴⁶ County of Los Angeles, *Newhall Ranch Specific Plan*.

³⁴⁷ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1994); Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*, 1995; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*, 1996; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 1999; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2006).

³⁴⁸ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1994); Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2000; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2001; Guthrie *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2006); Dudek and Associates, Inc., *Biological Resources Technical Report for the Entrada Site*.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*). The Southern California rufous-crowned sparrow is on the CDFG Watch List. This species is not federally listed as threatened or endangered within any part of its range.³⁴⁹ The rufous-crowned sparrow occupies moderate to steep hillsides that are rocky, grassy, or covered by coastal sage scrub or chaparral. The Southern California rufous-crowned sparrow has been observed over multiple years as a fairly common resident in the coastal scrub within the Specific Plan area during annual bird surveys. It has been observed foraging upland and near the Santa Clara River³⁵⁰ and was observed nesting in 2007.³⁵¹ Construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests would be a significant impact. In order to reduce impacts to this species, the project applicant would implement mitigation measures to reduce impacts to Southern California rufous-crowned sparrow before and during construction. Previously incorporated mitigation measures include **SP 4.6-53** (updated site specific surveys) and **SP 4.6-59** (consultation with County and CDFG at important benchmarks). This impact would also be reduced through the implementation of **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to nesting Southern California rufous-crowned sparrows to a level that is adverse but not significant.

The Newhall Ranch Specific Plan Program EIR concludes that due to the substantial loss of habitat resulting from buildout of the Specific Plan (loss of 1,820 acres of coastal sage scrub), impacts to Southern California rufous-crowned sparrow would be considered an unavoidably significant impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of

³⁴⁹ Paul W. Collins, "Rufous-Crowned Sparrow," *The Birds of North America Online*, ed. A. Poole, 472 (1999), <http://bna.birds.cornell.edu/bna/species/472>.

³⁵⁰ Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001*; Guthrie, *Bird Surveys along the Santa Clara River, 2002*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas*.

³⁵¹ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Golden eagle (*Aquila chrysaetos*). The golden eagle is on the CDFG Watch List and is a California Fully Protected species. The golden eagle requires rolling foothills, mountain terrain, and wide arid plateaus deeply cut by streams and canyons, open mountain slopes and cliffs, and rock outcrops.³⁵² On site, this species has been occasionally observed during the annual bird surveys conducted from 1988 through 2007 along the Santa Clara River. Observation of a single golden eagle soaring over the Santa Clara River was recorded on April 22, 1993.³⁵³ In addition, two golden eagles were observed in the coast live oak woodlands west of Grapevine Mesa on the RMDP project site.³⁵⁴ No known nests occur on site or in the immediate vicinity, and the project site is not considered suitable for nesting eagles. However, suitable foraging habitat occurs on the project site. Because this species is not expected to nest or otherwise substantially utilize the project site, no significant impacts to golden eagle are expected to occur as a result of the Mission Village development. Despite no significant impacts, applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Any impacts also would be reduced through the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would avoid impacts to nesting golden eagle if nests were located in the future.

The Newhall Ranch Specific Plan Program EIR concluded that due to the substantial loss of habitat, and potential impacts to individuals resulting from buildout of the Specific Plan, impacts to golden eagle would be considered significant and unavoidable; however, because the species is not expected to nest or otherwise substantially utilize the Mission Village project site, as stated above, no significant impacts to golden eagle are expected to occur as a result of the Mission Village development. In addition, since the Newhall Ranch Specific Plan Program EIR was certified, new mitigation measures have been added to

³⁵² Zeiner et al., *California's Wildlife: Volume II*.

³⁵³ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1993).

³⁵⁴ Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*.

this EIR. Those measures, referenced above, ensure that any impacts to golden eagle are minimized to less than significant levels.

Short-eared owl (*Asio flammeus*). The short-eared owl is a federally listed Bird of Conservation Concern as well as a CDFG-designated California Species of Special Concern. The short-eared owl is a resident of mixed and tall grass habitats. The species is usually found in open areas with few trees, such as annual and perennial grasslands, prairies, tundra, dunes, meadows, agricultural lands, and saline and fresh emergent wetlands.³⁵⁵ Short-eared owls have never been documented in the project area. However, an individual was observed just outside the project boundary in the Salt Creek area immediately west of the Ventura/Los Angeles County line in the fall of 2005.³⁵⁶ Short-eared owl could potentially forage on site in grasslands during the winter months. Because short-eared owls are highly mobile and are a rare winter visitor on the site, the proposed project would not result in impacts to individuals occupying this habitat during construction and/or grading activities. Furthermore, because the species does not nest on site, construction and grading activities associated with the proposed project would not result in impacts to young or eggs. Implementation of the proposed project would not directly impact this species. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR, as the species was not identified on the Specific Plan site until more recent surveys. See **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Long-eared owl (*Asio otus*). The long-eared owl has been designated by CDFG as a California Species of Special Concern. The long-eared owl primarily uses riparian habitat for roosting and nesting, but can also use live oak thickets and other dense stands of trees.³⁵⁷ It appears to be more associated with forest edge habitat than with open habitat or forest habitat.³⁵⁸ Dudek observed a long-eared owl during wildlife transect surveys within the Specific Plan area in live oak woodland south of Via Canyon during fall 2005.³⁵⁹ The observed individual was not nesting. The species was not observed during 2007 surveys despite several nights spent camping in oak woodlands surrounding the Landmark Village project area.³⁶⁰ Should this species occur on the site, construction-related activities could result in the loss or

³⁵⁵ Zeiner et al., *California's Wildlife: Volume II*; J.K. Terres, *The Audubon Society Encyclopedia of North American Birds* (New York: Alfred A. Knopf, 1980).

³⁵⁶ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

³⁵⁷ Zeiner et al., *California's Wildlife: Volume II*.

³⁵⁸ D.W. Holt, "The Long-Eared Owl (*Asio otus*) and Forest Management: A Review of the Literature," *Journal of Raptor Research* 31:175–186 (1997).

³⁵⁹ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

³⁶⁰ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

abandonment of active nests during that year's nesting season. Depending on the number and extent of bird nests on site that may be disturbed or removed, the loss of active nests could be a significant impact. The project applicant would implement mitigation measures to reduce impacts to long-eared owl before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Western burrowing owl (*Athene cunicularia*). The western burrowing owl is a Bird of Conservation Concern and a California Species of Special Concern. In California, western burrowing owls are yearlong residents of flat, open, dry grassland and desert habitats at lower elevations.³⁶¹ They can inhabit annual and perennial grasslands and scrublands, including open coastal scrub, characterized by low-growing vegetation.³⁶² On site, the western burrowing owl has been observed anecdotally at two locations (i.e., the species has not been observed during focused avian surveys). A single western burrowing owl individual was observed twice at the same location within a four-week period (November and December 2006) in the northern portion of Middle Canyon, east of Airport Mesa, in ruderal habitat. Another individual was observed in December 2006 in Middle Canyon, and again on April 11, 2007.³⁶³ Construction-related activities could result in the loss or abandonment of active burrows. Depending on the number and extent of active burrows on the site that may be disturbed or removed, the loss of active burrows could be a significant impact. The project applicant would implement mitigation measures to reduce impacts to western burrowing owl before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-20** (pre-construction surveys for burrowing owl). Implementation of these mitigation measures would

³⁶¹ C. Bates, "Burrowing Owl (*Athene cunicularia*)," *California Partners in Flight Desert Bird Conservation Plan*, http://www.prbo.org/calpif/htmldocs/species/desert/burrowing_owl.htm. 2006.

³⁶² D.C. Zeiner et al., *California's Wildlife: Volume II. Birds* (1990).

³⁶³ Sherri Miller, Dudek, verbal communication with Callie Ford, Dudek, November 2007.

reduce impacts to nesting and wintering western burrowing owls to a level that is adverse but not significant.

The Newhall Ranch Specific Plan Program EIR concluded that due to the substantial loss of habitat, and potential impacts to individuals resulting from buildout of the Specific Plan, impacts to western burrowing owl would be considered a significant unavoidable impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Oak titmouse (*Baeolophus inornatus*). The oak titmouse is a California Special Animal. This species is not federally listed as threatened or endangered within any part of its range. Oak titmice inhabit a variety of habitat types, but are primarily associated with oaks, especially those in warm, dry habitats.³⁶⁴ The oak titmouse is common and abundant in the project area, nesting on site in cottonwood riparian and coast live oak communities. It has been observed over multiple years along the Santa Clara River in the Specific Plan area. The oak titmouse was observed most recently by Guthrie in 2006³⁶⁵ and by Bloom Biological in 2007.³⁶⁶ Bloom Biological reported seeing between two and 14 individuals of this species daily. Most observations of this species were not mapped, but individuals have been sighted along the Santa Clara River and its tributaries. Construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests would be a significant impact. In order to avoid impacts to this species, the project applicant would implement mitigation measures to reduce impacts to oak titmouse before and during construction. Applicable mitigation measures include

³⁶⁴ Carla Cicero, "Oak Titmouse," *The Birds of North America Online*, ed. A. Poole, 485a (2000), <http://bna.birds.cornell.edu/bna/species/485a>.

³⁶⁵ Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2006).

³⁶⁶ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (require surveys of special-status species within the project site). This impact would also be reduced through the implementation of **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to nesting oak titmouse to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Ferruginous hawk (*Buteo regalis*). The ferruginous hawk is on the CDFG Watch List as a Bird of Conservation Concern. The ferruginous hawk forages in open grasslands, agriculture, sagebrush flats, desert scrub, surrounding valleys in low foothills, and fringes of pinyon–juniper habitats.³⁶⁷ On site, has been observed in the eastern alfalfa fields, Wolcott agricultural fields, Potrero Canyon, and other agriculture fields along the Santa Clara River in winter 2008.³⁶⁸ The project area is outside of the species' breeding range and it is not expected to nest on site. Because ferruginous hawks are highly mobile and are a winter visitor on the site, the proposed project would not result in mortality of individuals occupying this habitat during construction and/or grading activities. Furthermore, because the species does not nest on site, construction and grading activities associated with the proposed project would not result in impacts to young or eggs of this species. Implementation of the proposed project would not directly impact this species. The Newhall Ranch Specific Plan Program EIR concluded that due to the substantial loss of habitat resulting from buildout of the Specific Plan, impacts to ferruginous hawk would be considered a significant unavoidable impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. For example, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This

³⁶⁷ C. Polite and J. Pratt, Life History Accounts and Range Maps—California Wildlife Habitat Relationships System, <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx>, 1999.

³⁶⁸ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Costa's hummingbird (*Calypte costae*). The Costa's hummingbird is a California Special Animal. It is not federally listed as threatened or endangered within any part of its range. Primary habitats are desert wash, edges of desert riparian and valley foothill riparian areas, coastal scrub, desert scrub, desert succulent scrub, lower-elevation chaparral, and palm oasis.³⁶⁹ The species has been observed over multiple years during bird surveys conducted from 1988 through 2006 along the Santa Clara River within riparian scrub and woodland habitat; however, there are no mapped locations for observations. This species likely occurs as a migrant and could nest in suitable habitats on the borrow and grading sites. If nesting were to occur within or adjacent to the project site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. Implementation of proposed **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities) would reduce impacts to nesting hummingbirds to below a level of significance. Impacts to this species were not previously analyzed in the Newhall Ranch Specific Plan Program EIR.

Lawrence's goldfinch (*Carduelis lawrencei*). The Lawrence's goldfinch is as a California Special Animal. Additionally, this species is recognized under the NatureServe system of Natural Heritage Programs as vulnerable at the state level throughout its range and is listed as a Bird of Conservation Concern by the USFWS. Lawrence's goldfinches are found in cropland and hedgerows, shrubland and chaparral, conifer, hardwood and mixed woodlands.³⁷⁰ On site, this species was observed in upland areas and riparian thickets in 2007³⁷¹ and has been observed over multiple years during the bird surveys conducted from 1988 through 2006 along the Santa Clara River.³⁷² Two to 70 were recorded daily throughout March,

³⁶⁹ Zeiner et al., *California's Wildlife: Volume II*.

³⁷⁰ NatureServe, "An Online Encyclopedia of Life."

³⁷¹ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

³⁷² Compliance Biology, Inc., *Results of Focused Coastal California Gnatcatcher Surveys; Castaic Mesa Project; Guthrie, Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1988; Guthrie, Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo; Guthrie, Bird Surveys along the Santa Clara River and Its Tributaries (1992); Guthrie, Bird Surveys along the Santa Clara River and Its Tributaries (1993); Guthrie, Bird Surveys along the Santa Clara River, 1993; Guthrie, Bird Surveys along the Santa Clara River and Its Tributaries (1994); Guthrie, Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996; Guthrie, Bird Surveys along the Santa Clara River, 1996; Guthrie, Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997; Guthrie, Bird Surveys along the*

mostly in migrant flocks.³⁷³ If present, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of bird nests on the site that may be disturbed or removed, the loss of active nests would be a significant impact. In order to avoid impacts to this species, the project applicant would implement mitigation measures to reduce impacts to Lawrence's goldfinch before and during construction. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (require surveys of special-status species within the project site). This impact would also be reduced through the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to nesting Lawrence's goldfinches to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Turkey vulture (*Cathartes aura*). Although the turkey vulture has no federal or state status, it is being discussed, for the purposes of this report, as a CDFG trust resource. Turkey vultures use a variety of habitats while foraging for both wild and domestic carrion. They prefer open stages of most habitats. In the western United States, they tend to occur regularly in areas of hilly pastured rangeland, nonintensive

Santa Clara River, 1997; Guthrie, Bird Surveys along the Santa Clara River, 1998; Guthrie, Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 1999; Guthrie, Bird Surveys in the Proposed Riverwood Project Area; Guthrie, Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area; Guthrie, Bird Observations for Spring 2000 in the Proposed Mesa Development; Guthrie, Bird Surveys along the Santa Clara River, 2000; Guthrie, Bird Surveys in the Proposed Magic Mountain Entertainment Project Area; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000; Guthrie, Bird Surveys of Castaic Junction; Guthrie, Bird Surveys along the Santa Clara River; Los Angeles/Ventura County Line; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001; Guthrie, Bird Surveys along the Santa Clara River, 2001; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002; Guthrie, Bird Surveys along the Santa Clara River, 2002; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003; Guthrie, Bird Surveys along the Santa Clara River, 2003; Guthrie, Bird Observations in the Stevenson Ranch; Guthrie, Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas; Guthrie, Bird Observations for Spring 2004 in the Proposed Mesa East and West Development; Guthrie, Bird Observations in the Proposed Magic Mountain Entertainment Project Area; Guthrie, Bird Surveys along the Santa Clara River, 2004; Guthrie, Bird Observations during 2004; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries (2006); Labinger, Greaves, and Haupt, Results of 1995 Avian Surveys; Labinger, Greaves, and Haupt, 1996 Avian Survey Results; Labinger, Greaves, and Haupt, Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring; Labinger and Greaves, Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring.

³⁷³ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

agriculture, and areas with rock outcrops suitable for nesting, although they are not generally found in high-elevation mountain areas.³⁷⁴ On site, this species has been observed over multiple years during bird surveys conducted from 1988 through 2007 along the Santa Clara River,³⁷⁵ and off site in the Castaic Junction area by Guthrie³⁷⁶ and Haglund and Baskin.³⁷⁷ However, no mapped occurrences of this species were recorded. If present, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of bird nests on the site that may be disturbed or removed, the loss of active nests would be a significant impact. In order to avoid impacts to this species, the project applicant would implement mitigation measures to reduce

³⁷⁴ David A. Kirk and Michael J. Mossman. "Turkey Vulture," *The Birds of North America Online*, ed. A. Poole, 339 (1998), <http://bna.birds.cornell.edu/bna/species/339>; Zeiner et al., *California's Wildlife: Volume II*.

³⁷⁵ Guthrie, *Bird Surveys along the Santa Clara River, 1993*; Guthrie, *Bird Surveys along the Santa Clara River, 1994*; Guthrie, *Bird Surveys along the Santa Clara River, 1996*; Guthrie, *Bird Surveys along the Santa Clara River, 1997*; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; Guthrie, *Bird Surveys along the Santa Clara River, 1999*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000*; Guthrie, *Bird Surveys of Castaic Junction*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001*; Guthrie, *Bird Surveys along the Santa Clara River, 2001*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002*; Guthrie, *Bird Surveys along the Santa Clara River, 2003*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Mesa East and West Development*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2004*; Guthrie, *Bird Surveys along the Santa Clara River, 2004*; Guthrie, *Bird Surveys along the Santa Clara River, 2005*; Guthrie, *Bird Surveys along the Santa Clara River, 2006*; Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*; Lemons, "Focused California Gnatcatcher Surveys for Mission Village"; Labinger, Greaves, and Haupt, *Preliminary Results of Avian Surveys*; Labiner, Greaves, and Haupt, *1996 Avian Survey Results*; Labiner, Greaves, and Haupt, *Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring*; and Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

³⁷⁶ Guthrie, *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1988*; Guthrie, *Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo*; Guthrie, *Surveys for Least Bell's Vireo*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries (1993)*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries (1994)*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997*; Guthrie, *Bird Surveys along the Santa Clara River, 1998*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 1999*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003*; Guthrie, *Bird Observations during 2004*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries (2005)*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries (2006)*.

³⁷⁷ Haglund and Baskin, *Fish and Wildlife Survey and Habitat Assessment*.

impacts to turkey vulture before and during construction. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (require surveys of special-status species within the project site). This impact would also be reduced through the implementation of Mitigation Measures **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities) and **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant.

Northern harrier (*Circus cyaneus*). The northern harrier is a California Species of Special Concern. Northern harriers use a wide variety of open habitats in California, including deserts, coastal sand dunes, pasturelands, croplands, dry plains, grasslands, estuaries, flood plains, and marshes.³⁷⁸ The species can also forage over coastal sage scrub or other open scrub communities.³⁷⁹ The northern harrier has been observed in or near the project area infrequently during the 20 years when surveys were conducted.³⁸⁰ More recently, Dudek observed a northern harrier in the Mission Village area,³⁸¹ and in March 2007, Bloom Biological made three separate observations of a single male at different locations in or near the project area along the Santa Clara River.³⁸² While no active nests were observed during surveys, suitable nesting habitat occurs in association within the agricultural and grassland habitats on site. Should this species nest on the project site, construction-related activities could result in the loss or abandonment of active nests. Depending on the number and extent of this species' active nests on site that may be disturbed or removed, the loss of active nests would be a significant impact. In order to avoid impacts to this species, the project applicant would implement mitigation measures to reduce impacts to the northern harrier before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** (requiring updated surveys of special-status species within the project area) and **SP 4.6-59** (consultation with Los Angeles County and CDFG at important benchmarks). This impact would also be reduced by the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a less than significant level.

³⁷⁸ R. Bruce Macwhirter and Keith L. Bildstein. "Northern Harrier," *The Birds of North America Online*, ed. A. Poole, 210 (1996), <http://bna.birds.cornell.edu/bna/species/210>.

³⁷⁹ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

³⁸⁰ Guthrie, *Bird Surveys in the Proposed Riverwood Project Area; Guthrie, Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*.

³⁸¹ Lemons, "Focused California Gnatcatcher Surveys for Mission Village."

³⁸² Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

The Newhall Ranch Specific Plan Program EIR concludes that due to the substantial loss of habitat resulting from buildout of the Specific Plan, impacts to northern harrier would be considered a significant unavoidable impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). The western yellow-billed cuckoo is a candidate for listing under the federal ESA, is a CESA-listed endangered species, and is a Bird of Conservation Concern with regard to its nesting status. The eastern yellow-billed cuckoo prefers a diverse variety of habitats, including open woodland with clearings and low, dense, scrubby vegetation as well as abandoned farmland, overgrown fruit orchards, successional shrubland, dense thickets along streams and marshes, shade trees, and gardens.³⁸³ The habitat preference of the western yellow-billed cuckoo, in contrast, is much more restricted in both species composition and size of the patch of preferred habitat. The habitat of the western yellow-billed cuckoo primarily consists of large blocks of riparian habitat, particularly cottonwood–willow riparian woodlands.³⁸⁴ The western yellow-billed cuckoo has occasionally been documented within the Santa Clara River corridor during focused bird surveys in the RMDP area, although the locations of these observations were not mapped. Single individuals (thought to be migrants) were observed along the Santa Clara River east of the project site in 1997 and 1998³⁸⁵ and west of the Ventura county line in 1997.³⁸⁶ However, none has been observed in the project area since then. In addition, suitable habitat does occur in association with the riparian habitats on site, and western

³⁸³ Janice M. Hughes, "Yellow-Billed Cuckoo," *The Birds of North America Online*, ed. A. Poole, 418 (1999), <http://bna.birds.cornell.edu/bna/species/418>.

³⁸⁴ 66 FR 38611–38626.

³⁸⁵ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997*; Labinger, Greaves, and Haupt, *Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring*; Labinger and Greaves, *Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring*.

³⁸⁶ Guthrie, *Bird Surveys along the Santa Clara River, 1997*.

yellow-billed cuckoo could nest in those areas. Should this species occur on the site, construction-related activities could result in the loss or abandonment of active nests. Depending on the number and extent of active nests on site that may be disturbed or removed, the loss of active nests could be a significant impact. The project applicant would implement mitigation measures to reduce impacts to western yellow-billed cuckoo before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Hermit warbler (*Dendroica occidentalis*). The hermit warbler is considered a CDFG trust resource for the purposes of this analysis. Hermit warblers are found in conifer and mixed forests, shrubland, chaparral, and conifer and mixed woodlands.³⁸⁷ On site, this species was observed over multiple years during bird surveys conducted from 1988 through 2006 along the Santa Clara River within woodland habitat;³⁸⁸ however, there are no mapped occurrences of these observations. All observed individuals were thought to be migrants. If nests occur on site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests would be a potentially significant impact. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of proposed **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to hermit warbler to a less than significant level. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Yellow warbler (*Dendroica petechia brewsteri*). The yellow warbler has no federal or state sensitivity status but is designated as a California Species of Special Concern. In general, the yellow warbler breeds most

³⁸⁷ NatureServe, "An Online Encyclopedia of Life."

³⁸⁸ Guthrie, *Bird Surveys along the Santa Clara River, 1994*; Guthrie, *Bird Surveys along the Santa Clara River, 1996*; Guthrie, *Bird Surveys along the Santa Clara River, 2002*.

commonly in wet, deciduous thickets, especially those dominated by willows, and in disturbed and early successional habitats.³⁸⁹ A single migrant was observed in the Entrada planning area in 2000.³⁹⁰ This species has been observed within the riparian habitats on the project site and is presumed to nest on site. If the species is present, the proposed removal of riparian vegetation and/or construction-related noise could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of bird nests on the site that may be disturbed or removed, the loss of active nests would be a significant impact. In order to avoid impacts to this species, the project applicant would implement mitigation measures to reduce impacts to the yellow warbler before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** (special-status species presence/absence survey requirements) and **SP 4.6-59** (consultation with the CDFG prior to surveys to establish appropriate survey methodology). This impact would also be reduced through implementation of proposed **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to nesting yellow warblers to a level that is adverse but not significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

White-tailed kite (*Elanus leucurus*). The white-tailed kite is a California Fully Protected species. The white-tailed kite is commonly associated with agriculture areas.³⁹¹ It also inhabits low-elevation grasslands, savannah-like habitats, open sage scrub, meadows, wetlands, and oak woodlands, particularly in areas with a dense population of voles.³⁹² On the project site, white-tailed kite has been observed primarily along the Santa Clara River, where it nests in associated riparian woodlands and forages in adjacent grasslands, open sage scrub, and agricultural fields.³⁹³ If nesting kites are present during construction, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Due to the kite's status as a California Fully Protected species, the loss of active nests would be a significant impact. In order to avoid such impacts, the project applicant would implement mitigation measures to reduce impacts to the white-tailed kite before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** (special-status species presence/absence survey requirements) and **SP 4.6-59** (consultation with the CDFG prior to

³⁸⁹ Lowther et al., "Yellow Warbler (*Dendroica petechia*)," in *The Birds of North America*, ed. A. Poole and F. Gill, 454 (Washington, D.C.: Cornell Laboratory of Ornithology and the Academy of Natural Sciences, 1999).

³⁹⁰ Guthrie, *Bird Surveys in the Proposed Magic Mountain Entertainment Project Area*.

³⁹¹ J. Grinnell and A.H. Miller. "The Distribution of the Birds of California." *Pacific Coast Avifauna* 27 (1944). Reprinted in Lee Vining, California: Artemisia Press. April 1986.

³⁹² L.B. Waian and R.C. Stendell. "The White-Tailed Kite in California with Observations of the Santa Barbara Population." *California Fish and Game* 56 (1970), 188-198.

³⁹³ Guthrie, *White-Tailed Kite Populations*; Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Report on White-Tailed Kites*.

surveys to establish appropriate survey methodology). This impact would also be reduced through implementation of proposed **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would avoid impacts to nesting white-tailed kites. The Newhall Ranch Specific Plan Program EIR concludes that due to the substantial loss of habitat resulting from buildout of the Specific Plan, impacts to white-tailed kite would be considered a significant unavoidable impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as this EIR. A total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. In addition to the mitigation measures set forth in the Newhall Ranch Specific Plan Program EIR, this EIR includes the following mitigation measures which, when implemented, will reduce impacts to flycatcher: **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss. **Willow flycatcher** (*Empidonax traillii*)/**Southwestern willow flycatcher** (*Empidonax traillii extimus*). The full species of willow flycatcher, including its subspecies—the southwestern willow flycatcher, little willow flycatcher (*E. t. brewsteri*), and *E. t. adastus* (no common name other than willow flycatcher subspecies, was listed as state endangered by CDFG in 1991. The subspecies southwestern willow flycatcher was listed as federally endangered species by the USFWS in 1995. The willow flycatcher has been detected almost every year within the River corridor in the project area during the focused bird surveys. However, because all observations were early in the breeding season with none occurring after June 22, the start of the nesting season, all individuals are assumed to have been migrants and were probably either the little willow flycatcher or *E. t. adastus*. No southwestern willow flycatchers have been observed to nest on site. Along the Santa Clara River in the NRSP, willow flycatchers were observed by Guthrie,³⁹⁴ Labinger *et al.*,³⁹⁵ and Bloom Biological, Inc.,³⁹⁶

³⁹⁴ Guthrie, *Bird Surveys along the Santa Clara River*, 1993; Guthrie, *Bird Surveys along the Santa Clara River*, 1997; Guthrie, *Bird Surveys along the Santa Clara River*, 1998; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; Guthrie, *Bird Surveys along the Santa Clara River*, 2000; Guthrie, *Bird Surveys along the Santa Clara River*, 2001; Guthrie, *Bird Surveys along the Santa Clara River*, 2002; Guthrie, *Bird Surveys along the Santa Clara River*, 2004; Guthrie, *Bird Surveys along the Santa Clara River*, 2005.

³⁹⁵ Labinger, Greaves, and Haupt, *Preliminary Results of Avian Surveys*.

³⁹⁶ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

along Castaic Creek in VCC by Guthrie,³⁹⁷ and adjacent to Entrada in the Castaic Junction area by Guthrie³⁹⁸ and Dudek.³⁹⁹ No southwestern willow flycatchers exhibiting nesting, paired, or territorial behavior have been observed in the project site or vicinity. The most recent observation of the southwestern willow flycatcher displaying territorial behavior is downstream approximately 18 miles, near Saticoy.⁴⁰⁰ The CNDDDB⁴⁰¹ lists one occurrence of nesting southwestern willow flycatchers in the Santa Clara River corridor upstream of the project area, along Soledad Canyon Road near Agua Dulce, in 1997. A single willow flycatcher was observed east of the project site foraging along the Santa Clara River on May 31, 2004,⁴⁰² however, given the timing of this observation and the lack of any subsequent evidence of nesting, the observed willow flycatcher cannot be positively identified as belonging to the southwestern category of willow flycatchers.⁴⁰³ Similarly, several adult willow flycatchers were observed during recent surveys, but no nesting was confirmed.⁴⁰⁴ However, as suitable nesting habitat does occur in association with the riparian habitats on site, southwestern willow flycatcher could nest in those areas. Should this species occur on site, construction-related activities could result in the loss or abandonment of active nests. The loss of active nests of this species would be a significant impact. The project applicant would implement mitigation measures to reduce or avoid impacts to southwestern willow flycatcher before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the

³⁹⁷ Guthrie, *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1988*; Guthrie, *Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2004*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2005).

³⁹⁸ Guthrie, *Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 1999*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2006).

³⁹⁹ Dudek and Associates, Inc., *Biological Resources Technical Report for the Entrada Site*.

⁴⁰⁰ Labinger and Greaves, *Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring*.

⁴⁰¹ CDFG, "RareFind."

⁴⁰² Guthrie, *Bird Surveys along the Santa Clara River, 2004*.

⁴⁰³ Guthrie, *Bird Surveys along the Santa Clara River, 2004*.

⁴⁰⁴ Bloom, *Report on Arroyo Toad Surveys*.

County and CDFG at important benchmarks). This impact would also be reduced through implementation of **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

California horned lark (*Eremophila alpestris*). The California horned lark is on the CDFG Watch List. California horned larks are common and abundant residents in a variety of open habitats, usually where trees and shrubs are absent. California horned larks have been observed regularly foraging in plowed and graded fields near the Santa Clara River within the NRSP Project area Guthrie,⁴⁰⁵ Labinger *et al.*,⁴⁰⁶ Labinger and Greaves,⁴⁰⁷ and Bloom Biological, Inc.,⁴⁰⁸ in the VCC planning area;⁴⁰⁹ and off site in the Castaic Junction area.⁴¹⁰ More recent surveys have observed several individuals in the agricultural fields along the Santa Clara River and a flock of approximately 20 individuals was observed adjacent to the

⁴⁰⁵ Guthrie, *Bird Surveys along the Santa Clara River*, 1994; Guthrie, *Bird Surveys along the Santa Clara River*, 1995; Guthrie, *Bird Surveys along the Santa Clara River*, 1996; Guthrie, *Bird Surveys along the Santa Clara River*, 1998; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; Guthrie, *Bird Surveys along the Santa Clara River*, 1999; Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*; Guthrie, *Bird Surveys along the Santa Clara River*, 2000; Guthrie, *Bird Surveys along the Santa Clara River*, 2005.

⁴⁰⁶ Labinger, Greaves, and Haupt, *Preliminary Results of Avian Surveys*; Labinger, Greaves, and Haupt, *Results of 1995 Avian Surveys*; Labinger, Greaves, and Haupt, *Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring*.

⁴⁰⁷ Labinger and Greaves, *Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring*.

⁴⁰⁸ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴⁰⁹ Guthrie, *Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo*; Guthrie, *Surveys along Castaic Creek for least Bell's Vireo*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California* (1992); Guthrie, *Bird Surveys along the Santa Clara River*, 1996; Guthrie, *Bird Surveys along the Santa Clara River*, 1997; Guthrie, *Bird Surveys along the Santa Clara River*, 2000; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2001; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2002; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2003; Guthrie, *Bird Observations in the Commerce Center Project Site*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2005); Guthrie, *Bird Surveys along the Santa Clara River*, 2005; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2006); Dudek and Associates, Inc., *Biological Resources Technical Report for the Valencia Commerce Center*.

⁴¹⁰ Guthrie, *Surveys along Castaic Creek for least Bell's Vireo*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1993); Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1994); Guthrie, *Bird Surveys along the Santa Clara River*, 1994; Guthrie, *Bird Surveys along the Santa Clara River*, 1995; Guthrie, *Bird Surveys of Castaic Junction*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California*, 2003; Guthrie, *Bird Observations during 2004 at Castaic Junction*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2005).

project site foraging in a dirt agricultural field within the Landmark Village impact area.⁴¹¹ Should this species nest on site, construction-related activities could result in the loss or abandonment of active nests. Depending on the number and extent of active nests on site that may be disturbed or removed, the loss of active nests could be a significant impact. In order to avoid such impacts, the project applicant would implement mitigation measures to reduce impacts to the California horned lark before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** (special-status species presence/absence survey requirements) and **SP 4.6-59** (consultation with the CDFG prior to surveys to establish appropriate survey methodology). This impact would also be reduced through the implementation of **Mitigation Measure MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR, as it was not identified on site until later surveys.

Merlin (*Falco columbarius*). The merlin is on the CDFG Watch List. The merlin uses a wide variety of semi-open to open habitats during breeding and wintering.⁴¹² Individuals frequent coastlines, grasslands, savannahs, open woodlands, lakes, wetlands, edges, and communities in early successional stages while foraging. In 2007, Bloom Biological made four observations of wintering or migrating merlins between March 4 and March 23.⁴¹³ One male and one female were documented hunting over agriculture fields bordering riparian habitat near Indian Dunes, which is located in the Specific Plan area. Merlins were not observed during bird surveys in any other year between 1988 and 2007. Merlins are highly mobile and visit the site only during the winter. For these reasons, the proposed project would not result in mortality of individuals occupying this habitat during construction and/or grading activities. Furthermore, because the species does not nest on site, construction and grading activities associated with the proposed project would not result in impacts to young birds or eggs. Implementation of the proposed project would not directly impact this species. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR, as it was not identified on site until later surveys.

Prairie falcon (*Falco mexicanus*). North America's only endemic falcon, the prairie falcon is a Bird of Conservation Concern and is on the CDFG Watch List. Additionally, USFWS identified the prairie falcon

⁴¹¹ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴¹² K. Garrett and J. Dunn. *The Birds of Southern California: Status and Distribution* (Los Angeles Audubon Society, 1981); Sodhi et al., "Merlin," *The Birds of North America Online*, ed. A. Poole, 044 (February 2005), <http://bna.birds.cornell.edu/bna/species/044>.

⁴¹³ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

as a Bird of Conservation Concern.⁴¹⁴ Prairie falcons inhabit open habitats in North America, including arid plains and steppe habitats. In the western states they prefer chaparral, desert grasslands, and creosote bush habitats. Surveys conducted by Guthrie detected two individual prairie falcons foraging during various surveys; one prairie falcon was detected on April 7, 2000, in the Potrero Canyon and Long Canyon area, and the other on July 2, 2001, along Castaic Creek between the confluence with the Santa Clara River and I-5.⁴¹⁵ Dudek biologists detected a prairie falcon within the Salt Creek watershed in late November 2005 and again in late August 2007 over Salt Creek within the High Country SMA/SEA 20.⁴¹⁶ Prairie falcons are highly mobile and visit the site only during the winter. For these reasons, the proposed project would not result in mortality of individuals occupying this habitat during construction and/or grading activities. Furthermore, because the species does not nest on site, construction and grading activities associated with the proposed project would not result in impacts to young birds or eggs. Implementation of the proposed project would not directly impact this species. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR, as it was not identified on site until later surveys.

American peregrine falcon (*Falco peregrinus anatum*). A subspecies of the peregrine falcon, the American peregrine falcon is listed as endangered under the California Endangered Species Act (CESA) and is also a California Fully Protected species. On October 11, 2007, the California Fish and Game Commission designated the American peregrine falcon as a candidate for delisting under CESA.⁴¹⁷ Peregrine falcons in general use a large variety of open habitats for foraging, including tundra, marshes, seacoasts, savannahs, grasslands, meadows, open woodlands, and agricultural areas. One American peregrine falcon was observed hunting along the Santa Clara River Corridor near the Grapevine Mesa area within the Specific Plan area by Guthrie in July 2000.⁴¹⁸ No other occurrences of this species have been documented on site during annual bird surveys between 1988 and 2007. American peregrine falcons are highly mobile and visit the site only during the winter. For these reasons, the proposed project would not result in mortality of individuals occupying this habitat during construction and/or grading activities. Furthermore, because the species does not nest on site, construction and grading activities associated

⁴¹⁴ USFWS, *Birds of Conservation Concern 2002* (Arlington, Virginia: Division of Migratory Bird Management, 2002).

⁴¹⁵ Guthrie, *Bird Surveys in the Proposed Magic Mountain Entertainment Project Area; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001.*

⁴¹⁶ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*; J. Trow, personal observation of prairie falcon by J. Trow (Dudek) over Salt Creek within the High Country SMA, August 2007.

⁴¹⁷ California Regulatory Notice Register, Notice of Findings Regarding the Removal of the American Peregrine Falcon from the Endangered Species List, 44-Z (November 2, 2007) 1856.

⁴¹⁸ Guthrie, *Bird Surveys along the Santa Clara River, 2000.*

with the proposed project would not result in impacts to young or eggs. Implementation of the proposed project would not directly impact this species. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR, as it was not identified on site until later surveys.

California condor (*Gymnogyps californianus*). The California condor is federally and state listed as endangered and is also a California Fully Protected species. California condors require vast expanses of open savannah, grasslands, and foothill chaparral, with cliffs, large trees, and snags for roosting and nesting.⁴¹⁹ Until April 2008, California condors had not been known to nest or land within the project area in the last 25 years.⁴²⁰ In April 2008, a California condor was observed feeding on a dead calf in a Potrero side canyon by Bloom Biological, Inc. wildlife biologist Chris Niemela.⁴²¹ A condor was also observed in January 2009 in the Potrero Canyon area,⁴²² and there have been other documented landings in the project area between April and July 2008.⁴²³ Additional 2009 flight data provided to CDFG by the USFWS indicate that the condor frequently flies over the project area when moving between the Sespe Wilderness area to the northwest and the San Gabriel Mountains to the southeast of the project area, and that the species appears to be increasing its use of the Santa Clarita Valley area. Observations of California condors within the Newhall Ranch Specific Plan area have been associated with areas where cattle grazing currently occurs and dead calves have provided feeding opportunities. Because grazing does not occur within the proposed project site, there is a lack of carcasses. However, with increasing use of the Santa Clarita Valley area, the condor is expected to continue to forage opportunistically in portions of the Specific Plan, VCC, and Entrada planning areas for dead cattle and other large mammal carcasses. Implementation of the proposed project would not directly impact this species. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR, as it was not identified on site until later surveys.

Yellow-breasted chat (*Icteria virens*). The yellow-breasted chat is a California Species of Special Concern. This species is not federally listed as threatened or endangered, but has been listed as threatened, endangered, or of special concern in some states and provinces on the periphery of its range (e.g.,

⁴¹⁹ Zeiner et al., *California's Wildlife: Volume II*.

⁴²⁰ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Interim Report of Winter Surveys*.

⁴²¹ M. Carpenter, Newhall Ranch, personal communication reporting that a California condor was observed feeding on a dead calf in a Potrero side canyon by wildlife biologist Chris Niemela in a Potrero side canyon, 2008.

⁴²² C. Niemela, memo from C. Niemela (Bloom Biological) to Jesse Grantham (USFWS) regarding observations of California condor in Potrero Canyon in January 2009, March 11, 2009.

⁴²³ R.P. Root. "Acknowledgement of Request for Formal Consultation on the Proposed Newhall Ranch Specific Plan, Santa Clarita, Los Angeles County, California." Letter from R.P. Root (USFWS) to A.O. Allen (Corps), November 12, 2008.

Connecticut, New Jersey, New York, Ontario, and British Columbia).⁴²⁴ In Southern California, the yellow-breasted chat is primarily found in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. On site, this species has been observed nesting in riparian thickets in 2007⁴²⁵ and has also been observed over multiple years during bird surveys conducted from 1988 through 2006.⁴²⁶ The proposed removal of riparian vegetation and/or construction-related noise could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of bird nests on the site that may be disturbed or removed, the loss of active nests would be a significant impact. In order to avoid impacts to this species, the project applicant would implement mitigation measures to reduce the impacts to yellow-breasted chat before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** (special-status species presence/absence survey requirements) and **SP 4.6-59** (consultation with the CDFG prior to surveys to establish appropriate survey methodology). This impact

⁴²⁴ K.P. Eckerle and C.F. Thompson. "Yellow-Breasted Chat (*Icteria virens*)." In *The Birds of North America*, ed. A. Poole and F. Gill, 575 (Philadelphia: The Birds of North America, Inc., 2001).

⁴²⁵ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴²⁶ Guthrie, *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1988*; Guthrie, *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1989*; Guthrie, *Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo*; Guthrie, *Surveys for Least Bell's Vireo*; Guthrie, *Surveys along Castaic Creek for least Bell's Vireo*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1992); Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1993); Guthrie, *Bird Surveys along the Santa Clara River, 1993*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1994); Guthrie, *Bird Surveys along the Santa Clara River, 1994*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995*; Guthrie, *Bird Surveys along the Santa Clara River, 1995*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996*; Guthrie, *Bird Surveys along the Santa Clara River, 1996*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries, near Valencia, California 1997*; Guthrie, *Bird Surveys along the Santa Clara River, 1997*; Guthrie, *Bird Surveys along the Santa Clara River, 1998*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 1999*; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; Guthrie, *Bird Surveys along the Santa Clara River, 1999*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*; Guthrie, *Bird Surveys along the Santa Clara River, 2000*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000*; Guthrie, *Bird Surveys of Castaic Junction*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001*; Guthrie, *Bird Surveys along the Santa Clara River, 2001*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002*; Guthrie, *Bird Surveys along the Santa Clara River, 2002*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003*; Guthrie, *Bird Surveys along the Santa Clara River, 2003*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2004*; Guthrie, *Bird Surveys along the Santa Clara River, 2004*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2005); Guthrie, *Bird Surveys along the Santa Clara River, 2005*; Guthrie, *Bird Surveys along the Santa Clara River, 2006*; Labinger, Greaves, and Haupt, *Preliminary Results of Avian Surveys*; Labinger, Greaves, and Haupt, *Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring*; Labinger and Greaves, *Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring*.

would also be reduced through the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to nesting yellow-breasted chats to a level that is adverse but not significant. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR, as it was not identified on site until later surveys.

Loggerhead shrike (*Lanius ludovicianus*). The loggerhead shrike is a Bird of Conservation Concern and a California Species of Special Concern. The species occurs most frequently in riparian areas along the woodland edge, grasslands with sufficient perching and butchering sites, scrublands, and open-canopied woodlands, although they can be quite common in agricultural and grazing areas and can sometimes be found in mowed roadsides, cemeteries, and golf courses. The loggerhead shrike is a breeding resident on site.⁴²⁷ It has been observed to be fairly common within California sagebrush scrub and grasslands in the Specific Plan area⁴²⁸ and has been observed within the VCC planning area;⁴²⁹ however, no mapped locations were recorded. Should this species occur on site, construction-related activities could result in the loss or abandonment of active nests. Depending on the number and extent of active nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. In order to avoid this impact to the loggerhead shrike, the project applicant would implement mitigation measures to reduce the impacts to loggerhead shrike before and during construction. Applicable mitigation measures include **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks), Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would result in the avoidance of impacts and, therefore, a significant impact would not occur. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

⁴²⁷ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴²⁸ Guthrie, *Bird Surveys along the Santa Clara River, 1993*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area*; Guthrie, *Bird Observations for Spring 2000 in the Proposed Mesa Development*; Guthrie, *Bird Surveys along the Santa Clara River, 2002*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas*; Guthrie, *Bird Observations for Spring 2004 in the Proposed Mesa East and West Development*; Guthrie, *Bird Surveys along the Santa Clara River, 2005*; Labinger, Greaves, and Haupt, *Preliminary Results of Avian Surveys*; Lemons, "Focused California Gnatcatcher Surveys for Mission Village"; Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴²⁹ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries, near Valencia, California, 1995*; Guthrie, *Bird Observations in the Commerce Center Project Site*.

Black-crowned night-heron (*Nycticorax nycticorax*). The black-crowned night heron is a California Special Animal. This species is not federally listed as threatened or endangered within any part of its range. Its habitat requirements are varied, including all types of wetland areas, including fresh, brackish, and salt water ecosystems and even man-made ditches, canals, reservoirs, and wet agricultural fields.⁴³⁰ On site, this species was observed early in the year and is thought to be a wintering or migratory species within the project site. In the most recent survey, several adults and juveniles were observed along the Santa Clara River after dusk and before dawn.⁴³¹ Observations of the species were mapped along the Santa Clara River in the RMDP/SCP project area south of Landmark Village and near the Ventura County line.⁴³² No roosts or rookeries (nesting colonies) have been detected during the surveys within or adjacent to the project site during any of the surveys that have been conducted over the years. Should nesting occur adjacent to the site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. In order to avoid this impact to the black-crowned night-heron, the project applicant would implement mitigation measures to reduce impacts to the black-crowned night-heron before and during construction. Applicable mitigation measures include **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks), **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would result in the avoidance of impacts and, therefore, a significant impact would not occur. This is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Nuttall's woodpecker (*Picoides nuttallii*). The Nuttall's woodpecker is a California Special Animal. This species is not federally listed as threatened or endangered within any part of its range. The Nuttall's woodpecker is primarily found in oak woodlands, to a lesser extent in riparian woodlands, and rarely in conifer forests. Nuttall's woodpecker has been described as a species characteristic of, if not confined to, oak woodlands in California.⁴³³ It has been observed nearly every year along the Santa Clara River since surveys began in 1988. Nuttall's woodpeckers are common residents in cottonwood and willow riparian habitat along Santa Clara River, Castaic Creek and other tributaries, and in coast live oak woodlands in adjoining canyons. Bloom Biological recorded three to 14 daily within the RMDP/SCP project area in

⁴³⁰ County of Riverside, "Birds," <http://www.rctlma.org/mshcp/volume2/birds.html>. 2008.

⁴³¹ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴³² Ibid.

⁴³³ Peter E. Lowther, "Nuttall's Woodpecker," *The Birds of North America Online*, ed. A. Poole, 555 (2000), <http://bna.birds.cornell.edu/bna/species/555>.

2007.⁴³⁴ Should nesting occur within or adjacent to the project site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. Applicable mitigation measures include **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks), **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would result in the avoidance of impacts and, therefore, a significant impact would not occur. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Summer tanager (*Piranga rubra*). The summer tanager is not state or federally endangered, but is a California Species of Special Concern. Western populations of summer tanagers occupy riparian woodlands dominated by willows and cottonwoods (*Populus* spp.) at lower elevations;⁴³⁵ and at higher elevations they utilize mesquite (*Prosopis* spp.) and salt cedar (*Tamarix* spp.) habitats.⁴³⁶ No individuals have been observed within the project site during annual bird surveys. One individual was observed off site west of the Ventura County line in 1993 and 1994,⁴³⁷ within Castaic Junction in 1991;⁴³⁸ in April, May, and July 1993 in dense cottonwoods downstream of the Valencia Wastewater Plant (Castaic Junction area);⁴³⁹ and it has also been observed east of the project site in 2000 and 2003.⁴⁴⁰ These observations were not mapped. If nesting occurs on site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. The project applicant would implement mitigation measures to reduce or avoid impacts to summer tanager before and during construction. Applicable mitigation measures

⁴³⁴ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴³⁵ W. Douglas Robinson, "Summer Tanager." *The Birds of North America Online*. ed. A. Poole, 248 (1996), <http://bna.birds.cornell.edu/bna/species/248>; K.V. Rosenberg et al., "Community Organization of Riparian Breeding Birds: Response to an Annual Resource Peak," *Auk* 99 (1982):260-274; K.V. Rosenberg et al., *Birds of the Lower Colorado River Valley* (Tucson, Arizona: University of Arizona Press, 1991).

⁴³⁶ Robinson, "Summer Tanager."

⁴³⁷ Guthrie, *Bird Surveys along the Santa Clara River, 1993*; Guthrie, *Bird Surveys along the Santa Clara River, 1994*.

⁴³⁸ Guthrie, *Surveys for Least Bell's Vireo*.

⁴³⁹ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1993).

⁴⁴⁰ Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003*.

include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to summer tanager to a level that is adverse but not significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Coastal California gnatcatcher (*Poliioptila californica californica*). The coastal California gnatcatcher is a federally listed threatened species and a California Species of Special Concern. It occurs in coastal Southern California and Baja California year-round, where it depends on a variety of arid scrub habitats. While isolated occurrences of California gnatcatchers occur off site to the east and southwest, no California gnatcatchers have been observed during the course of the focused surveys conducted for this species within the Specific Plan or Entrada areas. However, during the course of surveys conducted within the VCC planning area, an individual California gnatcatcher was observed on October 5, 2007, by Dudek biologist Jeff Priest and biologist Ron Francis, a subconsultant to Dave Crawford, Compliance Biology, Inc.⁴⁴¹ Should this species occur on site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. The project applicant would implement mitigation measures to reduce or avoid impacts to California gnatcatcher before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to coastal California gnatcatcher to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Vermilion flycatcher (*Pyrocephalus rubinus*). The vermilion flycatcher is a California Species of Special Concern. This species is found in riparian thickets near open, mesic habitats. It breeds in cottonwood,

⁴⁴¹ Priest, "Documentation of California Gnatcatcher Observation."

willow, mesquite, oak, sycamore, and other vegetation in desert riparian communities that are located adjacent to irrigated fields, irrigated ditches, or pastures.⁴⁴² A single individual was observed along the Santa Clara River on June 19, 1993.⁴⁴³ This is the only observation of a vermilion flycatcher from any of the many years of surveys both within and adjacent to the project site, and its location was not mapped. If nesting occurs on site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. The project applicant would implement mitigation measures to reduce or avoid impacts to vermilion flycatcher before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to vermilion flycatcher to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Rufous hummingbird (*Selasphorus rufus*). The rufous hummingbird is a California Special Animal and is a Bird of Conservation Concern with regard to its nesting colony status. The rufous hummingbird uses a variety of vegetation communities that provide nectar-producing flowers. In its breeding range, the species uses open areas as well as coniferous forests, deciduous woods, riparian thickets, swamps, meadows, agricultural areas, parks, and residential areas.⁴⁴⁴ Rufous hummingbirds have been observed within and near the project area in several different years. Three rufous hummingbirds were observed in early April of 1999 by Guthrie north of SR-126 in what is now the Homestead West area.⁴⁴⁵ Another individual was observed in late March 2004 by Guthrie within Potrero Valley, Oak Valley, Long Canyon, or Onion Fields.⁴⁴⁶ Another individual was observed in early April of that year in the southern half of the

⁴⁴² Zeiner et al., *California's Wildlife: Volume II*; B.O. Wolf and S.L. Jones, Vermilion Flycatcher." The Birds of North America Online, ed. A. Poole, 484 (2000), <http://bna.birds.cornell.edu/bna/species/484>.

⁴⁴³ Guthrie, *Bird Surveys along the Santa Clara River, 1993*.

⁴⁴⁴ S. Healy and W.A. Calder, "Rufous Hummingbird." The Birds of North America Online, ed. A. Poole, 053 (2006), <http://bna.birds.cornell.edu/bna/species/053>.

⁴⁴⁵ Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*.

⁴⁴⁶ Guthrie, *Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas*.

Legacy Village area,⁴⁴⁷ which is adjacent to the project area just south of Mission Village and east of Potrero Village. No mapped occurrences of this species were recorded. If nesting occurs on site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. In order to avoid impacts to these species, the project applicant would implement mitigation measures to reduce impacts to the rufous/Allen's hummingbird before and during construction. Applicable mitigation measures include **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks), **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to rufous hummingbirds to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Chipping sparrow (*Spizella passerina*). The chipping sparrow is a California Special Animal. This species is not federally listed as threatened or endangered within any part of its range and Sauer *et al.* have concluded that continental populations appear healthy.⁴⁴⁸ Chipping sparrows prefer open wooded habitats with a sparse or low herbaceous layer and few shrubs, if any.⁴⁴⁹ On site, this species has been observed as a common migrant in the project area, and one to 12 individuals were observed near edges of agricultural fields most days in early March.⁴⁵⁰ The chipping sparrow has been observed over multiple years during bird surveys conducted from 1988 through 2007 along the Santa Clara River within riparian scrub and woodland habitat. In order to avoid impacts to this species, the project applicant would implement mitigation measures to reduce the impacts to chipping sparrow before and during construction. Applicable mitigation measures include **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks), **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests), and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program

⁴⁴⁷ Guthrie, *Bird Observations in the Stevenson Ranch*.

⁴⁴⁸ J.R. Sauer et al., *The North American Breeding Bird Survey, Results and Analysis 1966–2000*. Version 2001.2. (Laurel, Maryland: U.S. Geological Survey, Patuxent Wildlife Research Center, 1997).

⁴⁴⁹ Zeiner et al., *California's Wildlife: Volume II*.

⁴⁵⁰ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Least Bell's vireo (*Vireo bellii pusillus*). The least Bell's vireo was state listed as endangered in 1980 and federally listed as endangered by the USFWS in 1986.⁴⁵¹ The USFWS made a final critical habitat designation for the least Bell's vireo in 1994.⁴⁵² Least Bell's vireos primarily occupy riverine riparian habitats that feature dense cover within one to two meters of the ground and a dense, stratified canopy. The least Bell's vireo inhabits low, dense riparian growth along water or along dry parts of intermittent streams and is typically associated with southern willow scrub, cottonwood forest, mulefat scrub, sycamore alluvial woodland, southern coast live oak riparian forest, arroyo willow riparian forest, wild blackberry, or mesquite in desert localities. The least Bell's vireo has been observed almost every year along the Santa Clara River within the Specific Plan area,⁴⁵³ and off site in Castaic Junction⁴⁵⁴ and has also been observed over multiple years within the VCC planning area.⁴⁵⁵ Most recently, Bloom Biological

⁴⁵¹ 51 FR 16474.

⁴⁵² 59 FR 4845.

⁴⁵³ Guthrie, *Bird Surveys along the Santa Clara River, 1993*; Guthrie, *Bird Surveys along the Santa Clara River, 1995*; Guthrie, *Bird Surveys along the Santa Clara River, 1996*; Guthrie, *Bird Surveys along the Santa Clara River, 1997*; Guthrie, *Bird Surveys along the Santa Clara River, 1998*; Guthrie, *Bird Surveys in the Proposed Riverwood Project Area*; Guthrie, *Bird Surveys along the Santa Clara River, 2000*; Guthrie, *Bird Surveys along the Santa Clara River, 2001*; Guthrie, *Bird Surveys along the Santa Clara River, 2002*; Guthrie, *Bird Surveys along the Santa Clara River, 2003*; Guthrie, *Bird Surveys along the Santa Clara River, 2004*; Guthrie, *Bird Surveys along the Santa Clara River, 2005*; Guthrie, *Bird Surveys along the Santa Clara River, 2006*; Labinger, Greaves, and Haupt, *Preliminary Results of Avian Surveys*; Labinger, Greaves, and Haupt, *Results of 1995 Avian Surveys*; Labinger, Greaves, and Haupt, *1996 Avian Survey Results*; Labinger, Greaves, and Haupt, *Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring*; Labinger and Greaves, *Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring*; Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴⁵⁴ Guthrie *Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1988*; Guthrie, *Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo*; Guthrie, *Surveys for Least Bell's Vireo*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2002*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003*; Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2004*; Guthrie, *Bird Observations during 2004*, Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2005); Guthrie, *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries* (2006); Dudek and Associates, Inc., *Biological Resources Technical Report for the Entrada Site*; Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴⁵⁵ Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries* (1994); Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995*; Guthrie, *Bird Surveys along the Santa Clara River and Its Tributaries*

observed at least 56 territories and three active nests within the Specific Plan area and adjacent areas.⁴⁵⁶ If least Bell's vireos are nesting during development of the site, the proposed removal of riparian vegetation and/or construction-related noise could result in the loss or abandonment of active nests during that year's nesting season. In light of the vireo's status as a federal- and state-listed endangered species, loss of active nests of this species would be a significant impact. In order to avoid this impact to the least Bell's vireo, the project applicant would implement mitigation measures for the least Bell's vireo before and during construction. Applicable mitigation measures include **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks), **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests), and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would avoid impacts to least Bell's vireos adults, nests, eggs, nestlings, and fledglings. As a result, no significant impact would occur because no individual birds would be affected. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Yellow-headed blackbird (*Xanthocephalus xanthocephalus*). The yellow-headed blackbird is a California Species of Special Concern. This species is not federally listed as threatened or endangered within any part of its range. It is found primarily within prairie wetlands, but it is also commonly found in wetlands associated with quaking aspen parks, mountain meadows, and arid regions. This species has been observed within the Specific Plan area.⁴⁵⁷ Bloom Biological observed one individual in an agriculture field within a flock of red-winged blackbirds on April 1, 2007.⁴⁵⁸ No nesting colonies have been observed within the project site. If nesting occurs on site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. In order to avoid impacts to these species, the project applicant would implement mitigation measures to reduce impacts to the yellow-headed blackbird before and during construction. Applicable mitigation measures include **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks), **MV 4.3-15** (pre-

Tributaries near Valencia, California, 1996; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2003; Guthrie, Bird Surveys along a Portion of the Santa Clara River and Its Tributaries (2006).

⁴⁵⁶ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴⁵⁷ Guthrie, *Bird Surveys along the Santa Clara River, 1996; Guthrie, Bird Surveys along the Santa Clara River, 1997; Guthrie, Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998; Guthrie, Bird Surveys along the Santa Clara River, 2001; Bloom Biological, Inc., Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

⁴⁵⁸ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*.

construction surveys for nesting native bird species and construction setbacks for active nests), and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce impacts to yellow-headed blackbird to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Pallid bat (*Antrozous pallidus*), California Species of Special Concern; **western mastiff bat** (*Eumops perotis*), California Species of Special Concern; **western red bat** (*Lasiurus blossevillii*), California Species of Special Concern; **fringed myotis** (*Myotis thysanodes*), California Special Animal; **Yuma myotis** (*Myotis yumanensis*), California Special Animal; and **pocketed free-tailed bat** (*Nyctinomops femorosaccus*), California Species of Special Concern. These species were detected on or in the vicinity of the project site during active Anabat surveys and mist net surveys conducted in 2004 and 2006 by Impact Sciences. Suitable roosting habitat for western mastiff bat and pocketed free-tailed bat is not present, as the project site lacks rugged rocky areas and cliffs, and suitable made-structures. However, pallid bat could roost within hollow oak trees on the site. Suitable western red bat roosting habitat and fringed myotis habitat occurs throughout the project site. Forests and woodlands are primary habitats for the Yuma myotis. Should active bat roosts be present, construction-related activities could result in the direct loss or abandonment of active roost sites. In order to reduce these impacts, the project applicant would avoid direct effects on pallid bat individuals during construction and establish new day roosts (including maternity roosts) should any existing day roosts be permanently lost as a result of the project. Depending on the number and extent of day roosts that may be disturbed or removed, impacts to pallid bat could be significant. In order to reduce these impacts, the project applicant would avoid direct effects on pallid bat individuals during construction and establish new day roosts should any existing day roosts be permanently lost as a result of the project. In addition, the applicable mitigation measure for impacts during construction is **Mitigation Measure MV 4.3-18** (pre-construction surveys for active roosts of special-status bats), which requires that, no earlier than 30 days prior to the commencement of construction activities, a pre-construction survey be conducted by a qualified biologist to determine whether active roosts of special-status bats, including the pallid bat, are present on or within 300 feet of the project disturbance boundaries. Should an active maternity roost be identified (the breeding season of native bat species in California, including the pallid bat, generally occurs from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, at the discretion of the biological monitor, until the roost is vacated and juveniles have fledged, as determined by the biologist. The applicable mitigation measures for permanent loss of roost sites are **MV 4.3-19** (day roost site replacement), which requires the project applicant to prepare and implement a bat roost site

creation plan that would establish (an) alternative roost site(s) within suitable preserved open space located at an adequate distance from sources of human disturbance and **MV 4.3-78** (culvert and bridge design to provide roosting habitat for bats), which requires a qualified biologist shall work with the project engineer to identify and incorporate structures into the design that provide suitable roosting habitat for bat species occurring in the project area. Implementation of these mitigation measures would reduce this impact to a level that is not significant. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

San Diego black-tailed jackrabbit (*Lepus californicus*). The San Diego black-tailed jackrabbit is listed as a California Species of Special Concern. The black-tailed jackrabbit occupies many diverse habitats, but is primarily found in arid regions supporting shortgrass and open or early succession scrub and chaparral habitats.⁴⁵⁹ Systematic surveys of the project area have not been conducted, but the San Diego black-tailed jackrabbit has been anecdotally observed on site.⁴⁶⁰ Based on the Impact Sciences report of the San Diego black-tailed jackrabbit in the project area,⁴⁶¹ it is assumed that the species potentially occurs in suitable habitat throughout the site. Construction-related activities could result in the impacts to individual black-tailed jackrabbit. In order to reduce impacts to this species, the project applicant would implement four mitigation measures designed to avoid impacts and otherwise capture and relocate animals away from the work area prior to construction. These animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground-disturbing activities, in an effort to salvage animals that may be discovered during construction activities. These measures will reduce impacts to San Diego black tailed jackrabbit individuals to the extent feasible and practicable. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable mitigation measures are **MV 4.3-16** (pre-construction surveys and relocation of San Diego black-tailed jackrabbit and San Diego woodrat), **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities), and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant.

The Newhall Ranch Specific Plan Program EIR concluded that the substantial loss of habitat, and potential impacts to individuals of this species, would be considered a significant unavoidable impact;

⁴⁵⁹D.C. Zeiner et al., *California's Wildlife: Volume III.Mammals* (1990).

⁴⁶⁰Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

⁴⁶¹Ibid.

however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

San Diego desert woodrat (*Neotoma lepida intermedia*). The San Diego desert woodrat is a California Species of Special Concern. Desert woodrats are found in a variety of shrub and desert habitats and are primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth.⁴⁶² The mammal assessment conducted by Impact Sciences⁴⁶³ found that the San Diego desert woodrat is a relatively common rodent within the Specific Plan area of the NRSP site. Dudek observed a single midden in the High Country SMA/SEA 20.⁴⁶⁴ San Diego desert woodrat was observed in Long and Potrero canyons in 2005.⁴⁶⁵ Construction-related activities would result in the direct loss of individual woodrats or active woodrat nests (stick houses). Implementation of proposed **Mitigation Measures MV 4.3-16** (pre-construction surveys and relocation of San Diego black-tailed jackrabbit and San Diego woodrat) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities) would reduce the magnitude of impacts to the San Diego desert woodrat to less than significant.

⁴⁶² V.C. Bleich, "Ecology of Rodents at the United States Naval Weapons Station; Seal Beach, Fallbrook Annex, San Diego County, California" (Master's thesis, California State University, Long Beach, 1973); V.C. Bleich and O.A. Schwartz. "Observations on the Home Range of the Desert Woodrat," *Journal of Mammalogy* 56 (1975), 518-519; J. H. Brown, G.A. Lieberman, and W.F. Dengler. "Woodrats and Cholla: Dependence of a Small Population on the Density of Cacti," *Ecology* 53 (1972), 310-313; G.N. Cameron and D.G. Rainey. "Habitat Utilization by *Neotoma lepida* in the Mojave Desert," *Journal of Mammalogy* 53 (1972), 251-266; S.D. Thompson, Spatial Utilization and Foraging Behavior of the Desert Woodrat, *Neotoma lepida lepida*." *Journal of Mammalogy* 63 (1982), 570-581.

⁴⁶³ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

⁴⁶⁴ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

⁴⁶⁵ Chris Huntley, Aspen, personal communication with Sherri Miller, Dudek, October 2006.

The Newhall Ranch Specific Plan Program EIR concluded that the substantial loss of habitat, and potentially the direct loss of individuals of this species, would be considered a significant unavoidable impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Mule deer (*Odocoileus hemionus*). The mule deer is considered a CDFG trust resource and is considered a special-status species for the purposes of this analysis, because take of the species requires a game permit. Mule deer have been documented within and adjacent to the project area during focused surveys in 2004 for mammals by Impact Sciences.⁴⁶⁶ Mule deer were also observed in the High Country SMA/SEA 20 in 2005.⁴⁶⁷ Construction-related activities could result in impacts to individual mule deer. Potentially significant impacts to mule deer could occur without mitigation, depending on the number and extent of the species on site that may be disturbed or removed. In order to reduce impacts to this species, the project applicant would implement several mitigation measures designed to avoid impacts during the rearing season (i.e., the period from birth to dispersal of young) and otherwise capture and relocate animals away from the work area prior to construction. These animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground disturbing activities, in an effort to salvage animals that may be discovered during construction activities. These measures will reduce impacts to mule deer individuals to the extent feasible and practicable. Applicable mitigation measures include the previously incorporated measures SP 4.6-53 and SP 4.6-59 (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable

⁴⁶⁶ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

⁴⁶⁷ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

mitigation measures are MV 4.3-26 (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities) and MV 4.3-30 (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Mountain lion (*Odocoileus hemionus*). The mountain lion is designated by CDFG as a Specially Protected Mammal, which means it may not be taken, injured, possessed, transported, imported, or sold without a depredation permit. The mountain lion is considered a special-status species for the purposes of this analysis. Mountain lions prefer habitats that provide cover, such as thickets of brush and timber in woodland vegetation communities.⁴⁶⁸ They also utilize caves and other natural cavities for cover and breeding. Mountain lions have been documented within and adjacent to the project area during focused surveys in 2004 for mammals by Impact Sciences.⁴⁶⁹ Specific locations for mountain lions in the project area were not provided, but it is assumed that mountain lions could occur anywhere in the project area where deer also occur. Construction-related activities could result in impacts to individual mountain lion. Potentially significant impacts to mountain lion could occur without mitigation, depending on the number and extent of the species on site that may be disturbed or removed. In order to reduce impacts to this species, the project applicant would implement several mitigation measures designed to avoid impacts during the rearing season (i.e., the period from birth to dispersal of young) and otherwise capture and relocate animals away from the work area prior to construction. These animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground-disturbing activities, in an effort to salvage animals that may be discovered during construction activities. These measures will reduce impacts to mountain lion individuals to the extent feasible and practicable. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable mitigation measures are **MV 4.3-14** (pre-construction surveys for mountain lion natal dens and establishment of appropriate setbacks), **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities), and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of

⁴⁶⁸ D.C. Zeiner et al., *California's Wildlife: Volume III. Mammals* (Sacramento: California Department of Fish and Game, 1990).

⁴⁶⁹ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

vegetation). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

American badger (*Taxidea taxus*). The American badger is a California Species of Special Concern (CSC). Badgers are generally associated with dry, open, treeless regions, prairies and grasslands, low-intensity agriculture (e.g., pasture and dryland crops), drier open shrublands and forest, parklands, and cold desert areas.⁴⁷⁰ The badger, although not common on site, has been documented through systematic surveys and anecdotal observations of badger dens and tracks in three locations in the project area, including the Specific Plan area,⁴⁷¹ Potrero Creek in the Specific Plan area,⁴⁷² and High Country SMA/SEA 20.⁴⁷³ Construction-related activities could result in impacts to individual American badger. Potentially significant impacts to American badgers could occur without mitigation, depending on the number and extent of the species on site that may be disturbed or removed. In order to reduce impacts to this species, the project applicant would implement several mitigation measures designed to avoid impacts during the rearing season (i.e., the period from birth to dispersal of young) and otherwise capture and relocate animals away from the work area prior to construction. These animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground-disturbing activities, in an effort to salvage animals that may be discovered during construction activities. These measures will reduce impacts to badger individuals to the extent feasible and practicable. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable mitigation measures include **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities.), **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and **MV 4.3-17** (American badger natal den avoidance). Implementation of these mitigation measures would reduce impacts to the American badger to a less than significant level. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR.

⁴⁷⁰ C.A. Long, "Taxidea taxus," *Mammalian Species* 26 (1973), 1-4; Zeiner et al., *California's Wildlife: Volume III. Mammals*.

⁴⁷¹ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

⁴⁷² P. Behrends (Dudek and Associates, Inc.), personal observation of badger den in Potrero Creek during wetland delineation, August, 1, 2006.

⁴⁷³ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

Black bear (*Ursus americanus*). The American black bear is considered special status as a trust resource by CDFG for the purposes of this report. The black bear is found in dense, mature stands of a variety of forest types. It can utilize valley foothill riparian forests, wet meadows, and brushy stands of forests. The black bear was anecdotally observed within High Country SMA/SEA 20 in 2005.⁴⁷⁴ The specific location was not recorded, but it is assumed that black bears utilize portions of the High Country SMA/SEA 20 due to its connection to the Santa Susana Mountains to the south. Construction-related activities could result in impacts to individual black bear. Potentially significant impacts to black bear could occur without mitigation, depending on the number and extent of the species on site that may be disturbed or removed. In order to reduce impacts to this species, the project applicant would implement several mitigation measures designed to avoid impacts during the rearing season (i.e., the period from birth to dispersal of young) and otherwise capture and relocate animals away from the work area prior to construction. These animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground disturbing activities, in an effort to salvage animals that may be discovered during construction activities. These measures will reduce impacts to badger individuals to the extent feasible and practicable. Applicable mitigation measures include the previously incorporated measures SP 4.6-53 and SP 4.6-59 (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable mitigation measures are **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities) and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Impacts to Species Potentially Occurring on the Mission Village Site

Trask shoulderband snail (*Helminthoglypta traskii traskii*). The Trask shoulderband snail is listed as a California Special Animal. Surveys of the project area for Trask shoulderband snail between November 2009 and January 2010⁴⁷⁵ were negative. However, three non-special-status shoulderband snail species were detected in the project area or surrounding areas. These included specimens tentatively identified as Southern California shoulderband snail, Vasquez rocks shoulderband snail, and Grapevine shoulderband snail. Based on these survey results, the presence of coastal scrub, riparian and chaparral vegetation communities, and the occurrence of the Trask shoulderband snail downstream along the Santa Clara

⁴⁷⁴ Ibid.

⁴⁷⁵

River in the Fillmore area, it was concluded that the Trask shoulderband snail potentially occurs in the project area. Potential direct impacts (loss of individual snails and/or microhabitats) and indirect impacts (construction-related dust and ground vibration; habitat fragmentation; off-road vehicles; cattle grazing; altered wildfire regimes; invasive plant species; increased human activity; Argentine ants; other introduced non-native snails such as decollate snails; increased activity by pet, stray, and feral cats and dogs; and pesticides) to Trask shoulderband snail, if it occurs, as a result of implementation of the proposed project would, (1) constitute a substantial direct adverse effect on this species, (2) conflict with local policies and ordinances protecting biological resources, and (3) substantially reduce the number and range of this species. Thus, this impact is significant, absent mitigation. In order to reduce direct impacts to this species, the project applicant would implement a series of mitigation measures designed to avoid or minimize the impact of project implementation on Trask shoulderband snail, if it occurs, to a level that is adverse but not significant. Applicable mitigation measures include the following previously incorporated measures:

- Mitigation Measures **SP 4.6-1** through **SP 4.6-16**, **SP 4.6-21** through **SP 4.6-26**, and **SP 4.6-63** (habitat restoration, enhancement, and preservation of the River Corridor SMA/SEA 23);
- Mitigation Measure **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23), **SP 4.6-18**(provision of transition areas adjacent to the River Corridor SMA/SEA 23), **SP 4.6-19** (requirements for transition areas adjacent to the River Corridor SMA/SEA 23).
- Mitigation Measures **SP 4.6-20**, **SP 4.6-34**, and **SP 4.6-35** (guidelines for grading activities in the River Corridor SMA/SEA 23 and the High Country SMA/SEA 20);
- Mitigation Measure **SP 4.6-27** (habitat enhancement of the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-29** through **SP 4.6-32** (recreation and access restrictions within the High Country SMA/SEA 20);
- Mitigation Measure **SP 4.6-33** (protection of transition areas between the development edge and the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-36** through **SP 4.6-42** (open space dedication of the High Country SMA/SEA 20);
- Mitigation Measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks); and

This impact would also be reduced through the implementation of the following:

- Mitigation Measure **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas)
- Mitigation Measure **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- Mitigation Measure **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village);
- Mitigation Measures **MV 4.3-31** through **MV 4.3-43** (wetlands mitigation plan and riparian restoration activities on the project site);
- Mitigation Measure **MV 4.3-45** (develop an integrated pest management plan that addresses pesticide use)
- Mitigation Measure **MV 4.3-47** (control of pet, stray, and feral cats and dogs in or near open space areas)
- Mitigation Measure **MV 4.3-48** (quarterly monitoring and control measures for Argentine ants for up to 5 years),
- Mitigation Measure **MV 4.3-53** (dust control measures to protect vegetation communities and special-status aquatic wildlife species);
- Mitigation Measure **MV 4.3-54** (permanent fencing along trails in the River Corridor SMA/SEA 23);
- Mitigation Measure **MV 4.3-57** (review of plant palettes and inspection of container plants for use within 200 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation).

Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. Impacts to this species were not previously analyzed as part of the Newhall Ranch Specific Plan Program EIR and Additional Analysis because the snail was identified after that environmental documentation was certified.

Southern steelhead (*Oncorhynchus mykiss*). The southern steelhead is listed as federally endangered and is a California Species of Special Concern. Within the Santa Clara River drainage, southern steelhead historically inhabited Piru Creek, Sespe Creek, Santa Paula Creek, Hopper Creek, and possibly Pole Creek.⁴⁷⁶ Presently, southern steelhead occur downstream of the proposed project in the Santa Clara River watershed in Piru Creek, between the confluence with the Santa Clara River and Santa Felicia Dam, in Sespe Creek, in Santa Paula Creek, and possibly in Hopper Creek and Pole Creek.⁴⁷⁷ Habitat for juveniles and spawning adults is described as relatively cool freshwater streams, well-oxygenated water with adequate depth and cover in the way of gravel, cobble, boulder, undercut banks, large and small woody debris, and overhanging vegetation. As non-spawning adults, southern steelhead are found in the Pacific Ocean.⁴⁷⁸ Reconnaissance surveys conducted along the Santa Clara River and tributary drainages within the Specific Plan area of the RMDP were negative in 2004 and 2005.⁴⁷⁹ This species is not expected to occur in the project area and the requisite habitat features to support spawning and rearing are not present on site. Implementation of the proposed project would not directly impact this species. Impacts to this species were not addressed by the Newhall Ranch Specific Plan Program EIR.

California red-legged frog (*Rana draytonii*). The California red-legged frog is a federally threatened species and is a California Species of Special Concern. Breeding occurs in streams, deep pools, backwaters within streams and creeks, ponds, marshes, sag ponds, dune ponds, lagoons, and stock ponds. California red-legged frogs can occur in ephemeral ponds or permanent streams and ponds; however, populations probably cannot persist in ephemeral streams. The California red-legged frog has not been observed in the project area. While there are no records of California red-legged frog from the project site in the numerous wildlife surveys conducted since 1992, the species is known from the project region. The San Marino Environmental Associates report states that Thomas Haglund observed red-legged frogs in the mid-1970s in the Santa Clara River at Fillmore and that “this may represent the last sighting of this species in the Santa Clara River” (p. 37).⁴⁸⁰ Given that this species has been documented upstream of the project site within tributaries of the river, it is possible that non-breeding frogs could move through the river corridor within the project site. Should construction and/or grading activities occur during a time period that individual frogs are moving through the river corridor, the species may be adversely affected. In order to reduce impacts to this species, the project applicant would implement a series of mitigation measures designed to limit construction activities within aquatic habitats and capture and relocate

⁴⁷⁶ Titus, Erman, and Snider. *History and Status of Steelhead*.

⁴⁷⁷ Stoeker and Kelly, *Santa Clara River Steelhead Trout*.

⁴⁷⁸ D. McEwan and T.A. Jackson. *Steelhead Restoration and Management Plan for California* (Sacramento: CDFG, 1996); P. Moyle, *Inland Fishes of California*. (Berkeley and Los Angeles: University of California Press, 2002).

⁴⁷⁹ ENTRIX, Inc., *Focused Special-Status Fish Species Habitat Assessment*.

⁴⁸⁰ SMEA, *Sensitive Aquatic Species Survey*.

animals away from the work area prior to construction. Equipment would not be operated within areas of ponded or flowing water (unless otherwise approved by the Corps and CDFG), and water containing mud, silt, and other pollutants would not be allowed to enter flowing water. Further, any California red legged frogs potentially present would be removed from the disturbance footprint by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground disturbing activities in an effort to salvage animals that may be uncovered during construction activities.

Applicable mitigation measures include the following previously incorporated measures:

- Mitigation Measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks); and
- Mitigation Measures **SP 4.6-55** (federal and state permits for wetland impacts), and **SP 4.6-58** (NPDES and water quality permits).

Additional applicable mitigation measures include:

- Mitigation Measure **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas);
- Mitigation Measure **MV 4.3-3** (surveys of riverbed for California red-legged frog);
- Mitigation Measure **MV 4.3-8** (patrol for stranded fish and aquatic organisms);
- Mitigation Measure **MV 4.3-9** (development of a Stream Crossing and Diversion Plan);
- Mitigation Measure **MV 4.3-10** (installation of structures within the riverbed not to impair movement of aquatic life);
- Mitigation Measure **MV 4.3-11** (regulating stream diversion bypass channels and dewatering);
- Mitigation Measure **MV 4.3-12** (creation of habitat for special-status fish during construction);
- Mitigation Measure **MV 4.3-13** (prevention of mud and pollutants from entering streams and storm flows);
- Mitigation Measure **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities).

Implementation of these mitigation measures would reduce impacts to California red-legged frog to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to California red-legged frog, due to the species' limited potential to occur on the project site.

Rosy boa (*Charina trivirgata*). The rosy boa is a California Special Animal. The rosy boa inhabits rocky shrubland and desert habitats and is attracted to oases and streams but does not require permanent water.⁴⁸¹ Rosy boas were not trapped or otherwise observed during surveys conducted on portions of the Specific Plan area in 2004 and 2006.⁴⁸² Suitable habitat occurs in association with scrub, chaparral, riverbank, and oak woodland habitats, and rosy boa is presumed to occur in portions of the site supporting these habitat types. Construction-related activities could result in the direct impacts to individual animals. In order to reduce impacts to this species, the project applicant would implement four mitigation measures designed to capture and relocate animals away from the work area prior to construction. The captured animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground-disturbing activities in an effort to salvage animals that may be uncovered during construction activities. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable mitigation measures are **MV 4.3-7** (surveys to capture and relocate special-status reptiles) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR concluded that the substantial loss of habitat, and potential impacts to individuals of this species, would be considered an unavoidable significant impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement

⁴⁸¹ Stebbins, *Western Reptiles and Amphibians*.

⁴⁸² Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area*.

and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

San Bernardino ringneck snake (*Diadophis punctatus modestus*). The San Bernardino ringneck snake is a California Special Animal. The ringneck snake is found in moist habitats, including woodlands, hardwood and conifer forest, grassland, sage scrub, chaparral, croplands/hedgerows, and gardens.⁴⁸³ San Bernardino ringneck snakes were not trapped or otherwise observed during surveys conducted on portions of the Specific Plan area in 2004 and 2006.⁴⁸⁴ Suitable habitat occurs at the project site in association with scrub, chaparral, riverbank and oak woodland habitats, and San Bernardino ringneck snake is presumed to occur in portions of the site supporting these habitat types. Construction-related activities could result in direct impacts to individual animals. In order to reduce impacts to this subspecies, the project applicant would implement two mitigation measures designed to capture and relocate animals away from the work area prior to construction. The captured animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the subspecies. In addition, the project applicant would conduct biological monitoring during ground disturbing activities in an effort to salvage animals that may be uncovered during construction activities. Applicable mitigation measures are **MV 4.3-7** (surveys to capture and relocate special-status reptiles) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce the impacts to the San Bernardino ringneck to a level that is adverse but not significant.

The Newhall Ranch Specific Plan Program EIR concluded that the substantial loss of habitat, and potential impacts to individuals of this species, would be considered an unavoidable significant impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of 616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable

⁴⁸³ NatureServe, "An Online Encyclopedia of Life." Stebbins, *Western Reptiles and Amphibians*.

⁴⁸⁴ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area*.

for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Coast patch-nosed snake (*Salvadora hexalepis virgultea*). The coast patch-nosed snake is listed as a California Species of Special Concern. It occupies desert scrub, coastal chaparral, washes, sandy flats, and rocky areas. Coast patch-nosed snakes were not trapped or otherwise observed during surveys conducted on portions of the Specific Plan area in 2004 and 2006.⁴⁸⁵ The project area is located towards the northern extent of the subspecies' range,⁴⁸⁶ and based on the CNDDDB, the coast patch-nosed snake has been documented only south of the project area. Suitable habitat occurs in association with scrub habitat on site, and coast patch-nosed snake is presumed to occur in areas supporting this habitat type. Construction-related activities could result in direct impacts to individual animals. In order to reduce impacts to this species, the project applicant would implement a series of mitigation measures designed to capture and relocate animals away from the work area prior to construction. The captured animals would be handled by qualified biologists and placed in a pre-approved area capable of supporting the species. In addition, the project applicant would conduct biological monitoring during ground disturbing activities in an effort to salvage animals that may be uncovered during construction activities. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable mitigation measures are **MV 4.3-7** (surveys to capture and relocate special-status reptiles) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to the coast patch-nosed snake to a level that is adverse but not significant.

The Newhall Ranch Specific Plan Program EIR concluded that the substantial loss of habitat, and potential impacts to individuals of this species, would be considered an unavoidable significant impact; however, the mitigation proposed in the Newhall Ranch Specific Plan Program EIR was not as extensive as the mitigation recommended in this EIR. In addition to the mitigation measures described above, a total of 6,113 acres of potential habitat will be protected and managed in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area. Additional mitigation to that in the Newhall Ranch Specific Plan Program EIR includes **MV 4.3-24** (preservation of

⁴⁸⁵ Impact Sciences, Inc., 2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area.

⁴⁸⁶ Stebbins, *Western Reptiles and Amphibians*.

616.3 acres of coastal scrub on site within Open Area and/or off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); **MV 4.3-28** (Oak Resource Management Plan identifying areas suitable for oak woodland enhancement and creation); and **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation). This additional open space would reduce impacts to a level that is adverse, but not significant. Also, see **Wildlife Habitat Loss** for a discussion of project-related impacts to special-status wildlife due to habitat loss.

South coast garter snake (*Thamnophis sirtalis*). The south coast garter snake is a California Species of Special Concern. No focused surveys have been conducted for this species, and no observations have been noted in previous wildlife surveys for other riparian and aquatic species.⁴⁸⁷ Natural history records for the south coast garter snake in California include sightings from Santa Clara River Valley (Ventura County), south to San Pasqual (San Diego County).⁴⁸⁸ Suitable habitat for the species occurs on-site in association with marsh, riparian and adjacent habitats. The removal of riparian vegetation and construction activities associated with the proposed bridge and/or bank protection could result in impacts to individual south coast garter snakes. Impacts to the south coast garter snake would be potentially significant, depending on the number and extent of this species that may be disturbed or removed. Implementation of proposed Mitigation Measures **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas), **MV 4.3-9** (development of a Stream Crossing and Diversion Plan), **MV 4.3-10** (installation of structures within the riverbed not to impair movement of aquatic life), **MV 4.3-11** (regulating stream diversion bypass channels and dewatering), **MV 4.3-13** (prevention of mud and pollutants from entering streams and storm flows), and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities), would reduce impacts to the species to a less than significant level. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

⁴⁸⁷ SMEA, *Sensitive Aquatic Species Survey*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part II*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part III*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part IV*; Aquatic Consulting Services, Inc., *Aquatic Surveys along the Santa Clara River; Part I*; Impact Sciences, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California*; Compliance Biology, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project*; Impact Sciences, Inc., *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area, Valencia, California*; Ecological Sciences, Inc., "Results of Focused Arroyo Toad Surveys, Castaic Creek" (2004).

⁴⁸⁸ NatureServe, "An Online Encyclopedia of Life."

Grasshopper sparrow (*Ammodramus savannarum*). The grasshopper sparrow is a California Species of Special Concern. The species frequents dense, dry or well-drained grassland, especially native grassland with a mix of grasses and forbs for foraging and nesting. Grasshopper sparrows require fairly continuous native grassland areas with occasional taller grasses, forbs, or shrubs for song perches.⁴⁸⁹ No observations of the grasshopper sparrow have been made within the project area, but potential habitat exists on site. Depending on the number and extent of this species' bird nests that may be disturbed or removed, the loss of active nests would be a potentially significant impact. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of Mitigation Measures **MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant.

Black-chinned sparrow (*Spizella atrogularis*). The black-chinned sparrow is a California Special Animal and is a USFWS Bird of Conservation Concern. This species is not federally listed as threatened or endangered within any part of its range. The black-chinned sparrow occupies arid brushlands and chaparral, although it occurs less commonly within coastal sage scrub.⁴⁹⁰ The species may use open chaparral⁴⁹¹ but usually favors moderately dense but not overgrown chaparral of mixed species and shows in lowest numbers in thick old chaparral on north-facing slopes.⁴⁹² The black-chinned sparrow was not detected within the project area or region. The species has not been detected in the area for over a dozen years; it is not believed to occur within the project area. However, the species is likely to occur as a migrant on sage scrub- and chaparral-covered hillsides and a few could remain to breed on more rugged slopes on the borrow and grading sites. Should this species occur on the site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' bird nests that may be disturbed or removed, the loss of active nests would be a potentially significant impact. The project applicant would implement mitigation measures to reduce or avoid impacts to black-chinned sparrow before and during construction. Applicable mitigation measures include previously incorporated measures **SP 4.6-53** and **SP**

⁴⁸⁹ Garrett and Dunn, *The Birds of Southern California*.

⁴⁹⁰ P. Unitt, *San Diego County Bird Atlas*. No. 39. October 31, 2004 *Proceedings of the San Diego Society of Natural History* (Ibis Publishing Company, 2004); Garrett and Dunn, *The Birds of Southern California*.

⁴⁹¹ Garrett and Dunn, *The Birds of Southern California*.

⁴⁹² Chris R. Tenney, "Black-Chinned Sparrow." *The Birds of North America Online*, ed. A. Poole, 270 (1997), <http://bna.birds.cornell.edu/bna/species/270>; Unitt, *San Diego County Bird Atlas*.

4.6-59 (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). This impact would also be reduced through the implementation of **Mitigation Measures MV 4.3-15** (pre-construction surveys for nesting native bird species and construction setbacks for active nests) and **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Ringtail Cat (*Bassariscus astutus*). The ringtail cat (ringtail) is a California Fully Protected species. Suitable habitat for ringtails consists of broken semi-arid country with a mixture of hardwood forest and shrubland in close association with rocky areas or riparian habitats.⁴⁹³ Although no ringtails were documented during the mammal survey, Impact Sciences concluded that the species has a moderate potential to occur on site in dense woodland or riparian areas.⁴⁹⁴ However, this species has never been observed in the numerous wildlife surveys conducted in the Specific Plan area, including recent wildlife surveys conducted by Dudek.⁴⁹⁵ Should ringtail be present, construction-related activity could result in direct impacts to individual ringtail. Potentially significant impacts to ringtail could occur without mitigation, depending on the number and extent of the species on site that may be disturbed or removed. In order to reduce impacts to this species, the project applicant would implement several mitigation measures designed to avoid impacts, including conducting pre-construction surveys for ringtail in suitable habitat in and within 300 feet of the construction zone and, if the species is observed in the breeding and rearing period, no construction-related activities shall occur within 300 feet until it has been determined that construction activities would not adversely affect the rearing of young. In addition, the project applicant would conduct biological monitoring during ground disturbing activities, in an effort to salvage animals that may be discovered during construction activities. These measures will reduce impacts to badger individuals to the extent feasible and practicable. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable mitigation measures include **MV 4.3-26** (pre-construction educational meetings, construction-limit

⁴⁹³ I. Poglayen-Neuwall and D.E. Toweill. "Bassariscus astutus," *Mammalian Species* 327 (1988), 1-8; Zeiner et al., *California's Wildlife: Volume III. Mammals*.

⁴⁹⁴ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

⁴⁹⁵ Dudek and Associates, Inc., *2006 Spineflower Monitoring Pilot Study* (2006); Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*; Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch Specific Plan Area*; Dudek and Associates, Inc., *Biological Resources Technical Report for the Valencia Commerce Center*.

staking, and biological monitoring during vegetation clearing and grading activities), **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and **MV 4.3-49** (ringtail avoidance). Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.

Townsend's big-eared bat (*Corynorhinus townsendii townsendii*), California Species of Special Concern; **western small-footed myotis** (*Myotis ciliolabrum*), California Special Animal; and **long-legged myotis** (*Myotis volans*), California Special Animal. These bat species have not been observed on the project site, but given the presence of suitable habitat, these species could roost and/or forage on or adjacent to the site. Should active bat roosts be present, construction-related activity could result in the direct loss or abandonment of active roost sites. In order to reduce impacts to this species, the project applicant would implement mitigation measures designed to avoid direct impacts to bat individuals during construction and to establish new day roosts should any existing day roosts be permanently lost as a result of the project. The applicable mitigation measure for impacts during construction is **MV 4.3-18** (pre-construction surveys for active roosts of special-status bats), which requires that, no earlier than 30 days prior to the commencement of construction activities, a pre-construction survey be conducted by a qualified biologist to determine whether active roosts of special-status bats are present on or within 300 feet of the project disturbance boundaries. Should an active maternity roost be identified (the breeding season of native bat species in California generally occurs from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, at the discretion of the biological monitor, until the roost is vacated and juveniles have fledged, as determined by the biologist. The applicable mitigation measures for permanent loss of roost sites are **MV 4.3-19** (day roost site replacement), which requires the project applicant to prepare and implement a bat roost site creation plan that would establish (an) alternative roost site(s) within suitable preserved open space located at an adequate distance from sources of human disturbance and **MV 4.3-78** (culvert and bridge design to provide roosting habitat for bats), which requires a qualified biologist shall work with the project engineer to identify and incorporate structures into the design that provide suitable roosting habitat for bat species occurring in the project area. Implementation of these mitigation measures would reduce impacts to roosting bats to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Southern grasshopper mouse (*Onychomys torridus*). The southern grasshopper mouse is a California Species of Special Concern. The southern grasshopper mouse is found rangewide in low arid scrub and

semi-scrub vegetation,⁴⁹⁶ and the subspecies *O. t. ramona* (which is the subspecies designated as a California Species of Special Concern) occurs in grasslands and sparse coastal scrub habitats. The mammal assessment conducted by Impact Sciences did not document the southern grasshopper mouse in the project area.⁴⁹⁷ The species also was not captured in pitfall trapping studies in 2004 and 2006 that were conducted primarily to inventory the reptiles and amphibians in the project area.⁴⁹⁸ However, this species has the potential to occur on site in scrub and grassland habitat. Should this species occur on site, construction-related activities could result in direct impacts to the individual southern grasshopper mouse. In order to reduce impacts to this species, the project applicant would conduct biological monitoring during ground-disturbing activities, in an effort to salvage animals that may be discovered during construction activities. These measures will reduce impacts southern grasshopper mouse individuals to the extent feasible and practicable. Applicable mitigation measures include the previously incorporated measures **SP 4.6-53** and **SP 4.6-59** (updated surveys for special-status species and consultation with the County and CDFG at important benchmarks). Additional applicable Mitigation Measure **MV 4.3-26** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities) would also be implemented. Implementation of these mitigation measures would reduce this impact to a level that is adverse but not significant. The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis. See **Wildlife Habitat Loss**, for a discussion of project-related impacts to special-status wildlife due to habitat loss.

Impacts to Special-Status Wildlife Species Occurring Downstream of the Project Site

The following special-status wildlife species are known to, or could, occur within the Santa Clara River downstream of the Mission Village project site: Santa Ana sucker, unarmored threespine stickleback, arroyo chub, arroyo toad, California red-legged frog, southwestern pond turtle, and two-striped garter snake. The *Flood Technical Report for the Mission Village Project*⁴⁹⁹ found that there would be no significant changes in water flows, velocities, depth, sedimentation or floodplain and channel conditions downstream of the project site as a result of the proposed project (see **Appendix 4.2**). These hydraulic effects were also found to be insufficient to alter the amount, location, and nature of aquatic and riparian

⁴⁹⁶ D.H. Frank and E.J. Heske. "Seasonal Changes in Space Use Patterns in the Southern Grasshopper Mouse, *Onychomys torridus torridus*," *Journal of Mammalogy* 73 (1992), 292–298; R. McCarty, "Onychomys torridus," *Mammalian Species* 59 (1975), 1–5.

⁴⁹⁷ Impact Sciences, Inc., *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

⁴⁹⁸ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area*.

⁴⁹⁹ PACE, *Flood Technical Report for the Mission Village Project*.

habitats in the project area and downstream into Ventura County. The technical analysis further determined that the river would still retain sufficient width to allow natural fluvial processes to continue; consequently the mosaic of habitats in the river that support various sensitive species would be maintained and the population of the species within and immediately adjacent to the river corridor would not be significantly affected. Based on that technical assessment, and the analysis of these species and their habitat described in the PACE 2006 report⁵⁰⁰ (these conclusions were reached by ENTRIX based upon the PACE report), no significant impacts to downstream populations of these special-status wildlife species are expected to occur.

(i) Sensitive Plant Communities

As discussed under **subsection 7.c**, CDFG has identified as sensitive four of the plant communities found within the Mission Village project site: big sagebrush scrub, Mexican elderberry scrub, southern willow scrub, and southern cottonwood–willow riparian. In addition to those vegetation communities ranked as G1, G2, or G3, riparian and wetland vegetation communities on site are considered special-status, including herbaceous wetland, river wash, alluvial scrub, giant reed, arrow weed scrub, and mulefat scrub. Given the occurrence of *Artemisia tridentata* ssp. *parishii* (which is considered special status by the County of Los Angeles) within the big sagebrush scrub community, this EIR treats big sagebrush scrub as a special-status vegetation community as well. Impacts to these sensitive plant communities are discussed below.

Herbaceous Wetland (NA/NA⁵⁰¹). The project site contains 4.0 acres of herbaceous wetland. The proposed project would result in the permanent conversion of 0.4 acre of herbaceous wetland, and 1.0 acre would be temporarily disturbed by bank stabilization and/or haul roads; however, this area would be revegetated following completion of construction. Of the total 1.2 acres present within the boundaries of the River Corridor SMA/SEA 23, 0.4 acre would be developed and 0.8 acre would be temporarily disturbed. Given the riparian nature of this plant community, the loss of herbaceous wetland would be a significant impact. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),

⁵⁰⁰ PACE, *Flood Technical Report for the Mission Village Project*.

⁵⁰¹ A conservation status rank is not applicable because the species is not a suitable target for conservation activities.

- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR, which analyzed impacts on this plant community as part of its assessment of the overall loss of wildlife habitat (**subsection 9.b.1.(b), Wildlife Habitat Loss**).

River Wash (NA/NA). The project site contains 115.1 acres of river wash. The proposed project would result in the permanent conversion of 9.7 acres of river wash. An additional 10.0 acres would be temporarily disturbed by bank stabilization and/or haul roads, but would be revegetated following completion of construction. Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 2.3 acres would be developed and 5.5 acres would be temporarily disturbed. The river wash in the project study area occurs in CDFG and Corps jurisdiction where it is associated with (1) wetlands, (2) state and/or U.S. waters, and (3) seasonally wetted portions of river wash. These areas may provide breeding habitat for aquatic species. Because river wash is a riparian vegetation community, the losses resulting from the project would represent a significant impact on biological resources absent mitigation. Impacts to this vegetation community also would be considered significant due to their potential to affect numerous sensitive species, which use this habitat, including the unarmored threespine stickleback, arroyo chub, arroyo toad, and others. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),

- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR, which analyzed impacts to this plant community as part of its assessment of the overall loss of wildlife habitat (see **subsection 9.b.1.(b), Wildlife Habitat Loss**).

Alluvial Scrub (NA/NA). The project site contains 0.5 acre of alluvial scrub. The proposed project would result in no permanent conversion of alluvial scrub; however, 0.5 acre would be temporarily disturbed by bank stabilization and/or haul roads, but would be revegetated following completion of construction. The alluvial scrub in the project study area occurs in CDFG and Corps jurisdiction where it is associated with (1) wetlands, (2) state and/or U.S. waters, and (3) seasonally wetted portions of alluvial scrub. These areas may provide breeding habitat for aquatic species. Because alluvial scrub is a riparian vegetation community, the losses resulting from the project would represent a significant impact on biological resources absent mitigation. Impacts to this vegetation community also would be considered significant due to their potential to affect numerous sensitive species, which use this habitat, including the unarmored threespine stickleback, arroyo chub, arroyo toad, and others. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),

- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR, which analyzed impacts to this plant community as part of its assessment of the overall loss of wildlife habitat (see **subsection 9.b.1.(b), Wildlife Habitat Loss**).

Big Sagebrush Scrub (35.110.00). The project site contains 24.6 acres of big sagebrush scrub, of which 15.8 acres would be developed and 6.5 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated following completion of construction). Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 0.8 acre would be developed and 0.2 acre would be temporarily disturbed. Given that *Artemisia tridentata* ssp. *parishii* (which is considered sensitive by the County of Los Angeles) occurs within the big sagebrush scrub community, and that this plant community is considered sensitive by the CDFG, the loss of big sagebrush scrub would be a significant impact. Implementation of the following mitigation measures will address these impacts:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),

- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to big sagebrush scrub to a less than significant level. The Newhall Ranch Specific Plan Program EIR analyzed this impact as part of its assessment of the overall loss of wildlife habitat (see **subsection 9.b.1.(b), Wildlife Habitat Loss**).

Giant Reed (42.080.00). The project site contains 5.6 acres of giant reed. The proposed project would not result in the permanent conversion of giant reed; however, 0.1 acre would be temporarily disturbed by bank stabilization and/or haul roads, but would be revegetated following completion of construction. Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 0.1 acre would be temporarily disturbed. Given the riparian nature of this plant community, the impacts to giant reed would be significant. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),

- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31 through MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR, which analyzed impacts to this plant community as part of its assessment of the overall loss of wildlife habitat (see **subsection 9.b.1.(b), Wildlife Habitat Loss**).

Arrow Weed Scrub (63.710.00). The project site contains 7.6 acres of arrow weed scrub. The proposed project would result in the permanent conversion of 4.9 acres of arrow weed scrub. An additional 2.0 acres would be temporarily disturbed by bank stabilization and/or haul roads, but would be revegetated following completion of construction. Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 2.1 acres would be developed and 1.1 acres would be temporarily disturbed. Given the riparian nature of this plant community, the impacts to arrow weed scrub would be significant. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1 through SP 4.6-16 and SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18 and SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21 through SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),

- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31 through MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR, which analyzed impacts to this plant community as part of its assessment of the overall loss of wildlife habitat (see **subsection 9.b.1.(b), Wildlife Habitat Loss**).

Mexican Elderberry Scrub (63.410.00). The project site contains 5.8 acres of Mexican elderberry scrub. Given that this plant community is relatively uncommon in the project area and is considered sensitive by the CDFG, without mitigation, the permanent loss of 5.3 acres, in addition to the temporary loss of 0.3 acre of Mexican elderberry scrub would be a significant impact. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1 through SP 4.6-16 and SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18 and SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21 through SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31 through MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Mulefat Scrub (63.410.00). The project site contains 1.8 acres of mulefat scrub, of which 0.5 acre would be developed and 1.2 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated following completion of construction). Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 0.2 acre would be developed and 0.4 acre would be temporarily disturbed. Given the biological value of this riparian habitat, and because this plant community is considered sensitive and is under the jurisdiction of the CDFG, the loss of mulefat scrub would be a significant impact. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Southern Willow Scrub (61.208.00). The project site contains 1.5 acres of southern willow scrub, of which 0.7 acre would be developed and 0.1 acre would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated following completion of construction). Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 0.1 acre would be developed and <0.1 acre would be temporarily disturbed. Given the biological value of this habitat, and because this plant community is considered sensitive and is under the jurisdiction of the CDFG, the loss of southern willow scrub would be a significant impact. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

Southern Cottonwood–Willow Riparian (61.130.02). The project site contains 109.2 acres of southern cottonwood–willow riparian forest, of which 6.4 acres would be developed and 22.4 acres would be temporarily disturbed by bank stabilization and/or haul roads (but would be revegetated following completion of construction). Of the total acreage present within the boundaries of the River Corridor SMA/SEA 23, 4.8 acres would be developed and 14.1 acres would be temporarily disturbed. Given the biological value of this riparian habitat, and because this plant community is considered sensitive and is under the jurisdiction of the CDFG, the loss of southern cottonwood willow riparian forest would be a significant impact. To address this impact, the following mitigation measures are recommended:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23),
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to this plant community to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

(j) Jurisdictional Resources

The proposed project would result in the permanent fill of 20.76 acres and the temporary disturbance of an additional 12.06 acres of drainages under the jurisdiction of the Corps and CDFG (**Figures 4.3-11 through 4.3-11-A5, Impacted Jurisdictional Resources**). Areas to be permanently filled include 0.27 acre within Exxon Canyon, 2.69 acres within Lion Canyon, 6.56 acres within Magic Mountain Canyon, 1.30 acres within Dead-End Canyon, 4.03 acres within Middle Canyon, and 5.91 acres within the Santa Clara River and in the off-site areas: 0.32 acre within Unnamed Canyon 1, 0.31 acre within Unnamed Canyon 2, 0.69 acre within Unnamed Canyon D, and 0.19 acre within Mid Martinez Canyon.

The proposed project would also result in impacts to 2.38 acres (permanent impacts) and 13.25 acres (temporary impacts) of CDFG-only jurisdictional areas. Areas to be permanently filled include 2.16 acres within the Santa Clara River and 0.17 acre within Unnamed Canyon 2. The fill/removal/disturbance of these jurisdictional resources would be a significant impact.

Within the Corps and/or CDFG jurisdictional boundaries, the proposed project would affect the following vegetation communities and land covers:

- Santa Clara River: primarily river wash, southern cottonwood-willow riparian forest, California sagebrush scrub, coast live oak woodland, herbaceous wetlands, arrow weed scrub, giant reed grasslands, agriculture, and disturbed land.
- Exxon Canyon: primarily California sagebrush scrub, California sagebrush scrub-purple sage and California buckwheat, undifferentiated chaparral, isolated pockets of annual grasslands, and disturbed land.
- Lion Canyon: primarily California sagebrush scrub and chaparral.
- Dead-End Canyon: primarily California sagebrush scrub, California sagebrush scrub-purple sage and California buckwheat, undifferentiated chaparral, isolated pockets of annual grasslands, riparian, and disturbed land.
- Middle Canyon: primarily California sagebrush scrub, California sagebrush scrub-purple sage and California buckwheat, undifferentiated chaparral, isolated pockets of annual grasslands, and disturbed land.
- Mid-Martinez Canyon: primarily California sagebrush scrub, annual grasslands, and disturbed land.

- Magic Mountain Canyon: primarily California sagebrush scrub, California sagebrush scrub-purple sage and California buckwheat, undifferentiated chaparral, isolated pockets of annual grasslands, agriculture, and disturbed land.
- Unnamed Canyon 1: primarily California sagebrush scrub, California sagebrush scrub-California buckwheat, undifferentiated chaparral, and annual grasslands.
- Unnamed Canyon 2: primarily California sagebrush scrub, California sagebrush scrub-California buckwheat, annual grasslands, riparian, and developed and disturbed land.
- Unnamed Canyon D: primarily California sagebrush scrub, annual grasslands, riparian, and agriculture.
- Agricultural ditch: disturbed land.



Legend

- NRSP Boundary
- Mission Village Project Boundary
- Mission Village VTTM Boundary
- Permanent Impact Limits
- Temporary Impact Limits

Jurisdictional Areas

- Corps/CDFG
- CDFG only

NOTE: A jurisdictional delineation of Castaic Creek has not been conducted; therefore, jurisdictional areas within the boundaries of the project site associated with Castaic Creek have been estimated.

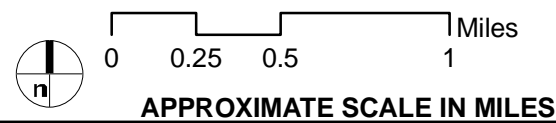


IMAGE SOURCE: DigitalGlobe 2007

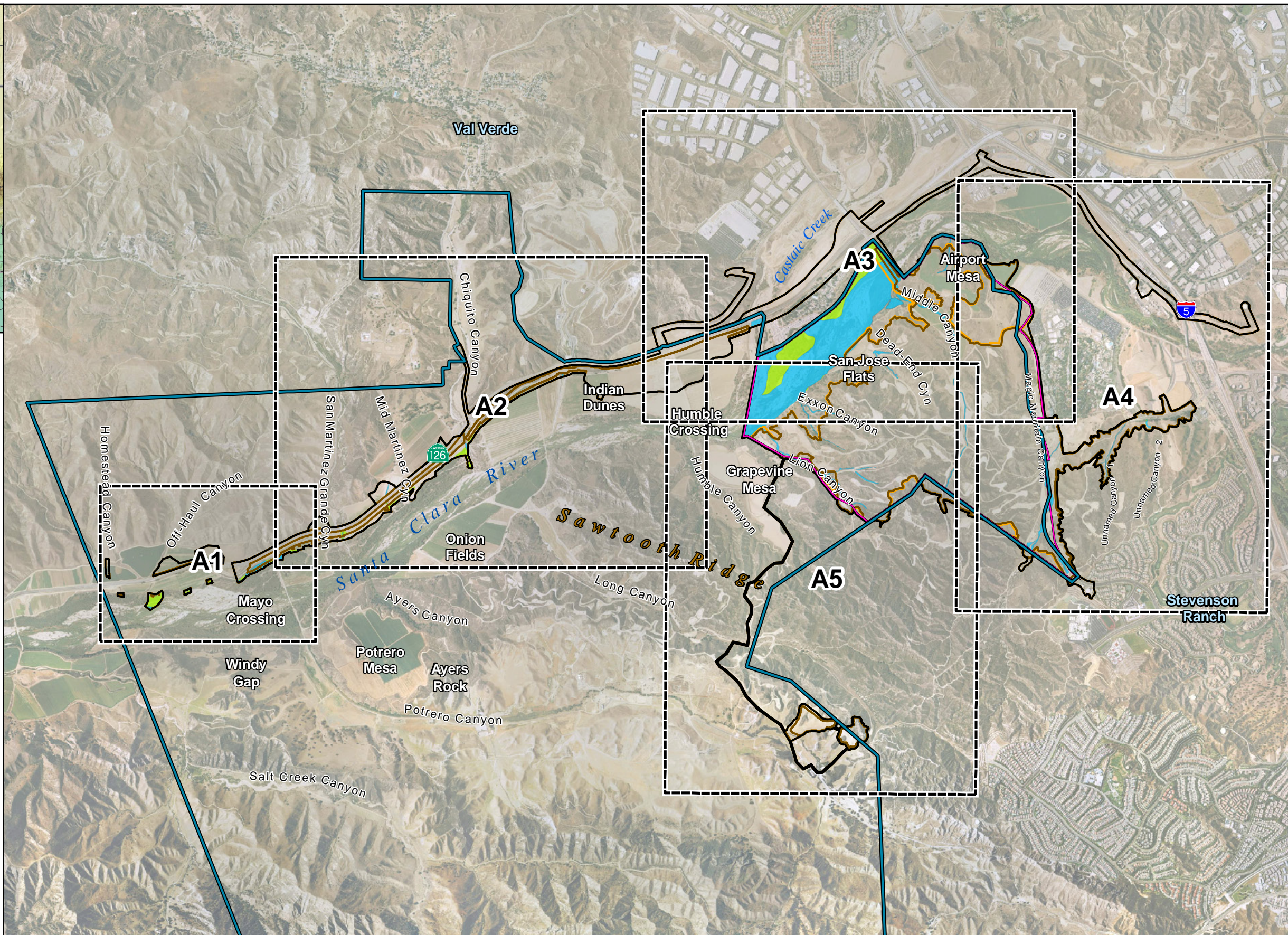


FIGURE 4.3-11

Mission Village EIR

Impacted Jurisdictional Resources

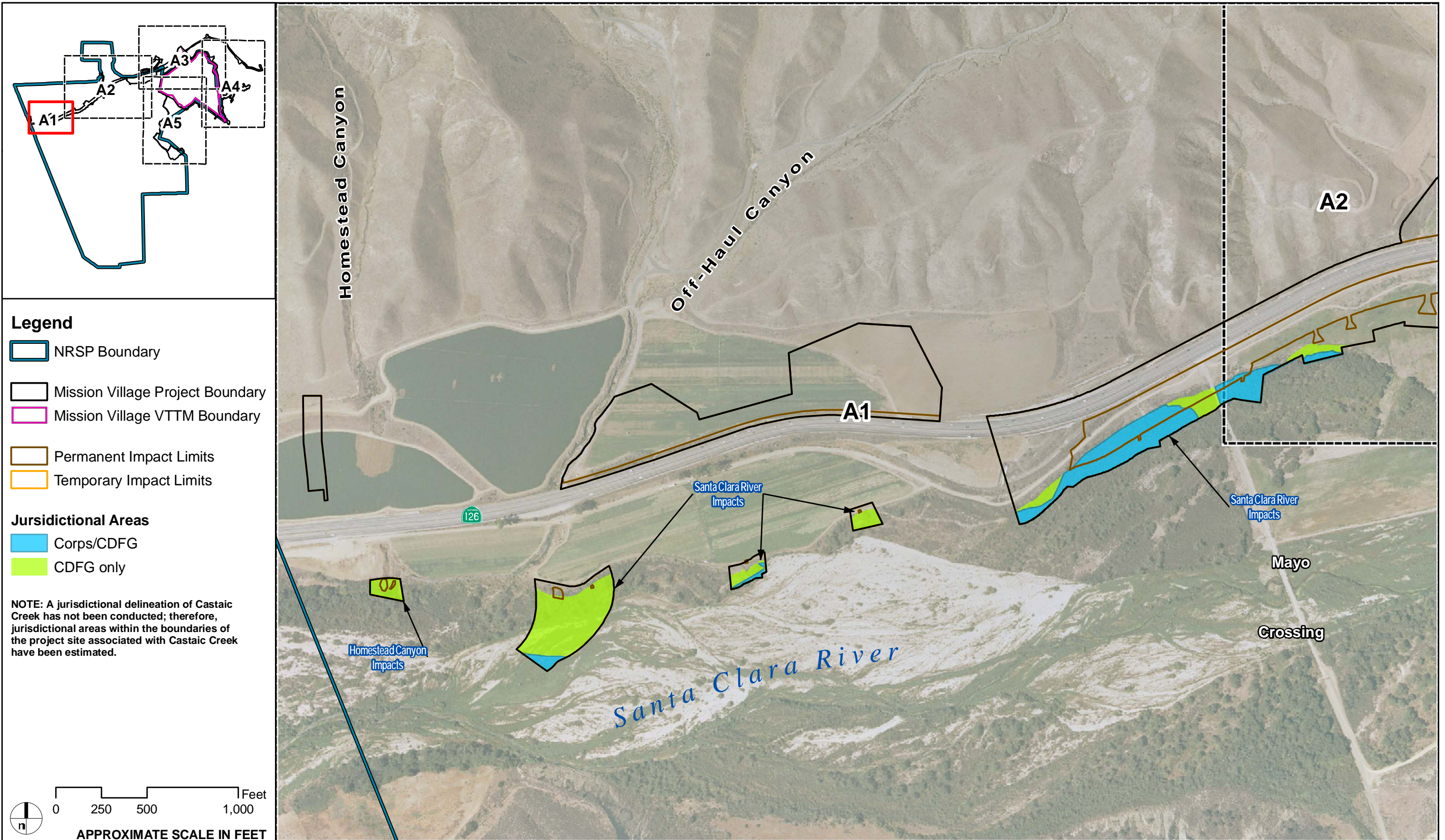


IMAGE SOURCE: DigitalGlobe 2007

FIGURE 4.3-11-A1

Mission Village EIR

Impacted Jurisdictional Resources



IMAGE SOURCE: DigitalGlobe 2007

FIGURE 4.3-11-A2

Mission Village EIR

Impacted Jurisdictional Resources

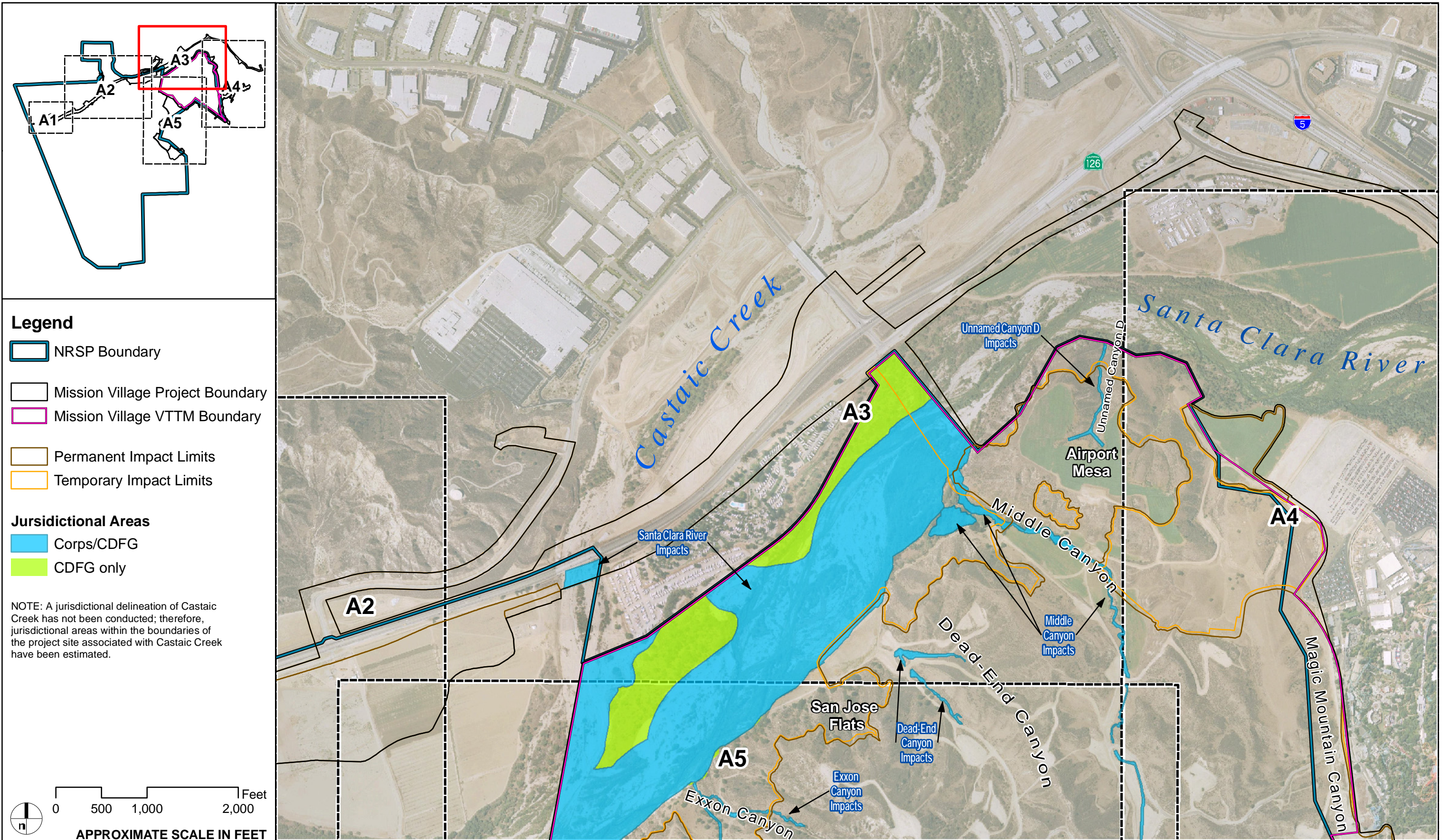


IMAGE SOURCE: DigitalGlobe 2007

FIGURE 4.3-11-A3

Mission Village EIR

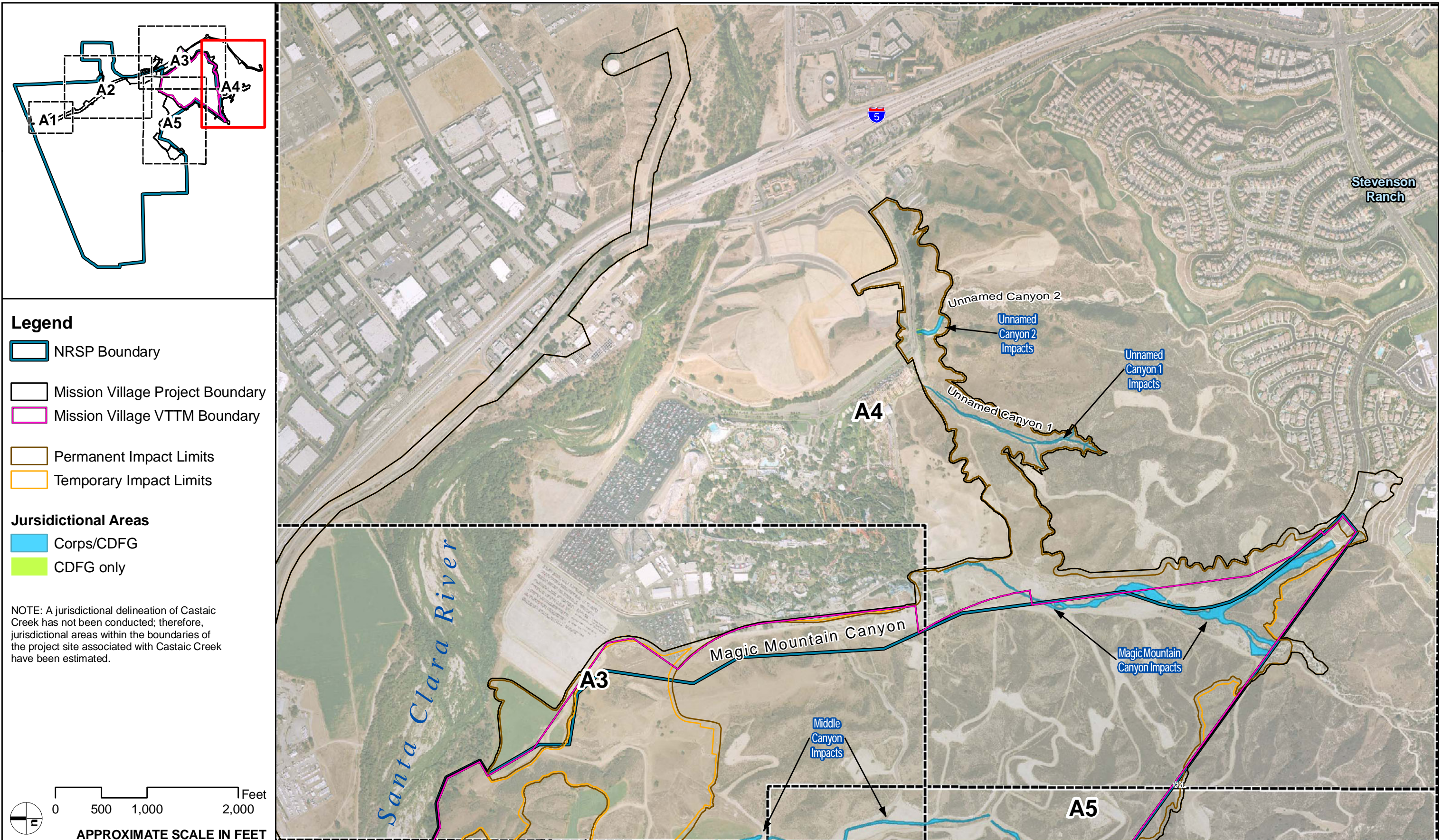


FIGURE 4.3-11-A4

Mission Village EIR

Impacted Jurisdictional Resources

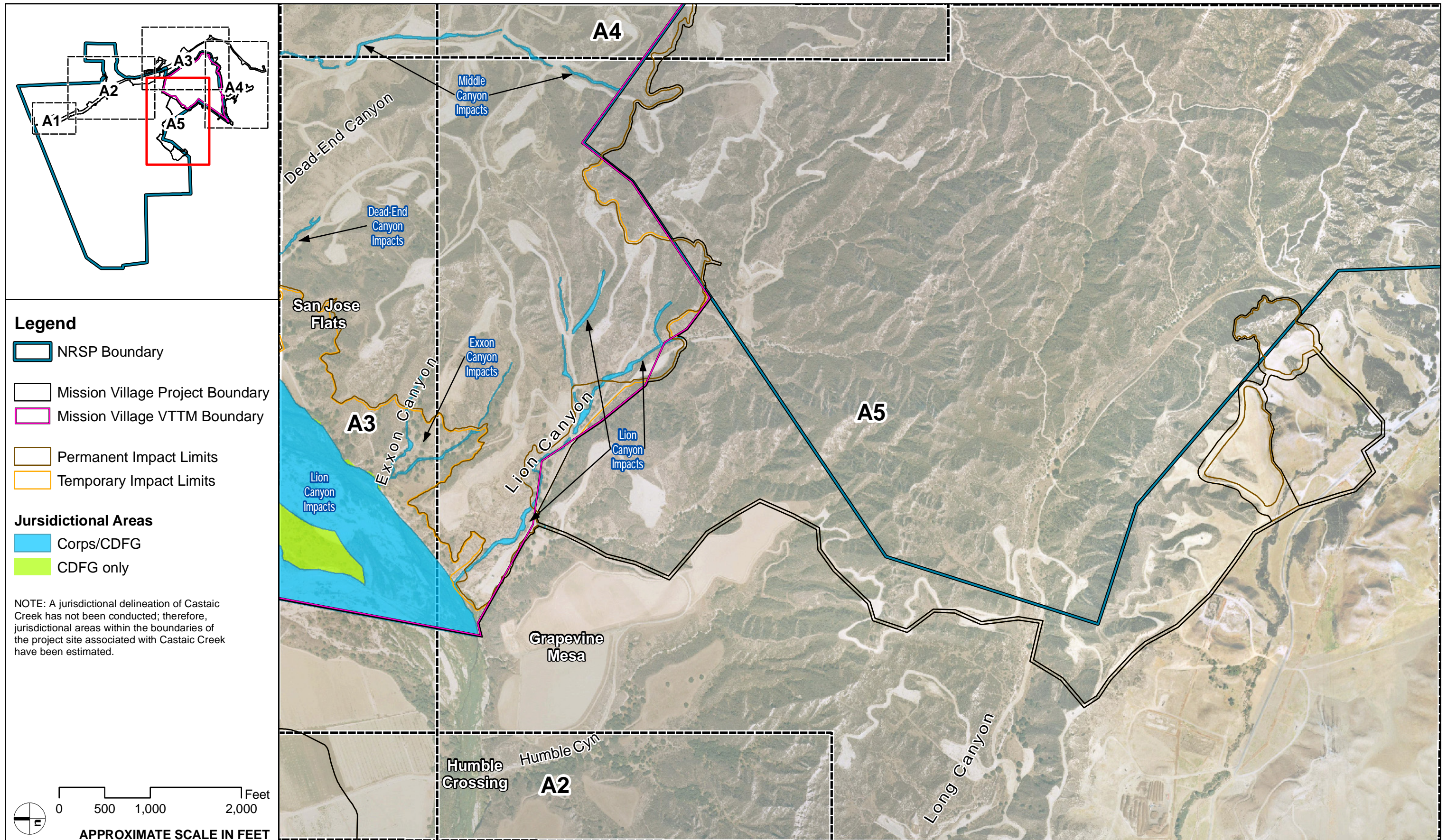


IMAGE SOURCE: DigitalGlobe 2007

FIGURE 4.3-11-A5

Mission Village EIR

Impacted Jurisdictional Resources

To address the project's potential impacts to resources within the jurisdiction of the Corps and/or CDFG, the following mitigation measures are recommended:

- **SP 4.6-1** through **SP 4.6-16** and **SP 4.6-63** (habitat restoration/enhancement in the River Corridor SMA/SEA 23; 1:1 riparian resource replacement),
- **SP 4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23),
- **SP 4.6-18** and **SP 4.6-19** (transition areas along the River Corridor SMA/SEA 23),
- **SP 4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA/SEA 23),
- **SP 4.6-21** through **SP 4.6-26** (open space dedication of the River Corridor SMA/SEA 23), and
- **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas),
- **MV 4.3-23** (development of a conceptual wetlands mitigation plan),
- **MV 4.3-30** (grading and construction activities should begin in disturbed areas and avoid isolating patches of vegetation), and
- **MV 4.3-31** through **MV 4.3-41** (wetlands mitigation plan and riparian restoration activities on the project site).

Once implemented, these mitigation measures would reduce impacts to jurisdictional resources to below a level of significance. This finding is consistent with the findings of the Newhall Ranch Specific Plan Program EIR.

The Mission Village applicant is seeking approval of a Clean Water Act (CWA) long-term, individual Section 404 permit from the Corps and a Master Streambed Alteration Agreement under Fish and Game Code section 1600, *et seq.* from CDFG for the Newhall Ranch Specific Plan area, including the Mission Village site. The environmental review for these permits is in process at this time and a Final EIS/EIR was released for final public comment in June 2010. The applicant would also be subject to all measures contained in these agreements/permits, if approved. Although it is expected that these measures would feasibly mitigate impacts to jurisdictional resources, they cannot be relied upon for CEQA compliance because they have not yet been adopted by the resource agencies. Therefore, consistent with the requirements of CEQA, the applicant shall, at a minimum, also implement the above measures.

(2) Indirect Impacts

Indirect impacts to biological resources would occur in those habitat areas surrounding the development envelope, as well as in remaining habitat areas within the proposed development area, both during and after the completion of the proposed project. Indirect impacts on biological resources as a result of project development on the site can include the following: (1) increased lighting and glare effects on wildlife species in remaining and adjacent open space areas; (2) a potential increase in pesticides, herbicides and pollutants into adjacent drainages, creeks, rivers and wetlands, as a result of landscaping irrigation and stormwater runoff; (3) an increase in non-native plant and wildlife species that are adapted to more urban environments and can out compete native species for available resources, thus reducing the distribution and population of native species; (4) increased human activity and domestic animal presence that can disturb natural habitat areas and displace wildlife populations; and (5) erosion and dust resulting from construction/grading activities.

Indirect impacts associated with the proposed project are not quantifiable, but are reasonably foreseeable. As such, the following discussion identifies expected types of secondary impacts and their relative magnitude, such that decision makers and the general public are aware of the indirect impact potential associated with implementation of the proposed project. This type of analysis is consistent with the requirements of CEQA.

(a) Increased Light and Glare

The development of a residential community would increase the number of nighttime light and glare sources on the site over current levels, which are very low to non-existent. Nighttime lighting can disturb resting and foraging behavior and can potentially alter breeding cycles and nesting behavior. If uncontrolled, such light where proximal to riparian areas associated with the Santa Clara River could adversely impact the composition and behavior of the animal species that occur in the area. Because of the potential disruption to breeding, movement, and foraging behavior of wildlife species, without mitigation, increased nighttime lighting and glare associated with the proposed project is a significant impact. Implementation of Newhall Ranch Specific Plan Program EIR Mitigation Measure 4.6-56 would reduce potential impacts resulting from increased light and glare to below a level of significance.

(b) Landscaping Irrigation and Stormwater Runoff

Overirrigation of landscaped areas, especially when combined with the use of chemicals, could lead to runoff that contains pesticides, herbicides, nitrates, and other contaminants. Any runoff that flows into the river corridor containing high levels of nutrients, particularly fertilizers and waste products such as nitrogen and phosphorous, could result in eutrophication (excessive nutrient buildup). This, in turn,

could result in a depletion of available oxygen due to increased biological oxygen demand (BOD) and reduce available dissolved oxygen for aquatic organisms. Other chemicals, pesticides, and herbicides could also adversely affect aquatic systems. In addition, paved surfaces would contribute runoff into the river corridor during storm events. Depending on the magnitude and frequency of storm events and the overall level of water quality, this runoff could cause increased eutrophication, depleted oxygen levels, long-term buildup of toxic compounds and heavy metals, and other adverse effects to biological resources associated with aquatic systems.

Project Design Features (PDFs) incorporated into the project to address water quality and hydrologic impacts include site design, source control, treatment control, hydromodification control, and Best Management Practices (BMPs). Stormwater runoff from all urban areas within the proposed project will be routed to bioretention areas, media filtration, and/or dry extended detention basin treatment control PDFs. Catch basin inserts will also be used in high use parking lots to address trash and debris and petroleum hydrocarbons. A detailed discussion of the PDFs is contained in **Appendix 4.22, Draft Mission Village Water Quality Technical Report**.⁵⁰² Collectively, the water quality treatment control PDFs will treat the pollutants of concern in runoff from the project site.

The effectiveness of these proposed measures to maintain water quality in the Santa Clara River was analyzed by GeoSyntec Consultants.⁵⁰³ The following summarizes the efficacy of these PDFs in reducing impacts on surface water quality; further details of each of these analyses are included in **Appendix 4.22**.

Sediments: MS4 Permit, Construction General Permit, Dewatering General Permit, and SUSMP-compliant BMPs will be incorporated into the project to address sediment in both the construction phase and post-development phase. Mean total suspended solids concentration and loads are predicted to be less in the post-development condition than in the existing conditions. Turbidity in stormwater runoff will be controlled through implementation of a Construction SWPPP and will be permanently reduced through the stabilization of erodible soils with development. On this basis, the impact of the project on biological resources due to increased sediments is considered less than significant.

Nutrients (Phosphorous and Nitrogen (Nitrate+Nitrite-N and Ammonia-N)): MS4 Permit, Construction General Permit, Dewatering General Permit, and SUSMP-compliant BMPs will be incorporated into the project to address nutrients in both the construction phase and post-development. Although average annual loads for total phosphorous, nitrate plus nitrite, and ammonia are predicted to increase from the project (due to increased average annual runoff volumes), average concentrations are predicted to

⁵⁰² GeoSyntec Consultants, *Mission Village Water Quality Technical Report* (2006).

⁵⁰³ GeoSyntec Consultants, *Mission Village Water Quality Technical Report* (**Appendix 4.3**).

decrease. Average concentrations are also predicted to be below or in the low range of observed wet weather values for Santa Clara River Reach 5. Average nitrate-N plus nitrite-N and ammonia-N concentrations are predicted to decrease with development to values well below LA Basin Plan objectives and TMDL wasteload allocations. The predicted nutrient concentrations are not expected to cause increased algae growth. On this basis, the impact of the project on biological resources due to increased nutrients is considered less than significant.

Trace Metals: MS4 Permit, Construction General Permit, General Dewatering Permit, and SUSMP-compliant BMPs will be incorporated into the project to address trace metals in both the construction phase and post-development phase. The average annual trace metal concentrations are predicted to decrease with project development (dissolved copper are predicted to be unchanged). Average annual trace metal loads are predicted to increase due to the increase in average annual runoff volume. Predicted average annual concentrations of dissolved copper, total lead, dissolved zinc, and total aluminum are below benchmark Basin Plan objectives, California Toxics Rule (CTR) criteria, and National Ambient Water Quality Criteria (NAWQC) criteria. Cadmium is not expected to be present at significant levels in runoff discharges from the project. On this basis, the impact of the project on biological resources due to increased trace metals is considered less than significant.

Chloride: MS4 Permit, Construction General Permit, Dewatering General Permit, and SUSMP-compliant BMPs will be incorporated into the project to address chloride loads (via volume reduction) in both the construction phase and post-development phase. The mean predicted concentration and load of chloride is predicted to increase with development, although the predicted concentration is well below the LA Basin Plan objective and is near the low end of the range of observed values in the Santa Clara River Reach 5. On this basis, the impact of the project on biological resources due to increased chloride is considered less than significant.

Pesticides: Pesticides in runoff may or may not increase in the post-development phase as a result of landscape applications. Proposed pesticide management practices, including source control, removal with sediments in treatment control PDFs, and advanced irrigation controls, in compliance with the requirements of the MS4 Permit and the SUSMP will minimize the presence of pesticides in runoff. During the Construction phase of the project, erosion and sediment control BMPs implemented per General Permit and General De-Watering Permit requirements will prevent pesticides associated with sediment from being discharged. Final site stabilization will limit mobility of legacy pesticides that may be present in pre-development conditions. On this basis, the impact of the project on biological resources due to increased pesticides is considered less than significant.

Pathogens: Post-development pathogen sources include both natural and anthropogenic sources. The natural sources include bird and mammal excrement. Anthropogenic sources include leaking septic and sewer systems and pet wastes. A reduction in agriculture and open space within the project area will reduce the bacteria produced by wildlife. The project will not include septic systems and the sewer system will be designed to current standards which minimizes the potential for leaks. Thus pet wastes are the primary source of concern. The PDFs will include source controls and treatment controls which in combination should help to reduce pathogen indicator levels in post-construction stormwater runoff. Pathogens are not expected to occur at elevated levels during the construction-phase of the project. On this basis, the project's impact on biological resources due to increased pathogen and pathogen indicators is considered less than significant.

Hydrocarbons: Hydrocarbon concentrations will likely increase post-development because of vehicular emissions and leaks. In stormwater runoff, hydrocarbons are often associated with soot particles that can combine with other solids in the runoff. Such materials are subject to treatment in the proposed extended detention basins, bioretention areas, and vegetated swales. Source control BMPs incorporated in compliance with the MS4 Permit and the SUSMP requirements will also minimize the presence of hydrocarbons in runoff. During the construction phase of the project, pursuant to the Construction General Permit, the Construction Stormwater Pollution Prevention Plan must include BMPs that address proper handling of petroleum products on the construction site, such as proper petroleum product storage and spill response practices, and those BMPs must effectively prevent the release of hydrocarbons to runoff per the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology standards. On this basis, the impact of the project on biological resources due to increased on hydrocarbons is considered less than significant.

Trash and debris: Trash and debris in runoff are likely to increase post-development if left unaddressed. However, the project PDFs, including source control and treatment BMPs incorporated in compliance with the MS4 Permit and the SUSMP requirements, will minimize the adverse impacts of trash and debris. Source controls such as street sweeping, public education, fines for littering, covered trash receptacles, and storm drain stenciling are effective in reducing the amount of trash and debris that is available for mobilization during wet weather. Trash and debris will be captured in catch basin inserts in the commercial area parking lot and in the treatment control PDFs. During the Construction phase of the project, PDFs implemented per General Permit and General De-Watering Permit requirements will remove trash and debris through the use of BMPs such as catch basin inserts and by general good housekeeping practices. Trash and debris are not expected to significantly impact receiving waters or biological resources due to the implementation of the project PDFs.

Methylene Blue Activated Substances (MBAS): In the post-development phase, the presence of soap in runoff from the project will be controlled through the source control PDFs, including a public education program on residential and charity car washing and a centralized car wash area directed to sanitary sewer in the multi-family residential areas. Other sources of MBAS, such as cross connections between sanitary and storm sewers, are unlikely given modern sanitary sewer installation methods and inspection and maintenance practices. During the construction phase of the project, equipment and vehicle washing will not use soaps or any other MBAS sources. Therefore, MBAS are not expected to significantly impact the receiving waters or biological resources under the proposed project.

Cyanide: In addition to the expected relatively low level of cyanide in untreated stormwater, cyanide in runoff from the project would be readily removed by biological uptake, degradation by microorganisms, and by volatilization in the treatment PDFs, especially the dry extended detention basins. Therefore cyanide is not expected to significantly impact the receiving waters or biological resources under the project.

Bioaccumulation: In the literature, the primary pollutants that are of concern with regard to bioaccumulation are mercury and selenium, neither of which will be introduced by the project or is naturally present at levels of concern in Santa Clara River watershed.⁵⁰⁴ On this basis, the potential for bioaccumulation in the project PDFs or in the Santa Clara River and adverse effects on waterfowl and other species is considered less than significant.

(c) Increase in Populations of Non-Native Plant and Wildlife Species

After project completion, a number of non-native plant species that are more adapted to urban environments could increase in population and potentially displace native species within the riparian corridor because of the ability of non-natives to compete more effectively for resources. It is unknown to what degree non-native plant species will displace native species in adjacent habitat areas. However, because non-native and exotic plants are commonly included in landscaping plans of both common areas and private lots of new development projects, it is reasonable to expect that project development will result in identifiable increases in non-native and/or exotic plant populations.

In particular, these plant species are often more adapted to a wider variety of growing conditions and can out-compete native plant populations for available nutrients, prime growing locations and other resources. Because these plants reproduce so quickly and in such large numbers, these species can quickly replace many native plant populations, resulting in lower species diversity, loss of suitable

⁵⁰⁴ GeoSyntec Consultants, *Mission Village Water Quality Technical Report*.

breeding and/or nesting habitat for common and special-status wildlife species, changes to the riparian ecosystem and overall reductions in habitat values. Therefore, the impact on native biological resources as a result of increased non-native plant species is considered potentially significant. Implementation of proposed Mitigation Measure **MV 4.3-57** (review of plant palettes and inspection of container plants for use within 200 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation) would reduce the magnitude of impacts resulting from an increased non-native population to below a level of significance.

Urban development also tends to attract wildlife species that are more typical of, and more adaptable to, urban settings, including house sparrows, European starlings, rock doves, brown-headed cowbirds, American crows, ravens, striped skunks, opossum, red fox, raccoons, and Norway rats. An increase in meso-predators (i.e., skunk, opossum, fox) in an area can adversely impact native rodent and bird populations. Additionally, a number of native species are not adapted to urban development and their populations tend to decrease in the vicinity of residential or recreational developments.

Developed areas also attract and encourage non-native Argentine ants. These ants have the potential to negatively impact native ant populations, which serve as secondary pollinators and seed dispersers of many native flower species. Additionally, as coast horned lizard primarily feed on native ants, the reduction of native ant populations due to the introduction of Argentine ants could adversely affect the local coast horned lizard population. As discussed in the Newhall Ranch Specific Plan Program EIR, wildlife species typical of an urban environment currently occur in the area. Accordingly, development of the proposed project would further exacerbate an already adverse condition. Therefore, the impact on native biological resources as a result of increased non-native animal species is considered significant. Implementation of proposed Mitigation Measures **MV 4.3-21** (installation of waste and recycling receptacles that discourage wildlife foraging in common areas/parks), **MV 4.3-45** (develop an integrated pest management plan that addresses pesticide use), **MV 4.3-29** (monitoring and control of invasive, non-native aquatic wildlife species for up to 5 years), **MV 4.3-48** (quarterly monitoring and control measures for Argentine ants for up to 5 years), **MV 4.3-77** (cowbird monitoring and trapping program); and **MV 4.3-79** (prevention of Argentine ant invasion) would reduce the magnitude of the project's contribution towards an already adverse condition to below a level of significance.

(d) Increased Human and Domestic Animal Presence

The proposed project would increase the number of people living and recreating adjacent to the Santa Clara River. The effect of this increase in human population would be the potential for increased human disturbances to, and ongoing degradation of, adjacent riparian habitats associated with the Santa Clara River. Increased recreation and other human activity along proposed trails and unauthorized entry into

the riparian area could result in increased noise disturbances to wildlife (especially during the breeding season of birds) which can result in nest abandonment; the harassment and/or capture of slower moving species, including certain reptiles and amphibians; the displacement of other wildlife species; an increase in the amount of refuse and pollutants in the area; compaction of soils; and trampling of ground-dwelling flora and fauna.

Increased use of the project site by future residents of Mission Village would also result in a corresponding increase in use of the area by domestic animals. Dogs can disturb nesting or roosting sites and disrupt the normal foraging activities of wildlife in adjacent habitat areas. Should this activity occur frequently, and over a long period, these disturbances may have a long-term effect on the behavior of both common and special-status species and can result in their extirpation from the area. Feral cats and house cats can cause substantial damage to the species composition of natural areas, including the populations of special-status species, through predation. Additionally, the use of anticoagulant-based rodenticides to control pest animals attracted to development areas can lead to secondary poisoning of native wildlife. Implementation of Specific Plan Mitigation Measures SP 4.6-17 through 4.6-19 (standards for trail design and limitations on human and pet access to the River Corridor SMA/SEA 23; transition areas along the River Corridor SMA/SEA 23), as well as proposed Mitigation Measures **MV 4.3-21** (installation of waste and recycling receptacles that discourage wildlife foraging in common areas/parks), **MV 4.3-45** through **MV 4.3-47** (develop an integrated pest management plan that addresses pesticide use; trash and debris removal from riparian habitats; and control of pet, stray, and feral cats and dogs in or near open space areas), **MV 4.3-29** (monitoring and control of invasive, non-native aquatic wildlife species for up to 5 years), and **MV 4.3-54** (permanent fencing along trails in the River Corridor SMA/SEA 23) would reduce the magnitude of impacts related to increased human and domestic animal presence. The Newhall Ranch Specific Plan Program EIR concluded that impacts caused by increased human and domestic and feral animal presence would be significant. However, with implementation of the new mitigation measures, referenced above, the proposed project's impacts resulting from increased human, domestic, and pet animal presence is considered less than significant.

(e) Construction and Grading Activities

Construction and grading activities associated with project implementation that are proposed adjacent to or within the Santa Clara River ecosystem could adversely affect sensitive vegetation and wildlife within portions of the ecosystem not directly affected. These activities can result in the following impacts: (1) siltation and erosion into creek and river drainages that could adversely affect fish spawning and movement; (2) excessive dust accumulation on vegetation that could result in the degradation or loss of some plant species; and (3) soil compaction around remaining trees. These impacts will be minimized through implementation of construction BMPs that will meet or exceed measures required by the General

Construction Permit. A Stormwater Pollution and Prevention Plan (SWPPP) will be developed as required by, and in compliance with, the General Construction Permit and Los Angeles County Standard Conditions. The General Permit requires the SWPPP to include a menu of BMPs to be selected, implemented and maintained based on the phase of construction and weather conditions to effectively control erosion and sediment to the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology (BAT/BCT).⁵⁰⁵ BMPs to be included in this menu include, among others: slope stabilization using rock or vegetation, re-vegetation, hydro-seeding or using tackifiers on exposed areas, installation of energy dissipaters, drop structures, catch basin inlet protection, construction materials management, and cover and containment of construction materials and wastes. On this basis, the project's construction-related impacts to biological resources are considered less than significant.

10. PROJECT MITIGATION MEASURES

While development of the Newhall Ranch Specific Plan has the potential to result in significant biological impacts, the County of Los Angeles adopted mitigation measures to address these impacts as part of the Newhall Ranch Specific Plan. The mitigation measures are found in the certified Newhall Ranch Specific Plan Program EIR and the adopted Mitigation Monitoring Plan for the Specific Plan (May 2003). The project applicant has committed to implementing these mitigation measures. **Table 4.3-9** identifies previously adopted Specific Plan mitigation measures as they relate to project-specific impacts. Plant communities to be protected in perpetuity are summarized in **Table 4.3-10, Total Conservation Area and Preserved Plant Communities**.

⁵⁰⁵ BAT/BCT are Clean Water Act technology-based standards that are applicable to construction site stormwater discharges. Federal law specifies factors relating to the assessment of BAT including: age of the equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; process changes; the cost of achieving effluent reduction; non-water quality environmental impacts (including energy requirements); and other factors as the administrator of the U.S. EPA deems appropriate. Clean Water Act Section 304(b)(2)(B). Factors relating to the assessment of BCT include reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived; comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources; the age of the equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; process changes; non-water quality environmental impact (including energy requirements); and other factors as the administrator deems appropriate. Clean Water Act Section 304(b)(4)(B). The administrator of the U.S. EPA has not issued regulations specifying BAT or BCT for construction site discharges.

a. Mitigation Measures Required by the Adopted Newhall Ranch Specific Plan, as they Relate to the Mission Village Project

The Los Angeles County Board of Supervisors adopted the following mitigation measures in connection with its approval of the Newhall Ranch Specific Plan (May 2003). Those mitigation measures applicable to the Mission Village project will be implemented, as appropriate.

**Table 4.3-9
Significant Impact and Mitigation Summary**

| Significant Impact | Relevant Previously Adopted Measures | Additional Measures Proposed by This EIR | Significance After Mitigation | Consistency with Findings of Newhall Ranch Specific Plan Program EIR |
|--|--|--|--------------------------------------|--|
| Impacts to Coastal Scrub | SP 4.6-17 to SP 4.6-19, SP 4.6-21-27, SP 4.6-36 to SP 4.6-42. These measures would protect in perpetuity 1,311 acres of coastal scrub in the High Country SMA. The protection of the Salt Creek Area would preserve and additional 631 acres of this community type. | MV 4.3-24 | Less than Significant | Inconsistent |
| Impacts to Riparian Plant Communities (i.e., Herbaceous Wetland, River Wash, Big Sagebrush Scrub, Giant Reed, Arrow Weed Scrub, Mexican Elderberry Scrub, Mulefat Scrub, Southern Willow Scrub, Tamarisk Scrub and Woodland, Southern Cottonwood-Willow Riparian). | SP 4.6-1 to SP 4.6-26, SP 4.6-63. These measures would protect in perpetuity 977.5 acres of habitat along the Santa Clara River. | MV 4.3-1, MV 4.3-23, MV 4.3-30, and MV 4.3-31 through MV 4.3-41 | Less than Significant | Consistent |
| Impacts to Big Sagebrush Scrub | SP 4.6-1 through SP 4.6-16, SP 4.6-21 through SP 4.6-26, SP 4.6-28 | MV 4.3-1, MV 4.3-23, MV 4.3-26, and MV 4.3-31 through MV 4.3-41 | Less than Significant | Consistent |
| Impacts to Wildlife Riparian Habitat, and Buffers/Setbacks from Riparian Habitat | SP 4.6-1 through SP 4.6-26, SP 4.6-56 | MV 4.3-1, MV 4.3-21, MV 4.3-23, MV 4.3-29 through MV 4.3-41, MV 4.3-45 through MV 4.3-47, and MV 4.3-57 | Less than Significant | The Newhall Ranch Specific Plan Program EIR did not specifically address potential impacts to wildlife riparian habitat and buffers/setbacks from riparian habitat, |
| Impacts to Wildlife Upland Habitat | SP 4.6-17, SP 4.6-20 through SP 4.6-29, SP 4.6-33 through SP 4.6-43, and SP 4.6-48. The preservation of the River Corridor SMA and High Country SMA would protect approximately 5,182 acres of wildlife habitat in perpetuity. The preservation of the Salt Creek Area would protect an additional 1,518 acres of wildlife habitat in perpetuity. | MV 4.3-15, MV 4.3-24, MV 4.3-28, and MV 4.3-30. | Less than Significant | Inconsistent |
| Restrictions of Wildlife Movement Corridors/Habitat Linkages | SP 4.6-1 to SP 4.6-26, SP 4.6-37 to SP 4.6-42, SP 4.6-56. The preservation of the River Corridor SMA would protect a regionally important wildlife movement corridor. The preservation of the High Country SMA would protect a large area of habitat south of the River Corridor SMA (which would be linked to the River Corridor SMA by the preservation of the Salt Creek Area). | None proposed. | Less than Significant | Inconsistent. Given that the tract map site is currently used for agriculture and is frequently devoid of cover, the tract map site is not expected to be a substantial part of a regional north-south wildlife movement corridor. |
| Impacts to Slender Mariposa Lily | SP 4.6-27, SP 4.6-29 to SP 4.6-32, SP 4.6-33, SP 4.6-34, SP 4.6-37 to SP 4.6-42, SP 4.6-53, SP 4.6-59. | MV 4.3-26 and MV 4.3-27. Approximately 559 acres considered suitable for slender mariposa lily mitigation have been identified in the High Country SMA/SEA 20 and Salt Creek Area ⁵⁰⁶ . | Less than Significant | Consistent |

⁵⁰⁶Dudek, Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan.

**Table 4.3-9 (Continued)
Significant Impact and Mitigation Summary**

| Significant Impact | Relevant Previously Adopted Measures | Additional Measures Proposed by This EIR | Significance After Mitigation | Consistency with Findings of Newhall Ranch Specific Plan Program EIR |
|---|---|--|--------------------------------------|---|
| Impacts to Southern California Black Walnut | SP 4.6-1 to SP 4.6-19, SP 4.6-21 to SP 4.6-35, SP 4.6-37 to SP 4.6-48. The preservation of the River Corridor SMA and the High Country SMA would protect approximately 585 acres of oak woodland and 300 acres of valley oak/grass in perpetuity. The preservation of the Salt Creek Area would protect approximately 266 acres of oak woodland and 113 acres of valley oak/grassland in perpetuity. In total, conservation easements would be placed over 851 acres of oak woodland and 413 acres of oak savannah (including the River Corridor SMA, the High Country SMA, and the Salt Creek Area). | MV 4.3-1, MV 4.3-23, MV 4.3-24, MV 4.3-26, MV 4.3-28, and MV 4.3-31 through MV 4.3-41. | Less than Significant | Consistent |
| Impacts to Parish's Sagebrush | SP 4.6-1 to SP 4.6-16, SP 4.6-21 to SP 4.6-26, SP 4.6-28. | MV 4.3-1, MV 4.3-26, MV 4.3-23, MV 4.3-24, and MV 4.3-31 through MV 4.3-41. | Less than Significant | The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species, given its limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis. |
| Impacts to Undescribed Everlasting | SP 4.6-16, SP 4.6-20, SP 4.6-24, SP 4.6-53, SP 4.6-59. | MV 4.3-26, MV 4.3-28, MV 4.3-75, and MV 4.3-76. | Less than Significant | The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species as it was not known to occur on site; however, detection during more recent surveys warrants its inclusion in this analysis. |
| Impacts to San Fernando Valley Spineflower | SP 4.6-65 to SP 4.6-80. | MV 4.3-58 through MV 4.3-74. | Less than Significant | Consistent |
| Impacts to Newhall Sunflower | SP 4.6-1 through SP 4.6-16, SP 4.6-17 through SP 4.6-19, SP 4.6-21 through SP 4.6-26. | MV 4.3-11, MV 4.3-26, MV 4.3-51 through MV 4.3-57. | Less than Significant | The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species as it was not known to occur on site; however, detection during more recent surveys warrants its inclusion in this analysis. |

**Table 4.3-9 (Continued)
Significant Impact and Mitigation Summary**

| Significant Impact | Relevant Previously Adopted Measures | Additional Measures Proposed by This EIR | Significance After Mitigation | Consistency with Findings of Newhall Ranch Specific Plan Program EIR |
|--|---|--|--------------------------------------|---|
| Impacts to Protected Oaks Coast Live Oak Woodland, and Southern Coast Live Oak Riparian Forest | SP 4.6-1 to SP 4.6-19, SP 4.6-21 to SP 4.6-35, SP 4.6-37 to SP 4.6-48. The preservation of the River Corridor SMA and the High Country SMA would protect approximately 585 acres of oak woodland and 300 acres of oak savannah in perpetuity. The preservation of the Salt Creek Area would protect approximately 266 acres of oak woodland and 113 acres of oak savannah in perpetuity. In total, conservation easements would be placed over 851 acres of oak woodland and 413 acres of oak savannah (including the River Corridor SMA, the High Country SMA, and the Salt Creek Area). | MV 4.3-1, MV 4.3-22, MV 4.3-26, MV 4.3-23, MV 4.3-30, MV 4.3-31 through MV 4.3-41. | Less than Significant | Consistent |
| Impacts to Aquatic Mollusks (<i>Pyrgulopsis castaicensis</i> n. sp.) | SP 4.6-1 through SP 4.6-16, SP 4.6-17 through SP 4.6-19, SP 4.6-21 through SP 4.6-26. | MV 4.3-11, MV 4.3-26, MV 4.3-51 through MV 4.3-57, MV 4.3-44. | Less than Significant | The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species as it was not known to occur on site; however, detection during more recent surveys warrants its inclusion in this analysis. |
| Impacts to Terrestrial Mollusks (Trask shoulderband snail) | SP 4.6-1 through SP 4.6-27, SP 4.6-32 through SP 4.6-42, SP 4.6-53, SP 4.6-59, SP 4.6-63, | MV 4.3-1, MV 4.3-23, MV 4.3-24, MV 4.3-31 through MV 4.3-43, MV 4.3-45, MV 4.3-47, MV 4.3-48, MV 4.3-53, MV 4.3-54. MV 4.3-57. | Less than Significant | The Newhall Ranch Specific Plan Program EIR did not address potential impacts to this species as it was not known to occur on site; however, detection of other shoulderband snails in the project area during more recent surveys warrants its inclusion in this analysis. |
| Impacts to Special-Status Fish Species (i.e., Santa Ana Sucker, Unarmored Threespine Stickleback, and Arroyo Chub) | SP 4.6-53 SP 4.6-54, SP 4.6-57, SP 4.6-58, SP 4.6-59, SP 4.6-44. | MV 4.3-1, MV 4.3-2, MV 4.3-8 through MV 4.3-10, MV 4.3-53. | Less than Significant | Consistent |
| Impacts to Special-Status Amphibians and Aquatic-Associated Reptiles (i.e., Arroyo Toad, Two-Striped Garter Snake, South Coast Garter Snake, and Southwestern Pond Turtle) | SP 4.6-53, SP 4.6-55, SP 4.6-58, SP 4.6-59. | MV 4.3-1, MV 4.3-2, MV 4.3-4 through MV 4.3-8, MV 4.3-10, and MV 4.3-26. | Less than Significant | Consistent |
| Impacts to Western Spadefoot Toad and California Red-Legged Frog | SP 4.6-53, SP 4.6-55, SP 4.6-58, SP 4.6-59. | MV 4.3-3, MV 4.3-9, MV 4.3-10, MV 4.3-13, MV 4.3-25, and MV 4.3-26. | Less than Significant | Consistent |
| Impacts to Upland-Associated Special-Status Reptiles (i.e., Coast Horned Lizard, Silvery Legless Lizard, Coastal Western Whiptail, Rosy Boa, San Bernardino Ringneck Snake, and Coast Patch-Nosed Snake) | SP 4.6-37 to SP 4.6-42, SP 4.6-53, SP 4.6-59. The preservation of High Country SMA would protect in perpetuity 4,205 acres of habitat. The preservation of the Salt Creek Area would preserve an additional 1,518 acres of habitat. | MV 4.3-7 and MV 4.3-26. | Less than significant | Inconsistent |

Table 4.3-9 (Continued)
Significant Impact and Mitigation Summary

| Significant Impact | Relevant Previously Adopted Measures | Additional Measures Proposed by This EIR | Significance After Mitigation | Consistency with Findings of Newhall Ranch Specific Plan Program EIR |
|--|---|---|--------------------------------------|---|
| Impacts to Special-Status Bird Species (i.e., Least Bell's Vireo, Willow Flycatcher, Southwestern Willow Flycatcher, Western Yellow-Billed Cuckoo, Cooper's Hawk, Sharp-Shinned Hawk, Ferruginous Hawk, Tricolored Blackbird, Lawrence's Goldfinch, Turkey Vulture, Northern Harrier, Yellow Warbler, White-Tailed Kite, Yellow-Breasted Chat, Southern California Rufous-Crowned Sparrow, Western Burrowing Owl, California Horned Lark, Merlin, Prairie Falcon, American Peregrine Falcon, California Condor, Loggerhead Shrike, Long-Eared Owl, Summer Tanager, Coastal California Gnatcatcher, Vermilion Flycatcher, Golden Eagle, Short-Eared Owl, Costa's Hummingbird, Yellow-Headed Blackbird, Allen's/Rufous Hummingbird, Nuttall's Woodpecker, Chipping Sparrow, Black-Crowned Night Heron, and Oak Titmouse) | SP 4.6-53, SP 4.6-59 | MV 4.3-15, MV 4.3-20, and MV 4.3-26. | Less than Significant | Inconsistent – the Tricolored Blackbird, Northern Harrier, White-Tailed Kite, Southern California Rufous-Crowned Sparrow, Western Burrowing Owl, Golden Eagle, Mountain Plover, Ferruginous Hawk and Sharp Shinned Hawk were found to be significantly impacted in the Newhall Ranch Specific Plan Program EIR, prior to the additional mitigation measures incorporated in this EIR. |
| Impacts to San Diego Desert Woodrat, San Diego Black-Tailed Jackrabbit, Mountain Lion, Mule Deer, American Badger, and Black Bear | SP 4.6-53, SP 4.6-59 | MV 4.3-14, MV 4.3-16, MV 4.3-26, MV 4.3-17, and MV 4.3-30. | Less than Significant | Inconsistent |
| Impacts to Pallid Bat, Western Mastiff Bat, Western Red Bat, Long-Legged Myotis, Pocketed Free-Tailed Bat, Townsend's Big-Eared Bat, Western Small-Footed Myotis, Fringed Myotis, Yuma Myotis | No applicable measures. | MV 4.3-18, MV 4.3-19, and MV 4.3-78. | Less than Significant | Consistent (The Newhall Ranch Specific Plan Program EIR did not address potential impacts to each of these species, given their limited potential to occur on the project site; however, detection during more recent surveys warrants its inclusion in this analysis.) |
| Restriction of Wildlife Habitat Linkages | SP 4.6-18 | None proposed. | Less than Significant | Consistent |
| Increased Light and Glare | SP 4.6-56 | None proposed. | Less than Significant | Consistent |
| Increase in Populations of Non-Native Plant and Wildlife Species | No applicable measures. | MV 4.3-21, MV 4.3-45, MV 4.3-29, MV 4.3-48, MV 4.3-57, MV 4.3-77, and MV 4.3-79. | Less than Significant | Consistent |
| Increased Human and Domestic Animal Presence | SP 4.6-17 to SP 4.6-19 | MV 4.3-16, MV 4.3-17, MV 4.3-29, MV 4.3-47, MV 4.3-57 | Less than Significant | Inconsistent |

Table 4.3-10
Total Conservation Area and Preserved Vegetation Communities, Floristic Alliances, Associations,
and Land Cover Type

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | River Corridor SMA/SEA 23 Acreage ¹ | High Country SMA/SEA 20 Acreage ² | Salt Creek Acreage ³ | Total Conservation Area ⁴ Acreage |
|--|-----------------------------------|--|-----------------------------------|--|--|---------------------------------|--|
| Grass and Herb Dominated Communities | Non-Native Grassland | California annual grassland | Not mapped to association level | 9.4 | 465.0 | 187.9 | 662.3 |
| | Native Grassland | Purple needlegrass | Not mapped to association level | 0.0 | 0.6 | 0.0 | 0.6 |
| Scrub and Chaparral | Coastal Scrub | California sagebrush scrub | Not mapped to association level | 22.3 | 437.0 | 11.8 | 471.1 |
| | | | Burned California sagebrush scrub | 0.0 | 784.8 | 615.5 | 1,400.3 |
| | | California sagebrush | 0.4 | 0.3 | 0.0 | 0.7 | |
| | | California sagebrush–purple sage | 31.4 | 84.1 | 2.1 | 117.6 | |
| | | | 0 | 0 | 0 | 0 | |
| | | Burned California sagebrush scrub–undifferentiated chaparral | 2.6 | 5.2 | 0.0 | 7.8 | |
| | | Coyote brush scrub | Not mapped to association level | 0.0 | 2.2 | 0.0 | 2.2 |
| | Undifferentiated Chaparral Scrubs | Not mapped to alliance level | Not mapped to association level | 1.5 | 537.1 | 9.1 | 547.7 |
| | | | Burned undifferentiated chaparral | 0.0 | 831.2 | 115.5 | 946.7 |
| | Chaparral with Oak | Scrub oak chaparral | Not mapped to association level | 0.0 | 0.2 | 0.0 | 0.2 |
| Broad Leafed Upland Tree Dominated | Upland Walnut Woodland and Forest | California walnut woodland and forest | California walnut woodland | 0.0 | 6.8 | 20.4 | 27.2 |
| | Oak Woodland and Forest | Coast live oak forest and woodland | Coast live oak woodland | 16.1 | 446.7 | 148.0 | 610.8 |
| | | | Not mapped to association level | 0.0 | 74.2 | 94.6 | 168.8 |
| | | Valley oak forest and woodland | Valley oak woodland | 0.0 | 47.8 | 23.9 | 71.7 |
| | | | Valley oak/grass | 0.0 | 300.3 | 113.4 | 413.7 |

Table 4.3-10 (Continued)
Total Conservation Area and Preserved Vegetation Communities, Floristic Alliances, Associations,
and Land Cover Types

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | River Corridor SMA/SEA 23 Acreage ¹ | High Country SMA/SEA 20 Acreage ² | Salt Creek Acreage ³ | Total Conservation Area ⁴ Acreage |
|--|--------------------------------------|---|---|--|--|---------------------------------|--|
| Bog and Marsh | Marsh | Bulrush-cattail wetland | Not mapped to association level | 0.0 | 1.4 | 0.0 | 1.4 |
| | | Cismontane alkali marsh | Not mapped to association level | 0.0 | 3.3 | 0.0 | 3.3 |
| Riparian and Bottomland Habitat | Other Riparian/Wetland | Herbaceous wetland | Not mapped to association level | 182.2 | 0.0 | 0.0 | 182.2 |
| | | River wash | Not mapped to association level | 201.1 | 33.3 | 7.4 | 241.8 |
| | | Alluvial scrub | Not mapped to association level | 0.0 | 0.5 | 0.4 | 0.9 |
| | | Big sagebrush scrub | Big sagebrush-California buckwheat | 2.7 | 8.5 | 0.0 | 11.2 |
| | | Giant reed | Not mapped to association level | 5.6 | 0.0 | 0.0 | 5.6 |
| | Low to High Elevation Riparian Scrub | Arrow weed scrub | Not mapped to association level | 12.6 | 0.0 | 0.7 | 13.3 |
| | | Mexican elderberry | Not mapped to association level | 0.0 | 3.2 | 1.4 | 4.6 |
| | | Mulefat scrub | Not mapped to association level | 15.0 | 14.1 | 20.1 | 49.2 |
| | Riparian Forest and Woodland | Southern willow scrub | Not mapped to association level | 13.1 | 4.3 | 2.5 | 19.9 |
| | | Tamarisk scrub and woodland | Shrub tamarisk | 2.3 | 0.0 | 0.2 | 2.5 |
| | | Coast live oak forest and woodland | Southern coast live oak riparian forest | 0.6 | 0.0 | 0.0 | 0.6 |
| | | Fremont cottonwood riparian forest and woodland | Southern cottonwood-willow riparian | 318.5 | 0.9 | 0.0 | 319.4 |

Table 4.3-10 (Continued)
Total Conservation Area and Preserved Vegetation Communities, Floristic Alliances, Associations, and Land Cover Types

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | River Corridor SMA/SEA 23 Acreage ¹ | High Country SMA/SEA 20 Acreage ² | Salt Creek Acreage ³ | Total Conservation Area ⁴ Acreage |
|--|----------------------|--------------------|-------------|--|--|---------------------------------|--|
| Manmade Land Cover Types | Agriculture | NA | | 101.8 | 59.8 | 99.1 | 260.7 |
| | Disturbed land | NA | | 37.1 | 52.7 | 43.9 | 133.7 |
| | | Total | | 976.4 | 4,205.5 | 1517.9 | 6,699.8 |

¹ The acreages and vegetation types depicted for the River Corridor SMA/SEA 23 were determined during field mapping.⁵⁰⁷

² The acreages and vegetation types depicted for the High Country SMA/SEA 20 were determined during field mapping.⁵⁰⁸

³ The acreages and vegetation types depicted for Salt Creek were determined during field mapping.⁵⁰⁹

⁴ The Conservation Area includes areas to be protected in perpetuity by conservation easements, inclusive of the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek Area.

Mitigation measures are separated into three categories. The first includes an overview of those design features that are incorporated as part of the Specific Plan to reduce the biological impact potential. The second category includes specific mitigation measures incorporated as part of the Resource Management Plan. The last category includes additional mitigation measures recommended as part of the Newhall Ranch Specific Plan Program EIR. The specific mitigation measures in each of these categories are defined below.

(1) Specific Plan Mitigation Measures

The Specific Plan was designed to partially mitigate potential impacts to sensitive biological resources through avoidance, thus allowing maximum conservation of important biological features at the site.

⁵⁰⁷ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch Specific Plan Area*.

⁵⁰⁸ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

⁵⁰⁹ Ibid.

Under the Specific Plan design, development will take place in a way that minimizes the effects on sensitive biological resources. An important aspect of this approach was an analysis of the conservation value of habitats on the property, which used conservation principles and a GIS mapping methodology. An additional component of the conservation strategy was the consideration of the larger regional context in the design of biological preserves on the site. Newhall Ranch, which extends from the ridgeline of the Santa Susana Mountains across the Santa Clara River to the uplands on the north, offers the potential for significant habitat contributions to a Santa Susana Mountains open area and a key segment of the Santa Clara River system, as well as regionally important connections between these habitat areas and across the river.

The biological resource conservation strategy developed for the Newhall Ranch property addresses the sequencing recommended by the resource agencies: avoidance, minimization, and mitigation for unavoidable impacts to key sensitive resources. The proposed large, open areas on the Newhall Ranch property avoid impacts to many of the highly sensitive species present or potentially occurring on the site and their habitats. Further design, with respect to potential unavoidable impacts to biological resources, has minimized encroachments into key areas of the property, decreasing the overall impacts. Indirect impacts to biological resources are minimized through the dedication of large blocks of habitat that decreases the edge-area ratio, and thus, buffers the habitat from noise, lighting, and encroachment by domestic pets, non-native plants, and humans. As a result of these design priorities, the project's biological resource conservation efforts have been focused on two Special Management Areas and the habitat corridor that connects them:

- The Santa Clara River Corridor (River Corridor SMA/SEA 23);
- The large block of relatively undisturbed habitats on higher elevations into the Santa Susana Mountains (High Country SMA/SEA 20); and
- The connection between these two areas along the Salt Creek drainage.

In this design, the Conceptual Grading Plan (see **Appendix 4.1, Geotechnical and Soil Resources**) preserves large areas of sensitive native habitats associated with the natural drainage areas of the site and maintains major landforms. The Conceptual Grading Plan also avoids large contiguous blocks of valuable habitat while providing direct linkage between them. The Specific Plan places the two key habitat resource areas into consolidated blocks (connected by the Salt Creek drainage), resulting in minimal boundaries with developed areas. The assembly of these three elements allows them to be managed as a single resource system within the Specific Plan Area. It also facilitates coordination with other programs outside the boundary of Newhall Ranch. The transitions between development and the special

management areas will be the focus of special design treatments to protect the integrity of the conserved areas. As indicated above, the “edges” of urban development areas have been minimized to reduce the indirect impacts of the Specific Plan. Native and compatible species will be used for landscaping in these areas.

The open area system for Newhall Ranch includes the most important habitat areas of the Santa Clara River (River Corridor SMA/SEA 23) and the areas which have been least affected by agricultural, oil, and natural gas production activities (High Country SMA/SEA 20). It also includes the largest, least fragmented patches of each habitat type that remain on Newhall Ranch. A critical component of the open area system within the Newhall Ranch property, and in the region as a whole, is the connection between the High Country and the River Corridor along Salt Creek. The corridor will provide continuity between the habitats and the wildlife populations within the property, as well as forming a permanent regional linkage between the Santa Clara River and the Santa Susana Mountains. Salt Creek is the most appropriate location for such a wildlife corridor connection because of several distinguishing characteristics. Specifically, Salt Creek (1) provides a direct link between the two major open areas; (2) is less disturbance than any of the other potential connections; (3) is bound through most of its length by open area on the north side and, therefore, will not be surrounded by development in the future; (4) is the only drainage that would provide more than a discontinuous, narrow connection; (5) includes both upland and riparian vegetation through most of the corridor; and (6) is topographically isolated from areas of development on Newhall Ranch. Currently, a portion of the wildlife corridor is situated in Ventura County. Future land use decisions will be required to define the corridor’s final configuration in areas that occur outside the County of Los Angeles. The incorporation of the river, the mountains, and the connection between them provides for conservation of the entire range of terrain and vegetation types on Newhall Ranch. By connecting the open areas into two major blocks with a major linkage, the land use plan for the Ranch minimizes edge-to-area ratio within the Specific Plan area.

(2) Specific Plan Resource Management Plan Mitigation

Approval of the Specific Plan and its associated Resource Management Plan (RMP) involved an amendment to the Los Angeles County zoning ordinance such that the provisions of the Specific Plan and RMP are binding. Specific measures to mitigate impacts to biological resources are incorporated as part of the RMP that is part of the Newhall Ranch Specific Plan. These measures are identified below: These measures are preceded by “SP,” which stands for Specific Plan.

(3) Santa Clara River (River Corridor) SMA/SEA 23

To mitigate impacts of the Specific Plan on riparian resources, riparian habitat will be restored and, where appropriate, enhanced. In addition, a mitigation bank may be established as discussed in this section. The general areas in which riparian mitigation activities may take place are shown on Exhibit 2.6-3, Candidate Riparian Restoration/Enhancement Areas, of the Specific Plan.

The mitigation of Specific Plan impacts through restoration of habitat and enhancement of existing habitat quality shall conform to the requirements set forth below:

(a) Mitigation through Restoration

In the Specific Plan, habitat restoration means the revegetation of native plant communities on sites that have had the habitat removed due to past activities, such as agricultural or oil and natural gas operations.

Affected riparian resources along the Santa Clara River will require restoration of similar habitat and values. Avoidance of impacts to riparian resources shall be the primary goal during the design of the individual stages of the Specific Plan. Unavoidable impacts to riparian resources shall be minimized through Specific Plan design, and then mitigated by the implementation of a revegetation plan. The revegetation plan may be prepared as part of a California Department of Fish and Game 1603 Streambed Alteration Agreement or Corps Section 404 Permit and shall include the following:

- SP 4.6-1 The restoration mitigation areas located within the River Corridor SMA shall be in areas that have been disturbed by previous uses or activities. Mitigation shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat. First priority will be given to those restorable areas that occur adjacent to existing patches (areas) of native habitat that support sensitive species, particularly Endangered or Threatened species. The goal is to increase habitat patch size and connectivity with other existing habitat patches while restoring habitat values that will benefit sensitive species.
- SP 4.6-2 A qualified biologist shall prepare or review revegetation plans. The biologist shall also monitor the restoration effort from its inception through the establishment phase.
- SP 4.6-3 Revegetation Plans may be prepared as part of a California Department of Fish and Game 1603 Streambed Alteration Agreement and/or an U.S. Army Corps of Engineers Section 404 Permit, and shall include:

- Input from both the Project proponent and resource agencies to assure that the Project objectives applicable to the River Corridor SMA and the criteria of this RMP are met.
- The identification of restoration/mitigation sites to be used. This effort shall involve an analysis of the suitability of potential sites to support the desired habitat, including a description of the existing conditions at the site(s) and such base line data information deemed necessary by the permitting agency.

SP 4.6-4 The revegetation effort shall involve an analysis of the site conditions such as soils and hydrology so that site preparation needs can be evaluated. The revegetation plan shall include the details and procedures required to prepare the restoration site for planting (i.e., grading, soil preparation, soil stockpiling, soil amendments, etc.), including the need for a supplemental irrigation system, if any.

SP 4.6-5 Restoration of riparian habitats within the River Corridor SMA shall use plant species native to the Santa Clara River. Cuttings or seeds of native plants shall be gathered within the River Corridor SMA or purchased from nurseries with local supplies to provide good genetic stock for the replacement habitats. Plant species used in the restoration of riparian habitat shall be listed on the approved project plant palette (Specific Plan Table 2.6-1, Recommended Plant Species for Habitat Restoration in the River Corridor SMA) or as approved by the permitting State and Federal agencies.

SP 4.6-6 The final revegetation plans shall include notes that outline the methods and procedures for the installation of the plant materials. Plant protection measures identified by the project biologist shall be incorporated into the planting design/layout.

SP 4.6-7 The revegetation plan shall include guidelines for the maintenance of the mitigation site during the establishment phase of the plantings. The maintenance program shall contain guidelines for the control of non-native plant species, the maintenance of the irrigation system, and the replacement of plant species.

SP 4.6-8 The revegetation plan shall provide for monitoring to evaluate the growth of the developing habitat. Specific performance goals for the restored habitat shall be defined by qualitative and quantitative characteristics of similar habitats on the river (e.g., density, cover, species composition, structural development). The monitoring effort shall include an evaluation of not only the plant material installed, but the use of the site by

wildlife. The length of the monitoring period shall be determined by the permitting State and/or Federal agency.

- SP 4.6-9 Monitoring reports for the mitigation site shall be reviewed by the permitting State and/or Federal agency.
- SP 4.6-10 Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan.

(b) Mitigation through Enhancement

- SP 4.6-11 Habitat enhancement as referred to in this document means the rehabilitation of areas of native habitat that have been moderately disturbed by past activities (e.g., grazing, roads, oil and natural gas operations, etc.) or have been invaded by non-native plant species such as giant cane (*Arundo donax*) and tamarisk (*Tamarix* sp.).
- SP 4.6-12 Removal of grazing is an important means of enhancement of habitat values. Without ongoing disturbance from cattle, many riparian areas will recover naturally. Grazing except as permitted as a long-term resource management activity will be removed from the River Corridor SMA pursuant to the Long-Term Management Plan set forth in Section 4.6 of the Specific Plan EIR.
- SP 4.6-13 To provide guidelines for the installation of supplemental plantings of native species within enhancement areas, a revegetation plan shall be prepared prior to implementation of mitigation (see guidelines for revegetation plans above). These supplemental plantings will be composed of plant species similar to those growing in the existing habitat patch (see Specific Plan Table 2.6-1).
- SP 4.6-14 Not all enhancement areas will necessarily require supplemental plantings of native species. Some areas may support conditions conducive for rapid “natural” reestablishment of native species. The revegetation plan may incorporate means of enhancement to areas of compacted soils, poor soil fertility, trash or flood debris, and roads as a way of enhancing riparian habitat values.
- SP 4.6-15 Removal of non-native species such as giant cane (*Arundo donax*), salt cedar or tamarisk (*Tamarix* sp.), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), if included in a revegetation plan to mitigate impacts, shall be subject to the following standards:

- First priority shall be given to those habitat patches that support or have a high potential for supporting sensitive species, particularly Endangered or Threatened species.
- All non-native species removals shall be conducted according to a resource agency approved exotics removal program.
- Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native riparian plant species.

(c) Mitigation Banking

SP 4.6-16 Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources shall be conducted pursuant to the Oak Resources Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.

(d) Management Requirements

(1) Recreation and Access

The quality of the habitat values that are conserved in the River Corridor SMA will benefit from the control of access to riparian areas. Guidelines for the control of access to the River Corridor SMA include the following:

SP 4.6-17 Access to the River Corridor SMA for hiking and biking shall be limited to the river trail system (including the Regional River Trail and various Local Trails) as set forth in this Specific Plan.

- The River trail system shall be designed to avoid impacts to existing native riparian habitat, especially habitat areas known to support sensitive species. Where impacts to riparian habitat are unavoidable, disturbance shall be minimized and mitigated as outlined above under Mitigation Measures 4.6-1 through 4.6-8.
- Access to the River Corridor SMA will be limited to day time use of the designated trail system.

- Signs indicating that no pets of any kind will be allowed within the River Corridor SMA, with the exception that equestrian use is permitted on established trails, shall be posted along the River Corridor SMA.
- No hunting, fishing, or motor or off-trail bike riding shall be permitted.
- The trail system shall be designed and constructed to minimize impacts on native habitats.

(2) *Transition Areas*

SP 4.6-18 Where development lies adjacent to the boundary of the River Corridor SMA a transition area shall be designed to lessen the impact of the development on the conserved area. Transition areas may be comprised of Open Area, natural or revegetated manufactured slopes, other planted areas, bank areas, and trails. Exhibits 2.6-4, 2.6-5, and 2.6-6 indicate the relationship between the River Corridor SMA and the development (disturbed) areas of the Specific Plan. The SMAs and the Open Area as well as the undisturbed portions of the development areas are shown in green. As indicated on the exhibits, on the south side of the river the River Corridor SMA is separated from development by the river bluffs, except in one location. The Regional River Trail will serve as transition area on the north side of the river where development areas adjoin the River Corridor SMA (excluding Travel Village).

SP 4.6-19 The following are the standards for design of transition areas:

- In all locations where there is no steep grade separation between the River Corridor SMA and development, a trail shall be provided along this edge.
- Native riparian plants shall be incorporated into the landscaping of the transition areas between the River Corridor SMA and adjacent development areas where feasible for their long-term survival. Plants used in these areas shall be those listed on the approved plant palette (Specific Plan Table 2.6-2 of the Resource Management Plan [Recommended Plants for Transition Areas Adjacent to the River Corridor SMA]).
- Roads and bridges that cross the River Corridor SMA shall have adequate barriers at their perimeters to discourage access to the River Corridor SMA adjacent to the structures.

- Where bank stabilization is required to protect development areas, it shall be composed of ungrouted rock, or buried bank stabilization as described in Section 2.5.2.a, except at bridge crossings and other locations where public health and safety requirements necessitate concrete or other bank protection.
- A minimum 100-foot-wide buffer adjacent to the Santa Clara River should be required between the top river side of bank stabilization and development within the Land Use Designations Residential Low Medium, Residential Medium, Mixed-Use and Business Park unless, through Planning Director review in consultation with the staff biologist, it is determined that a lesser buffer would adequately protect the riparian resources within the River Corridor, or that a 100-foot-wide buffer is infeasible for physical infrastructure planning. The buffer area may be used for public infrastructure, such as: flood control access; sewer, water, and utility easements; abutments; trails and parks, subject to findings of consistency with the Specific Plan and applicable County policies.

SP 4.6-20 The following guidelines shall be followed during any grading activities that take place within the River Corridor SMA:

- Grading perimeters shall be clearly marked and inspected by the project biologist prior to grading occurring within or immediately adjacent to the River Corridor SMA.
- The project biologist shall work with the grading contractor to avoid inadvertent impacts to riparian resources.

(4) Grading Activities Long-Term Management Plan

SP 4.6-21 Upon final approval of the Newhall Ranch Specific Plan, the Special Management Area designation for the River Corridor SMA shall become effective. The permitted uses and development standards for the SMA are governed by the Development Regulations, Chapter 3 of the Specific Plan.

SP 4.6-22 Upon completion of development of all land uses, utilities, roads, flood control improvements, bridges, trails, and other improvements necessary for implementation of the Specific Plan within the River Corridor in each subdivision allowing construction within or adjacent to the River Corridor, a permanent, non-revocable *conservation and public access easement* shall be offered to the County of Los Angeles pursuant to Mitigation

Measure 4.6-23, below, over the portion of the River Corridor SMA within that subdivision.

SP 4.6-23 The River Corridor SMA *Conservation and Public Access Easement* shall be offered to the County of Los Angeles prior to the transfer of the River Corridor SMA ownership, or portion thereof to the management entity described in Mitigation Measure 4.6-26, below.

SP 4.6-24 The River Corridor SMA *Conservation and Public Access Easement* shall prohibit grazing, except as a long-term resource management activity, and agriculture within the River Corridor and shall restrict recreation use to the established trail system.

Agricultural land uses and grazing for purposes other than long-term resource management activities within the River Corridor shall be extended in the event of the filing of any legal action against Los Angeles County challenging final approval of the Newhall Ranch Specific Plan and any related project approvals or certification of the Final EIR for Newhall Ranch. Agricultural land uses and grazing for purposes other than long-term resource management activities within the River Corridor shall be extended by the time period between the filing of any such legal action and the entry of a final judgment by a court with appropriate jurisdiction, after exhausting all rights of appeal, or execution of a final settlement agreement between all parties to the legal action, whichever occurs first.

SP 4.6-25 The River Corridor SMA conservation and public access easement shall be consistent in its provisions with any other conservation easements to State or Federal resource agencies which may have been granted as part of mitigation or mitigation banking activities.

SP 4.6-26 Prior to the recordation of the River Corridor SMA *Conservation and Public Access Easement* as specified in Mitigation Measure 4.6-23, above, the land owner shall provide a plan to the County for the permanent ownership and management of the River Corridor SMA, including any necessary financing. This plan shall include the transfer of ownership of the River Corridor SMA to the Center for Natural Lands Management, or if the Center for Natural Lands Management is declared bankrupt or dissolved, ownership will transfer or revert to a *joint powers authority* consisting of Los Angeles County (4 members), the City of Santa Clarita (2 members), and the Santa Monica Mountains Conservancy (2 members).

(5) High Country Special Management Area (SMA)

SP 4.6-26a Two types of habitat restoration may occur in the High Country SMA: (1) riparian revegetation activities principally in Salt Creek Canyon; and (2) oak tree replacement in, or adjacent to, existing oak woodlands and savannas.

- Mitigation requirements for riparian revegetation activities within the High Country SMA are the same as those for the River Corridor SMA and are set forth in Mitigation Measures 4.6-1 through 4.6-11 and 4.6-13 through 4.6-16, above.
- Mitigation requirements for oak tree replacement are set forth in Mitigation Measure 4.6-48, below.

(a) Mitigation Requirements

Mitigation activities that may occur in the High Country SMA, either for impacts associated with the construction of Estate lots, trails, or access roads, or for impacts identified during the subdivision process in other portions of the Specific Plan Area, include restoration of habitat and enhancement to existing habitat (see discussion below). Mitigation banking may be established as provided below. In addition, Salt Creek Canyon is a high priority area for riparian mitigation.

(1) Mitigation through Restoration

Two types of habitat restoration may occur in the High Country SMA: (1) riparian revegetation activities principally in Salt Creek Canyon; and (2) oak resource replacement in, or adjacent to, existing oak woodlands and savannas.

Mitigation requirements for riparian revegetation activities within the High Country SMA are the same as those for the River Corridor SMA and are set forth above.

Mitigation requirements for oak resource replacement are set forth in Specific Plan Section 2.6, paragraph 3b of the Oak Tree Replacement Program of the Resource Management Program.

(2) Enhancement of Habitat

SP 4.6-27 Removal of grazing from the High Country SMA except for those grazing activities associated with long-term resource management programs, is a principal means of enhancing habitat values in the creeks, brushland, and woodland areas of the SMA. The removal of grazing in the High Country SMA is discussed below under (b)4 Long Term Management. All enhancement activities for riparian habitat within the High Country

SMA shall be governed by the same provisions as set forth for enhancement in the River Corridor SMA. Specific Plan Table 2.6-3 of the Resource Management Plan provides a list of appropriate plant species for use in enhancement areas in the High Country SMA.

(3) Mitigation Banking

SP 4.6-28 Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources shall be conducted pursuant to the Oak Resource Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester. *(This measure is not applicable to the Mission Village project because the measure addresses management activities in the High Country SMA, which is located outside the boundaries of the proposed Mission Village project.)*

(b) Management Requirements

(1) Recreation and Access

A major public benefit of the High Country SMA is that it provides excellent recreational opportunities. However, recreational needs must be balanced with the preservation of the habitat values, which are conserved in the SMA. Recreation and access will be governed by the following standards:

SP 4.6-29 Access to the High Country SMA will be limited to day time use of the designated trail system. *(This measure is not applicable to the Mission Village project because the measure addresses access and management activities in the High Country SMA, which is located outside the boundaries of the proposed Mission Village project.)*

SP 4.6-30 No pets of any kind will be allowed within the High Country SMA, with the exception that equestrian use is permitted on established trails. *(This measure is not applicable to the Mission Village project because the measure addresses access and management activities in the High Country SMA, which is located outside the boundaries of the proposed Mission Village project.)*

SP 4.6-31 No hunting, fishing, or motor or trail bike riding shall be permitted. *(This measure is not applicable to the Mission Village project because the measure addresses access and management activities in the High Country SMA, which is located outside the boundaries of the proposed Mission Village project.)*

SP 4.6-32 The trail system shall be designed and constructed to minimize impacts on native habitats. *(This measure is not applicable to the Mission Village project because the measure addresses management activities in the High Country SMA, which is located outside the boundaries of the proposed Mission Village project.)*

(2) Transition/Fuel Modification Areas

Development areas are generally separated from the High Country SMA by steep slopes. Specific Plan Exhibit 2.6-7 of the Resource Management Program, Salt Creek Wildlife Corridor Land Use Perspective, illustrates that development adjacent to the Salt Creek Wildlife Corridor is significantly separated vertically from the corridor.

SP 4.6-33 Construction of buildings and other structures (such as patios, decks, etc.) shall only be permitted upon developed pads within Planning Areas OV-04, OV-10, PV-02, and PV-28 and shall not be permitted on southerly slopes facing the High Country SMA (Planning Area HC-01) or in the area between the original SEA 20 boundary and the High Country boundary. If disturbed by grading, all southerly facing slopes which adjoin the High Country SMA within those Planning Areas shall have the disturbed areas revegetated with compatible trees, shrubs, and herbs from the list of plant species for south and west facing slopes as shown in Table 2.6-3, Recommended Plant Species For Use In Enhancement Areas In The High Country.

Transition from the development edge to the natural area shall also be controlled by the standards of wildfire fuel modification zones as set forth in Mitigation Measure 4.6-49. Within fuel modification areas, trees and herbs from Table 2.6-3 of the Resource Management Plan should be planted toward the top of slopes; and trees at lesser densities and shrubs planted on lower slopes. *(This measure is not applicable to the Mission Village project because the measure addresses access and management activities in the High Country SMA, which is located outside the boundaries of the proposed Mission Village project.)*

(3) Grading Activities

SP 4.6-34 Grading perimeters shall be clearly marked and inspected by the project biologist prior to impacts occurring within or adjacent to the High Country SMA.

SP 4.6-35 The project biologist shall work with the grading contractor to avoid inadvertent impacts to biological resources outside of the grading area.

(4) *Long-Term Management*

SP 4.6-36 Upon final approval of the Newhall Ranch Specific Plan, the Special Management Area designation for the High Country SMA shall become effective. The permitted uses and development standards for the SMA are governed by the Development Regulations, Chapter 3. *(This measure is not applicable to the Mission Village project because the measure addresses access and management activities in the High Country SMA, which is located outside the boundaries of the proposed Mission Village project.)*

SP 4.6-37 The High Country SMA shall be offered for dedication in three approximately equal phases of approximately 1,400 acres each proceeding from north to south, as follows:

1. The first offer of dedication will take place with the issuance of the 2,000th residential building permit of Newhall Ranch;
2. The second offer of dedication will take place with the issuance of the 6,000th residential building permit of Newhall Ranch; and
3. The remaining offer of dedication will be completed by the 11,000th residential building permit of Newhall Ranch.
4. The Specific Plan applicant shall provide a quarterly report to the Departments of Public Works and Regional Planning which indicates the number of residential building permits issued in the Specific Plan area by subdivision map number.

SP 4.6-38 Prior to dedication of the High Country SMA, a *conservation and public access easement* shall be offered to the County of Los Angeles and a conservation and management easement offered to the Center for Natural Lands Management. The High Country SMA *Conservation and Public Access Easement* shall be consistent in its provisions with any other *conservation easements* to State or Federal resource agencies which may have been granted as part of mitigation or mitigation banking activities.

SP 4.6-39 The High Country SMA conservation and public access easement shall prohibit grazing within the High Country, except for those grazing activities associated with the long-term resource management programs, and shall restrict recreation to the established trail system.

SP 4.6-40 The High Country SMA conservation and public access easement shall be consistent in its provisions with any other conservation easements to State or Federal resource agencies which may have been granted as part of mitigation or mitigation banking activities.

SP 4.6-41 The High Country SMA shall be offered for dedication in fee to a *joint powers authority* consisting of Los Angeles County (4 members), the City of Santa Clarita (2 members), and the Santa Monica Mountains Conservancy (2 members). The *joint powers authority* will have overall responsibility for recreation within and conservation of the High Country.

SP 4.6-42 An appropriate type of service or assessment district shall be formed under the authority of the Los Angeles County Board of Supervisors for the collection of up to \$24 per single family detached dwelling unit per year and \$15 per single family attached dwelling unit per year, excluding any units designated as Low and Very Low affordable housing units pursuant to Section 3.10, Affordable Housing Program of the Specific Plan. This revenue would be assessed to the homeowner beginning with the occupancy of each dwelling unit and distributed to the *joint powers authority* for the purposes of recreation, maintenance, construction, conservation and related activities within the *High Country Special Management Area*.

(6) Open Area Mitigation Requirements

SP 4.6-43 Suitable portions of *Open Area* may be used for mitigation of riparian, *oak resources*, or elderberry scrub. Mitigation activities within *Open Area* shall be subject to the following requirements, as applicable.

- River Corridor SMA Mitigation Requirements, including: Mitigation Measures 4.6-1 through 4.6-11 and 4.6-13 through 4.6-16; and
- High Country SMA Mitigation Requirements, including: Mitigation Measures 4.6-27, 4.6-29 through 4.6-42, and
- Mitigation Banking—Mitigation Measure 4.6-16.

(a) Management Requirements

SP 4.6-44 Drainages with flows greater than 2,000 cfs will have soft bottoms. Bank protection will be of ungrouted rock, or buried bank stabilization as described in Section 2.5.2.a, except

at bridge crossings and other areas where public health and safety considerations require concrete or other stabilization. SP 4.6-45 The precise alignments and widths of major drainages will be established through the preparation of drainage studies to be approved by the County at the time of subdivision maps which permit construction.

SP 4.6-46 While Open Area is generally intended to remain in a natural state, some grading may take place, especially for parks, major drainages, trails, and roadways. Trails are also planned to be within Open Area.

SP 4.6-47 At the time that final subdivision maps permitting construction are recorded, the *Open Area* within the map will be offered for dedication to the Center for Natural Lands Management. Community Parks within *Open Area* are intended to be public parks. Prior to the offer of dedication of *Open Area* to the Center for Natural Lands Management, all necessary *conservation and public access easements*, as well as easements for infrastructure shall be offered to the County.

(b) Mitigation Banking

SP 4.6-47a Mitigation Banking will be permitted within the River Corridor SMA, the High Country SMA, and the *Open Area land use designations*, subject to the following requirements:

- Mitigation banking activities for riparian habitats will be subject to State and Federal regulations, and shall be conducted pursuant to the mitigation requirements set forth in Mitigation Measure 4.6-1 through 4.6-15 above.
- Mitigation banking for oak resources shall be conducted pursuant to 4.6-48, below.
- Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.

(c) Oak Resources Replacement Program

SP 4.6-48 Standards for the restoration and enhancement of oak resources within the High Country SMA and the Open Area include the following (oak resources include oak trees of the sizes regulated under the County Oak Tree Ordinance, Southern California black walnut trees, and mainland cherry trees/shrubs):

- To mitigate the impacts to oak resources that may be removed as development occurs in the Specific Plan Area, replacement trees shall be planted in conformance with the oak tree ordinance in effect at that time.
- Oak resource species obtained from the local gene pool shall be used in restoration or enhancement.
- Prior to recordation of construction-level final subdivision maps, an oak resource replacement plan shall be prepared that provides the guidelines for the oak tree planting and/or replanting. The Plan shall be reviewed by the Los Angeles Department of Regional Planning and the County Forester and shall include the following: site selection and preparation, selection of proper species including sizes and planting densities, protection from herbivores, site maintenance, performance standards, remedial actions, and a monitoring program.
- All plans and specifications shall follow County oak tree guidelines, as specified in the County Oak Tree Ordinance.

(7) Wildfire Fuel Modification

The Specific Plan Area is located within the extreme and moderate fire hazard zones as identified in the County of Los Angeles General Plan. The moderate fire hazard zone extends to those areas of Newhall Ranch where native brush can be found growing in its natural state. This is most common in the hillside areas. The extreme fire hazard zone includes high brush and woodlands, and all steep slopes regardless of vegetation (refer to **Section 4.12, Fire Protection Services**, for a detailed description of on-site fire zones).

Development of Newhall Ranch will reduce the amount of native flammable vegetation present within the Specific Plan Area. Fire fighting capabilities will be provided by two fire stations on the Specific Plan site, other nearby stations, a network of improved roads and an urban water system with fire flows as required by the County Fire Department. Existing and proposed off-site fire facilities will also serve the Specific Plan Area.

Property damage and public safety risks associated with wildfire are greatest where homes and other structures will be located adjacent to large open areas dominated by native vegetation. This condition will occur primarily in the southern portion of the Specific Plan site and where portions of the development area in the northwest section of Riverwood Village abut large natural open areas.

Emergency access to the site is currently provided to the Los Angeles County Fire Department for fire prevention control of the Specific Plan Area. Access will continue to be provided as the Specific Plan is implemented.

Fuel modification mitigation includes:

- SP 4.6-49 To minimize the potential exposure of the development areas, Open Area, and the SMAs to fire hazards, the Specific Plan is subject to the requirements of the Los Angeles County Fire Protection District (LACFPD), which provides fire protection for the area. At the time of final subdivision maps permitting construction in development areas that are adjacent to Open Area and the High Country SMA, a wildfire fuel modification plan shall be prepared in accordance with the fuel modification ordinance standards in effect at that time and shall be submitted for approval to the County Fire Department.
- SP 4.6-50 The wildfire fuel modification plan shall depict a fuel modification zone the size of which shall be consistent with the County fuel modification ordinance requirements. Within the zone, tree pruning, removal of dead plant material and weed and grass cutting shall take place as required by the fuel modification ordinance.
- SP 4.6-51 In order to enhance the habitat value of plant communities that require fuel modification, fire retardant plant species containing habitat value may be planted within the fuel modification zone. Typical plant species suitable for Fuel Modification Zones are indicated in Specific Plan Table 2.6-5 of the Resource Management Plan. Fuel modification zones adjacent to SMAs and Open Areas containing habitat of high value such as oak woodland and savannas shall utilize a more restrictive plant list, which shall be reviewed by the County Forester.
- SP 4.6-52 The wildfire fuel modification plan shall include the following construction period requirements: (a) a fire watch during welding operations; (b) spark arresters on all equipment or vehicles operating in a high fire hazard area; (c) designated smoking and non-smoking areas; and (d) water availability pursuant to the County Fire Department requirements.

(8) EIR Mitigation Measures

To further reduce impacts to biological resources that would result from Specific Plan implementation the following mitigation measures are proposed:

SP 4.6-53 If, at the time any subdivision map proposing construction is submitted, the County determines through an Initial Study, or otherwise, that there may be Rare, Threatened or Endangered, plant or animal species on the property to be subdivided, then, in addition to the prior surveys conducted on the Specific Plan site to define the presence or absence of sensitive habitat and associated species, current, updated site-specific surveys for all such animal or plant species shall be conducted in accordance with the consultation requirements set forth in Mitigation Measure 4.6-59 within those areas of the Specific Plan where such animal or plant species occur or are likely to occur.

The site-specific surveys shall include the unarmored three-spine stickleback, the arroyo toad, the Southwestern pond turtle, the California red-legged frog, the southwestern willow flycatcher, the least Bell's vireo, the San Fernando Valley spineflower and any other Rare, Sensitive, Threatened, or Endangered plant or animal species occurring, or likely to occur, on the property to be subdivided. All site-specific surveys shall be conducted during appropriate seasons by qualified botanists or qualified wildlife biologists in a manner that will locate any Rare, Sensitive, Threatened, or Endangered animal or plant species that may be present. To the extent there are applicable protocols published by either the United States Fish and Wildlife Service or the California Department of Fish and Game, all such protocols shall be followed in preparing the updated site-specific surveys.

All site-specific survey work shall be documented in a separate report containing at least the following information: (a) project description, including a detailed map of the project location and study area; (b) a description of the biological setting, including references to the nomenclature used and updated vegetation mapping; (c) detailed description of survey methodologies; (d) dates of field surveys and total person-hours spent on the field surveys; (e) results of field surveys, including detailed maps and location data; (f) an assessment of potential impacts; (g) discussion of the significance of the Rare, Threatened or Endangered animal or plant populations found in the project area, with consideration given to nearby populations and species distribution; (h) mitigation measures, including avoiding impacts altogether, minimizing or reducing impacts, rectifying or reducing impacts through habitat restoration, replacement or enhancement, or compensating for

impacts by replacing or providing substitute resources or environments, consistent with CEQA;⁵¹⁰ (i) references cited and persons contacted; and (j) other pertinent information, which is designed to disclose impacts and mitigate for such impacts.”

- SP 4.6-54 Prior to development within or disturbance to occupied unarmored threespine stickleback habitat, a formal consultation with the USFWS shall occur.
- SP 4.6-55 Prior to development or disturbance within wetlands or other sensitive habitats, permits shall be obtained from pertinent Federal and State agencies and the Specific Plan shall conform to the specific provisions of said permits. Performance criteria shall include that described in Mitigation Measures 4.6-1 through 4.6-16 and 4.6-42 through 4.6-47 for wetlands, and Mitigation Measures 4.6-27, 4.6-28, and 4.6-42 through 4.6-48 for other sensitive habitats.
- SP 4.6-56 All lighting along the perimeter of natural areas shall be downcast luminaries with light patterns directed away from natural areas.
- SP 4.6-57 Where bridge construction is proposed and water flow would be diverted, blocking nets and seines shall be used to control and remove fish from the area of activity. All fish captured during this operation would be stored in tubs and returned unharmed back to the river after construction activities were complete.
- SP 4.6-58 To limit impacts to water quality the Specific Plan shall conform with all provisions of required NPDES permits and water quality permits that would be required by the State of California Regional Water Quality Control Board.
- SP 4.6-59 Consultation shall occur with the County of Los Angeles (“County”) and California Department of Fish and Game (“CDFG”) at each of the following milestones:
1. Before Surveys. Prior to conducting sensitive plant or animal surveys at the Newhall Ranch subdivision map level, the applicant, or its designee, shall consult with the County and CDFG for purposes of establishing and/or confirming the appropriate survey methodology to be used.
 2. After Surveys. After completion of sensitive plant or animal surveys at the subdivision map level, draft survey results shall be made available to the County

⁵¹⁰ *State CEQA Guidelines* Sec. 15370.

and CDFG within sixty (60) calendar days after completion of the field survey work.

3. Subdivision Map Submittal. Within thirty (30) calendar days after the applicant, or its designee, submits its application to the County for processing of a subdivision map in the Mesas Village or Riverwood Village, a copy of the submittal shall be provided to CDFG. In addition, the applicant, or its designee, shall schedule a consultation meeting with the County and CDFG for purposes of obtaining comments and input on the proposed subdivision map submittal. The consultation meeting shall take place at least thirty (30) days prior to the submittal of the proposed subdivision map to the County.
4. Development/Disturbance and Further Mitigation. Prior to any development within, or disturbance to, habitat occupied by Rare, Threatened, or Endangered plant or animal species, or to any portion of the Spineflower Mitigation Area Overlay, as defined below, all required permits shall be obtained from both USFWS and CDFG, as applicable. It is further anticipated that the Federal and State permits will impose conditions and mitigation measures required by Federal and State law that are beyond those identified in the Newhall Ranch Final EIR (March 1999), the Newhall Ranch DAA (April 2001) and the Newhall Ranch Revised DAA (2002). It is also anticipated that conditions and mitigation measures required by Federal and State law for project-related impacts on Endangered, Rare or Threatened species and their habitat will likely require changes and revisions to Specific Plan development footprints, roadway alignments, and the limits, patterns, and techniques associated with project-specific grading at the subdivision map level.

SP 4.6-60 If at the time subdivisions permitting construction are processed, the County determines through an Initial Study that there may be elderberry scrub vegetation on the property being subdivided, then a site-specific survey shall be conducted to define the presence or absence of such habitat and any necessary mitigation measures shall be determined and applied.

SP 4.6-61 If at the time subdivisions permitting construction are processed, the County determines through an Initial Study that there may be mainland cherry trees and/or mainland cherry shrubs on the property being subdivided, then a site-specific survey shall be conducted to define the presence or absence of such habitat and any necessary mitigation measures

shall be determined and applied. *(This measure is not applicable to Mission Village because the project would not impact "mainland cherry trees and/or mainland cherry shrubs.")*

- SP 4.6-62 When a map revision or Substantial Conformance determination on any subdivision map or Conditional Use Permit would result in changes to an approved oak tree permit, then the oak tree report for that oak tree permit must be amended for the area of change, and the addendum must be approved by the County Forester prior to issuance of grading permits for the area of the map or CUP being changed. *(This measure is not applicable to the Mission Village project because the project does not propose any change to an existing oak tree permit.)*
- SP 4.6-63 Riparian resources that are impacted by buildout of the Newhall Ranch Specific Plan shall be restored with similar habitat at the rate of 1 acre replaced for each acre lost
- SP 4.6-64 The operator of the golf course shall prepare a Golf Course Maintenance Plan which shall include procedures to control storm water quality and ground water quality as a result of golf course maintenance practices, including irrigation, fertilizer, pesticide and herbicide use. This Plan shall be prepared in coordination with the County biologist and approved by the County Planning Director prior to the issuance of a Certificate of Occupancy. *(This measure is not applicable to the Mission Village project because the project does not include construction and operation of a golf course.)*

(9) Spineflower Special Study Mitigation Overlay

To address the Specific Plan's potential to adversely affect on-site populations of the state-listed San Fernando Valley spineflower, the County of Los Angeles, as a condition of plan approval, required the Applicant to develop a Spineflower Special Study Area Overlay, which includes the mitigation measures set forth below. Note that the Spineflower Conservation Plan (SCP) prepared as part of the RMDP/SCP project currently under review by CDFG and the Corps, has been designed to implement the terms and mandates of the overlay. In addition, the spineflower-related mitigation measures that are specific to the Mission Village site are also consistent with the overlay and SCP.

- SP 4.6-65 In order to facilitate the conservation of the spineflower on the Newhall Ranch Specific Plan site, the applicant, or its designee, shall, concurrent with Specific Plan approval, agree to the identified special study areas shown below in Figure 2.6-8, Spineflower Mitigation Area Overlay. The applicant, or its designee, further acknowledges that, within and around the Spineflower Mitigation Area Overlay (Figure 2.6-8), changes will likely occur to Specific Plan development footprints, roadway alignments, and the limits,

patterns and techniques associated with project-specific grading at the subdivision map level. The applicant, or its designee, shall design subdivision maps that are responsive to the characteristics of the spineflower and all other Endangered plant species that may be found on the Specific Plan site.

(a) Spineflower Preserves

SP 4.6-66 Direct impacts to known spineflower populations within the Newhall Ranch Specific Plan area shall be avoided or minimized through the establishment of one or more on-site preserves that are configured to ensure the continued existence of the species in perpetuity. Preserve(s) shall be delineated in consultation with the County and CDFG, and will likely require changes and revisions to Specific Plan development footprints for lands within and around the Spineflower Mitigation Area Overlay (Figure 2.6-8).

Delineation of the boundaries of Newhall Ranch spineflower preserve(s) for the entire Specific Plan area shall be completed in conjunction with approval of the first Newhall Ranch subdivision map filed in either the Mesas Village, or that portion of Riverwood Village in which the San Martinez spineflower population occurs.

A sufficient number of known spineflower populations shall be included within the Newhall Ranch spineflower preserve(s) in order to ensure the continued existence of the species in perpetuity. The conservation of known spineflower populations shall be established in consultation with the County and CDFG, and as consistent with standards governing issuance of an incidental take permit for spineflower pursuant to Fish and Game Code Section 2081, subdivision (b).

In addition to conservation of known populations, spineflower shall be introduced in appropriate habitat and soils in the Newhall Ranch preserve(s). The creation of introduced populations shall require seed collection and/or top soil at impacted spineflower locations and nursery propagation to increase seed and sowing of seed. The seed collection activities, and the maintenance of the bulk seed repository, shall be approved in advance by the County and CDFG.

Once the boundaries of the Newhall Ranch spineflower preserve(s) are delineated, the project applicant, or its designee, shall be responsible for conducting a spineflower population census within the Newhall Ranch spineflower preserve(s) annually for 10 years. (These census surveys shall be in addition to the surveys required by Mitigation Measure 4.6-53, above.) The yearly spineflower population census documentation shall

be submitted to the County and CDFG, and maintained by the project applicant, or its designee. If there are any persistent population declines documented in the annual population census reports, the project applicant, or its designee, shall be responsible for conducting an assessment of the ecological factor(s) that are likely responsible for the decline, and implement management activity or activities to address these factors where feasible. In no event, however, shall project-related activities jeopardize the continued existence of the Newhall Ranch spineflower populations. If a persistent population decline is documented, such as a trend in steady population decline that persists for a period of 5 consecutive years, or a substantial drop in population is detected over a 10-year period, spineflower may be introduced in consultation with CDFG in appropriate habitat and soils in the Newhall Ranch preserve(s), utilizing the bulk spineflower seed repository, together with other required management activity or activities. These activities shall be undertaken by a qualified botanist/biologist, subject to approval by the County and CDFG. The project applicant, or its designee, shall be responsible for the funding and implementation of the necessary management activity or activities, including monitoring, as approved by the County and CDFG.

Annual viability reports shall be submitted to the County and CDFG for 10 years following delineation of the Newhall Ranch spineflower preserve(s) to ensure long-term documentation of the spineflower population status within the Newhall Ranch preserve(s). In the event annual status reports indicate the spineflower population within the Newhall Ranch preserve(s) is not stable and viable 10 years following delineation of the spineflower preserve(s), the project applicant, or its designee, shall continue to submit annual status reports to the County and CDFG for a period of no less than an additional 5 years.

(b) Connectivity, Reserve Design, and Buffers

SP 4.6-67

Indirect impacts associated with the interface between the preserved spineflower populations and planned development within the Newhall Ranch Specific Plan shall be avoided or minimized by establishing open space connections with Open Area, River Corridor, or High Country land use designations. In addition, buffers (i.e., setbacks from developed, landscaped or other use areas) shall be established around portions of the delineated preserve(s) not connected to Open Area, the River Corridor or the High Country land use designations. The open space connections and buffer configurations shall take into account local hydrology, soils, existing and proposed adjacent land uses, the presence of non-native invasive plant species, and seed dispersal vectors.

Open space connections shall be configured such that the spineflower preserves are connected to Open Area, River Corridor, or High Country land use designations to the extent practicable. Open space connections shall be of adequate size and configuration to achieve a moderate to high likelihood of effectiveness in avoiding or minimizing indirect impacts (e.g., invasive plants, increased fire frequency, trampling, chemicals, etc.) to the spineflower preserve(s). Open space connections for the spineflower preserve(s) shall be configured in consultation with the County and CDFG. Open space connections for the spineflower preserve(s) shall be established for the entire Specific Plan area in conjunction with approval of the first Newhall Ranch subdivision map filed in either the Mesa Village, or that portion of the Riverwood Village in which the San Martinez spineflower location occurs.

For preserves and/or those portions of preserves not connected to Open Area, River Corridor, or High Country land use designations, buffers shall be established at variable distances of between 80 and 200 feet from the edge of development to achieve a moderate to high likelihood of effectiveness in avoiding or minimizing indirect impacts (e.g., invasive plants, increased fire frequency, trampling, chemicals, etc.) to the spineflower preserve(s). The buffer size/configuration shall be guided by the analysis set forth in the *“Review of Potential Edge Effects on the San Fernando Valley Spineflower,”* prepared by Conservation Biology Institute, January 19, 2000, and other sources of scientific information and analysis, which are available at the time the preserve(s) and buffers are established. Buffers for the spineflower preserve(s) shall be configured in consultation with the County and CDFG for the entire Specific Plan area. Buffers for the spineflower preserve(s) shall be established in conjunction with approval of the first Newhall Ranch subdivision map filed in either the Mesa Village, or that portion of the Riverwood Village in which the San Martinez spineflower location occurs.

Roadways and road rights-of-way shall not be constructed in any spineflower preserve(s) and buffer locations on Newhall Ranch unless constructing the road(s) in such location is found to be the environmentally superior alternative in subsequently required tiered EIRs in connection with the Newhall Ranch subdivision map(s) process. No other development or disturbance of native habitat shall be allowed within the spineflower preserve(s) or buffer(s).

The project applicant, or its designee, shall be responsible for revegetating open space connections and buffer areas of the Newhall Ranch spineflower preserve(s) to mitigate temporary impacts due to grading that will occur within portions of those open space

connections and buffer areas. The impacted areas shall be reseeded with a native seed mix to prevent erosion, reduce the potential for invasive non-native plants, and maintain functioning habitat areas within the buffer area. Revegetation seed mix shall be reviewed and approved by the County and CDFG.

(c) Preserve Protection/Fencing

SP 4.6-68 To protect the preserved Newhall Ranch spineflower populations, and to further reduce potential direct impacts to such populations due to unrestricted access, the project applicant, or its designee, shall erect and maintain temporary orange fencing and prohibitive signage around the Newhall Ranch preserve(s), open space connections and buffer areas, which are adjacent to areas impacted by proposed development prior to and during all phases of construction. The areas behind the temporary fencing shall not be used for the storage of any equipment, materials, construction debris, or anything associated with construction activities.

Following the final phase of construction of any Newhall Ranch subdivision map adjacent to the Newhall Ranch spineflower preserve(s), the project applicant, or its designee, shall install and maintain permanent fencing along the subdivision tract bordering the preserve(s). Permanent signage shall be installed on the fencing along the preservation boundary to indicate that the fenced area is a biological preserve, which contains protected species and habitat, that access is restricted, and that trespassing and fuel modification are prohibited within the area. The permanent fencing shall be designed to allow wildlife movement.

The plans and specifications for the permanent fencing and signage shall be approved by the County and CDFG prior to the final phase of construction of any Newhall Ranch subdivision map adjacent to a Newhall Ranch spineflower preserve(s).

(d) Preserve Protection/Hydrological Alterations

SP 4.6-69 Indirect impacts resulting from changes to hydrology (i.e., increased water runoff from surrounding development) at the interface between spineflower preserve(s) and planned development within the Newhall Ranch Specific Plan shall be avoided or mitigated to below a level of significance.

Achievement of this standard will be met through the documented demonstration by the project applicant, or its designee, that the storm drain system achieves pre-development

hydrological conditions for the Newhall Ranch spineflower preserve(s). To document such a condition, the project applicant, or its designee, shall prepare a study of the pre- and post-development hydrology, in conjunction with Newhall Ranch subdivision maps adjacent to spineflower preserve(s). The study shall be used in the design and engineering of a storm drain system that achieves pre-development hydrological conditions. The study must conclude that proposed grade changes in development areas beyond the buffers will maintain pre-development hydrology conditions within the preserve(s). The study shall be approved by the Planning Director of the County, and the resulting conditions confirmed by CDFG.

The storm drain system for Newhall Ranch subdivision maps adjacent to any spineflower preserves must be approved by the County prior to the initiation of any grading activities.

(e) Road Construction Measures

SP 4.6-70

Consistent with the Spineflower Mitigation Area Overlay reflected in Mitigation Measure 4.6-65, direct impacts to known Newhall Ranch spineflower populations associated with proposed road construction or modifications to existing roadways shall be further assessed for proposed road construction at the Newhall Ranch subdivision map level, in conjunction with the tiered EIR required for each subdivision map. To avoid or substantially lessen direct impacts to known spineflower populations, Specific Plan roadways shall be redesigned or realigned, to the extent practicable, to achieve the spineflower preserve and connectivity/preserve design/buffer standards set forth in Mitigation Measures 4.6-66 and 4.6-67. The project applicant, or its designee, acknowledges that that road redesign and realignment is a feasible means to avoid or substantially lessen potentially significant impacts on the now known Newhall Ranch spineflower populations. Road redesign or alignments to be considered at the subdivision map level include:

- (a) Commerce Center Drive;
- (b) Magic Mountain Parkway;
- (c) Chiquito Canyon Road;
- (d) Long Canyon Road;

- (e) San Martinez Grande Road;
- (f) Potrero Valley Road;
- (g) Valencia Boulevard; and
- (h) Any other or additional roadways that have the potential to significantly impact known Newhall Ranch spineflower populations.

Roadways and road rights-of-way shall not be constructed in any spineflower preserve(s) and buffer locations on Newhall Ranch, unless constructing the road(s) in such location is found to be the environmentally superior alternative in subsequently required tiered EIRs in connection with the Newhall Ranch subdivision map(s) process.

(f) Engineering, Design and Grading Modifications

SP 4.6-71 Consistent with the Spineflower Mitigation Area Overlay reflected in Mitigation Measure 4.6-65, direct impacts to known Newhall Ranch spineflower populations shall be further assessed at the Newhall Ranch subdivision map level, in conjunction with the required tiered EIR process. To avoid or substantially lessen impacts to known spineflower populations at the subdivision map level, the project applicant, or its designee, may be required to adjust Specific Plan development footprints, roadway alignments, and the limits, patterns and techniques associated with project-specific grading to achieve the spineflower preserve and connectivity/preserve design/buffer standards set forth in Mitigation Measures 4.6-66 and 4.6-67 for all future Newhall Ranch subdivision maps that encompass identified spineflower populations.

(g) Fire Management Plan

SP 4.6-72 A Fire Management Plan shall be developed to avoid and minimize direct and indirect impacts to the spineflower, in accordance with the adopted Newhall Ranch Resource Management Plan (RMP), to protect and manage the Newhall Ranch spineflower preserve(s) and buffers.

The Fire Management Plan shall be completed by the project applicant, or its designee, in conjunction with approval of any Newhall Ranch subdivision map adjacent to a spineflower preserve.

The final Fire Management Plan shall be approved by the County of Los Angeles Fire Department through the processing of subdivision maps.

Under the final Fire Management Plan, limited fuel modification activities within the spineflower preserves will be restricted to selective thinning with hand tools to allow the maximum preservation of Newhall Ranch spineflower populations. No other fuel modification or clearance activities shall be allowed in the Newhall Ranch spineflower preserve(s). Controlled burning may be allowed in the future within the Newhall Ranch preserve(s) and buffers, provided that it is based upon a burn plan approved by the County of Los Angeles Fire Department and CDFG. The project applicant, or its designee, shall also be responsible for annual maintenance of fuel modification zones, including, but not limited to, removal of undesirable non-native plants, revegetation with acceptable locally indigenous plants and clearing of trash and other debris in accordance with the County of Los Angeles Fire Department.

(h) Water Flow Diversion and Management

SP 4.6-73

At the subdivision map level, the project applicant, or its designee, shall design and implement project-specific design measures to minimize changes in surface water flows to the Newhall Ranch spineflower preserve(s) for all Newhall Ranch subdivision maps adjacent to the preserve(s) and buffers, and avoid and minimize indirect impacts to the spineflower. Prior to issuance of a grading permit for each such subdivision map, the project applicant, or its designee, shall submit for approval to the County plans and specifications that ensure implementation of the following design measures:

- (a) During construction activities, drainage ditches, piping or other approaches will be put in place to convey excess storm water and other surface water flows away from the Newhall Ranch spineflower preserve(s) and connectivity/preserve design/buffers, identified in Mitigation Measures 4.6-66 and 4.6-67;
- (b) Final grading and drainage design will be developed that does not change the current surface and subsurface hydrological conditions within the preserve(s);
- (c) French drains will be installed along the edge of any roadways and fill slopes that drain toward the preserve(s);
- (d) Roadways will be constructed with slopes that convey water flows within the roadway easements and away from the preserve(s);

- (e) Where manufactured slopes drain toward the preserve(s), a temporary irrigation system would be installed to the satisfaction of the County in order to establish the vegetation on the slope area(s). This system shall continue only until the slope vegetation is established and self sustaining;
- (f) Underground utilities will not be located within or through the preserve(s). Drainage pipes installed within the preserve(s) away from spineflower populations to convey surface or subsurface water away from the populations will be aligned to avoid the preserve(s) to the maximum extent practicable; and
- (g) Fencing or other structural type barriers that will be installed to reduce intrusion of people or domestic animals into the preserve(s) shall incorporate footing designs that minimize moisture collection.

(i) Biological Monitor

SP 4.6-74 A knowledgeable, experienced botanist/biologist, subject to approval by the County and CDFG, shall be required to monitor the grading and fence/utility installation activities that involve earth movement adjacent to the Newhall Ranch spineflower preserve(s) to avoid the incidental take through direct impacts of conserved plant species, and to avoid disturbance of the preserve(s). The biological monitor will conduct biweekly inspections of the project site during such grading activities to ensure that the mitigation measures provided in the adopted Newhall Ranch Mitigation Monitoring Program (Biota section) are implemented and adhered to.

Monthly monitoring reports, as needed, shall be submitted to the County verifying compliance with the mitigation measures specified in the adopted Newhall Ranch Mitigation Monitoring Program (Biota section).

The biological monitor will have authority to immediately stop any such grading activity that is not in compliance with the adopted Newhall Ranch Mitigation Monitoring Program (Biota section), and to take reasonable steps to avoid the take of, and minimize the disturbance to, spineflower populations within the preserve(s).

(j) Construction Impact Avoidance Measures

SP 4.6-75 The following measures shall be implemented to avoid and minimize indirect impacts to Newhall Ranch spineflower populations during all phases of project construction:

- (a) **Water Control.** Watering of the grading areas would be controlled to prevent discharge of construction water into the Newhall Ranch preserve(s) or on ground sloping toward the preserve(s). Prior to the initiation of grading operations, the project applicant, or its designee, shall submit for approval to the County an irrigation plan describing watering control procedures necessary to prevent discharge of construction water into the Newhall Ranch preserve(s) and on ground sloping toward the preserve(s).
- (b) **Storm Water Flow Redirection.** Diversion ditches would be constructed to redirect storm water flows from graded areas away from the Newhall Ranch preserve(s). To the extent practicable, grading of areas adjacent to the preserve(s) would be limited to spring and summer months (May through September) when the probability of rainfall is lower. Prior to the initiation of grading operations, the project applicant, or its designee, would submit for approval to the County a storm water flow redirection plan that demonstrates the flow of storm water away from the Newhall Ranch spineflower preserve(s).
- (c) **Treatment of Exposed Graded Slopes.** Graded slope areas would be trimmed and finished as grading proceeds. Slopes would be treated with soil stabilization measures to minimize erosion. Such measures may include seeding and planting, mulching, use of geotextiles and use of stabilization mats. Prior to the initiation of grading operations, the project applicant, or its designee, would submit for approval to the County the treatments to be applied to exposed graded slopes that would ensure minimization of erosion.

(k) Reassessment Requirement

SP 4.6-76

In conjunction with submission of the first Newhall Ranch subdivision map in either Mesas Village or that portion of Riverwood Village in which the San Martinez spineflower location occurs, the project applicant, or its designee, shall reassess project impacts, both direct and indirect, to the spineflower populations using subdivision mapping data, baseline data from the Newhall Ranch Final EIR and data from the updated plant surveys (see, Specific Plan EIR Mitigation Measure 4.6-53).

This reassessment shall take place during preparation of the required tiered EIR for each subdivision map. If the reassessment results in the identification of new or additional impacts to Newhall Ranch spineflower populations, which were not previously known

or identified, the mitigation measures set forth in this program, or a Fish and Game Code Section 2081 permit(s) issued by CDFG, shall be required, along with any additional mitigation required at that time.

(I) Newhall Ranch Monitoring and Management

SP 4.6-77

Direct and indirect impacts to the preserved Newhall Ranch spineflower populations shall require a monitoring and management plan, subject to the approval of the County. The applicant shall consult with CDFG with respect to preparation of the Newhall Ranch spineflower monitoring/management plan. This plan shall be in place when the preserve(s) and connectivity/preserve design/buffers are established (see Mitigation Measures 4.6-66 and 4.6-67). The criteria set forth below shall be included in the plan.

Monitoring. The purpose of the monitoring component of the plan is to track the viability of the Newhall Ranch spineflower preserve(s) and its populations, and to ensure compliance with the adopted Newhall Ranch Mitigation Monitoring Program (Biota section).

The monitoring component of the plan shall investigate and monitor factors such as population size, growth or decline, general condition, new impacts, changes in associated vegetation species, pollinators, seed dispersal vectors, and seasonal responses. Necessary management measures will be identified. The report results will be sent annually to the County, along with photo documentation of the assessed site conditions.

The project applicant, or its designee, shall contract with a qualified botanist/biologist, approved by the County, with the concurrence of CDFG, to conduct quantitative monitoring over the life of the Newhall Ranch Specific Plan. The botanist/biologist shall have a minimum of three years experience with established monitoring techniques and familiarity with Southern California flora and target taxa. Field surveys of the Newhall Ranch spineflower preserve(s) will be conducted each spring. Information to be obtained will include: (a) an estimate of the numbers of spineflowers in each population within the preserve(s); (b) a map of the extent of occupied habitat at each population; (c) establishment of photo monitoring points to aid in documenting long-term trends in habitat; (d) aerial photographs of the preserved areas at five-year intervals; (e) identification of significant impacts that may have occurred or problems that need attention, including invasive plant problems, weed problems and fencing or signage repair; and (f) overall compliance with the adopted mitigation measures.

For a period of three years from Specific Plan re-approval, all areas of potential habitat on the Newhall Ranch site will be surveyed annually in the spring with the goal of identifying previously unrecorded spineflower populations. Because population size and distribution limits are known to vary depending on rainfall, annual surveys shall be conducted for those areas proposed for development in order to establish a database appropriate for analysis at the project-specific subdivision map level (rather than waiting to survey immediately prior to proceeding with the project-specific subdivision map process). In this way, survey results gathered over time (across years of varying rainfall) will provide information on ranges in population size and occupation. New populations, if they are found, will be mapped and assessed for inclusion in the preserve program to avoid impacts to the species.

Monitoring/Reporting. An annual report will be submitted to the County and CDFG by December 31st of each year. The report will include a description of the monitoring methods, an analysis of the findings, effectiveness of the mitigation program, site photographs, and adoptive management measures, based on the findings. Any significant adverse impacts, signage, fencing or compliance problems identified during monitoring visits will be reported to the County and CDFG for corrective action by the project applicant, or its designee.

Management. Based on the outcome of ongoing monitoring and additional project-specific surveys addressing the status and habitat requirements of the spineflower, active management of the Newhall Ranch spineflower preserve(s) will be required in perpetuity. Active management activities will be triggered by a downward population decline over five consecutive years, or a substantial drop in population over a 10-year period following County re-approval of the Specific Plan. Examples of management issues that may need to be addressed in the future include, but are not limited to, control of exotic competitive non-native plant species, herbivory predation, weed control, periodic controlled burns, or fuel modification compliance.

After any population decline documented in the annual populations census following County re-approval of the Specific Plan, the project applicant, or its designee, shall be responsible for conducting an assessment of the ecological factor(s) that are likely responsible for the decline, and implement management activity or activities to address these factors where feasible. If a persistent population decline is documented, such as a trend in steady population decline persistent for a period of 5 consecutive years, or a substantial drop in population detected over a 10-year period, spineflower may be

introduced in appropriate habitat and soils in the Newhall Ranch preserve(s), utilizing the bulk spineflower seed repository, together with other required management activity or activities. In connection with this monitoring component, the project applicant, or its designee, shall contract with a qualified botanist/biologist, approved by the County, to complete: (a) a study of the breeding and pollination biology of the spineflower, including investigation into seed physiology to assess parameters that may be important as management tools to guarantee self-sustainability of populations, which may otherwise have limited opportunity for germination; and (b) a population genetics study to document the genetic diversity of the Newhall Ranch spineflower population. The criteria for these studies shall be to develop data to make the Newhall Ranch spineflower management program as effective as possible. These studies shall be subject to approval by the County's biologist, with the concurrence of CDFG. These activities shall be undertaken by a qualified botanist/biologist, subject to approval by the County with the concurrence of CDFG. The project applicant, or its designee, shall be responsible for the funding and implementation of the necessary management activity or activities, as approved by the County and CDFG.

The length of the active management components set forth above shall be governed by attainment of successful management criteria set forth in the plan rather than by a set number of years.

(m) Translocation/Reintroduction Program

SP 4.6-78 To the extent project-related direct and indirect significant impacts on spineflower cannot be avoided or substantially lessened through establishment of the Newhall Ranch spineflower preserve(s), and other avoidance, minimization, or other compensatory mitigation measures, a translocation and reintroduction program may be implemented in consultation with CDFG to further mitigate such impacts. Direct impacts (i.e., take) to occupied spineflower areas shall be fully mitigated at a 4:1 ratio. Impacts to occupied spineflower areas caused by significant indirect effects shall be mitigated at a 1:1 ratio.

Introduction of new spineflower areas will be achieved through a combination of direct seeding and translocation of the existing soil seed bank that would be impacted by grading. Prior to any development within, or disturbance to, spineflower populations, on-site and off-site mitigation areas shall be identified and seed and top soil shall be collected. One-third of the collected seed shall be sent to the Rancho Santa Ana Botanical Garden for storage. One third of the seed shall be sent to the USDA National Seed

Storage Lab in Fort Collins, Colorado for storage. One third shall be used for direct seeding of the on-site and off-site mitigation areas.

Direct seeding. Prior to the initiation of grading, the project applicant, or its designee, shall submit to the County a program for the reintroduction of spineflower on Newhall Ranch. The reintroduction program shall include, among other information: (a) location map with scale; (b) size of each introduction polygon; (c) plans and specifications for site preparation, including selective clearing of competing vegetation; (d) site characteristics; (e) protocol for seed collection and application; and (f) monitoring and reporting. The program shall be submitted to CDFG for input and coordination. The project applicant, or its designee, shall implement the reintroduction program prior to the initiation of grading. At least two candidate spineflower reintroduction areas will be created within Newhall Ranch and one candidate spineflower reintroduction area will be identified off site. Both on-site and off-site reintroduction areas will be suitable for the spineflower in both plant community and soils, and be located within the historic range of the taxon. Success criteria shall be included in the monitoring/management plan, with criteria for the germination, growth, and production of viable seeds of individual plants for a specified period.

Although the reintroduction program is experimental at this stage, the County considers such a program to be a feasible form of mitigation at this juncture based upon available studies. Botanists/biologists familiar with the ecology and biology of the spineflower would prepare and oversee the reintroduction program.

Translocation. Prior to the initiation of grading, the project applicant, or its designee, shall submit to the County a translocation program for the spineflower. Translocation would salvage the topsoil of spineflower areas to be impacted due to grading. Salvaged spineflower soil seed bank would be translocated to the candidate spineflower reintroduction areas. The translocation program shall include, among other information: (a) location map with scale; (b) size of each translocation polygon; (c) plans and specifications for site preparation, including selective clearing of competing vegetation; (d) site characteristics; (e) protocol for topsoil collection and application; and (f) monitoring and reporting. The translocation program shall be submitted to CDFG for input and coordination. Translocation shall occur within the candidate spineflower reintroduction areas on site and off site. Successful criteria for each site shall be included in the monitoring/management plan/with criteria for the germination and growth to reproduction of individual plants for the first year a specified period.

Although the translocation program is experimental at this stage, the County considers such a program to be a feasible form of mitigation at this juncture based upon available studies. Botanists/biologists familiar with the ecology and biology of the spineflower would prepare and oversee the translocation program.

(n) Ongoing Agricultural Activities

SP 4.6-79 The project applicant, or its designee, shall engage in regular and ongoing consultation with the County and CDFG in connection with its ongoing agricultural operations in order to avoid or minimize significant direct impacts to the spineflower.

In addition, the project applicant, or its designee, shall provide 30 days advance written notice to the County and CDFG of the proposed conversion of its ongoing rangeland operations on Newhall Ranch to more intensive agricultural uses. The purpose of the advance notice requirement is to allow the applicant, or its designee, to coordinate with the County and CDFG to avoid or minimize significant impacts to the spineflower prior to the applicant's proposed conversion of its ongoing rangeland operations to more intensive agricultural uses. This coordination component will be implemented by or through the County's Department of Regional Planning and/or the Regional Manager of CDFG. Implementation will consist of the County and/or CDFG conducting a site visit of the proposed conversion area(s) within the 30-day period, and making a determination of whether the proposed conversion area(s) would destroy or significantly impact spineflower population in or adjacent to those areas. If it is determined that the conversion area(s) do not destroy or significantly impact spineflower populations, then the County and/or CDFG will authorize such conversion activities in the proposed conversion area(s). However, if it is determined that the conversion area(s) may destroy or significantly impact spineflower populations, then the County and/or CDFG will issue a stop work order to the applicant, or its designee. If such an order is issued, the applicant, or its designee, shall not proceed with any conversion activities in the proposed conversion area(s). However, the applicant, or the designee, may take steps to relocate the proposed conversion activities in an alternate conversion area(s). In doing so, the applicant, or its designee, shall follow the same notice and coordination provisions identified above. This conversion shall not include ordinary pasture maintenance and renovation or dry land farming operations consistent with rangeland management. *(This measure is not applicable to the Mission Village project because the project does not include an agricultural component.)*

(o) San Martinez Population

SP 4.6-80 Upon approval of tentative tract map(s) impacting the San Martinez portion of the Specific Plan site, the applicant shall work with the Department of Regional Planning staff and SEATAC to establish an appropriately sized preserve area to protect the spineflower population at San Martinez Canyon. *(This measure is not applicable to the Mission Village project because the project is not proposed within the San Martinez portion of the Newhall Ranch Specific Plan.)*

b. Additional Mitigation Measures Proposed by This EIR

The following project-specific mitigation measures are recommended to reduce the potentially significant biological impacts that may occur with implementation of the Mission Village project. These mitigation measures are in addition to those adopted in the certified Newhall Ranch Specific Plan Program EIR. All mitigation measures that relate specifically to the Mission Village project are identified with the designation "MV."

MV 4.3-1 Temporary impacts from construction activities in the riverbed shall be restricted to the following areas of disturbance: (1) an 85-foot-wide zone that extends into the river from the base of the rip-rap or gunite bank protection where it intercepts the river bottom; (2) 100 feet on either side of the outer edge of a new bridge or bridge to be modified; (3) a 60-foot-wide corridor for utility lines; (4) 20-foot-wide temporary access ramps; and (5) 60-foot roadway width temporary construction haul routes. The locations of these temporary construction sites and the routes of all access roads shall be shown on maps submitted with the sub-notification letter submitted to the Corps and CDFG for individual project approval. Any variation from these limits shall be submitted, with a justification for a variation for Corps and CDFG approval. The construction plans should indicate what type of vegetation, if any, would be temporarily disturbed or removed and the post-construction activities to facilitate revegetation of the temporarily impacted areas. The boundaries of the construction site and any temporary access roads within the riverbed shall be marked in the field with stakes and flagging. No construction activities, vehicular access, equipment storage, stockpiling, or significant human intrusion shall occur outside the work area and access roads.

MV 4.3-2 Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities that result in any disturbance to the banks or wetted channel, aquatic habitats within construction sites and

access roads, as well as all aquatic habitats within 300 feet of construction sites and access roads, shall be surveyed by a qualified biologist for the presence of the unarmored threespine stickleback, arroyo chub, and Santa Ana sucker. The Corps and CDFG shall be notified at least 14 days prior to the survey and shall have the option of attending. The biologist shall file a written report of the survey with both agencies within 14 days of the survey and no later than 10 days prior to any construction work in the riverbed. If there is evidence that fish spawn has occurred in the survey area, then surveys shall cease unless otherwise authorized by USFWS. If surveys determine that gravid fish are present, that spawning has recently occurred, or that juvenile fish are present in the proposed construction areas, all activities within aquatic habitat will be suspended. Construction within aquatic habitats shall only occur when it is determined that juvenile fish are not present within the project area.

MV 4.3-3 Conduct focused surveys for California red-legged frogs. Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 1,000 feet of construction sites and access roads shall be surveyed at the appropriate season for California red-legged frogs. The applicant shall contract with a qualified biologist to conduct focused surveys for California red-legged frogs. If detected in or adjacent to the project area, no work will be authorized within 500 feet of occupied habitat until the applicant provides concurrence from the USFWS to CDFG and Corps. If present, the applicant shall implement measures required by the USFWS Biological Opinion for California red-legged frog that either supplement or supercede these measures. If present, the applicant shall develop and implement a monitoring plan that includes the following measures in consultation with the USFWS and CDFG.

- 1) The applicant shall retain a qualified biologist with demonstrated expertise with California red-legged frogs to monitor all construction activities in potential red-legged frog habitat and assist the applicant in the implementation of the monitoring program. This person will be approved by the USFWS prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of California red-legged frogs.

- 2) Prior to the onset of construction activities, the applicant shall provide all personnel who will be present on work areas within or adjacent to the project area the following information:
 - a. A detailed description of the California red-legged frogs, including color photographs;
 - b. The protection the California red-legged frog receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act;
 - c. The protective measures being implemented to conserve the California red-legged frogs and other species during construction activities associated with the proposed project; and
 - d. A point of contact if California red-legged frogs are observed.
- 3) All trash that may attract predators of the California red-legged frogs will be removed from work sites or completely secured at the end of each work day.
- 4) Prior to the onset of any construction activities, the applicant shall meet on site with staff from the USFWS and the authorized biologist. The applicant shall provide information on the general location of construction activities within habitat of the California red-legged frogs and the actions taken to reduce impacts to this species. Because California red-legged frogs may occur in various locations during different seasons of the year, the applicant, USFWS, and authorized biologist will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on California red-legged frogs. The goal of this effort is to reduce the level of mortality of California red-legged frogs during construction.
- 5) Work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG. All workers will be advised that equipment and vehicles must remain within the fenced work areas.

- 6) The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any California red-legged frogs from within the fenced area to suitable habitat outside of the fence. If California red-legged frogs are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS/CDFG.
- 7) Fencing to exclude California red-legged frogs will be at least 24 inches in height.
- 8) The type of fencing must be approved by the authorized biologist and the USFWS/CDFG.
- 9) Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of California red-legged frogs may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the applicant in scheduling its work activities accordingly.
- 10) If California red-legged frogs are found within an area that has been fenced to exclude California red-legged frogs, activities will cease until the authorized biologist moves the California red-legged frog(s).
- 11) If California red-legged frogs are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the California red-legged frogs. The authorized biologist in consultation with USFWS/CDFG will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS.
- 12) Any California red-legged frogs found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, access to deep perennial pools, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.
- 13) The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.

- 14) Staging areas for all construction activities will be located on previously disturbed upland areas, if possible, designated for this purpose. All staging areas will be fenced.
- 15) To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force (DAPTF 2009) will be followed at all times.

MV 4.3-4 Focused surveys for arroyo toad shall be conducted. Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 1,000 feet of construction sites and access roads shall be surveyed at the appropriate season for arroyo toad. The applicant shall contract with a qualified biologist to conduct focused surveys for arroyo toad. If detected in or adjacent to the project area, no work will be authorized within 500 feet of occupied habitat until the applicant provides concurrence from the USFWS to CDFG and the Corps. The applicant shall implement measures required by the USFWS Biological Opinion that either supplement or supercede these measures. If arroyo toads are determined to be present, the applicant shall develop and implement a monitoring plan that includes the following measures in consultation with the USFWS and CDFG:

- 1) The applicant shall retain a qualified biologist with demonstrated expertise with arroyo toads to monitor all construction activities in potential arroyo toad habitat and assist the applicant in the implementation of the monitoring program. This person will be approved by the USFWS prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of arroyo toad.
- 2) Prior to the onset of construction activities, the applicant shall provide all personnel who will be present on work areas within or adjacent to the project area the following information:
 - a. A detailed description of the arroyo toad, including color photographs;

- b. The protection the arroyo toad receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act;
 - c. The protective measures being implemented to conserve the arroyo toad and other species during construction activities associated with the proposed project; and
 - d. A point of contact if arroyo toads are observed.
- 3) All trash that may attract predators of the arroyo toad will be removed from work sites or completely secured at the end of each work day.
- 4) Prior to the onset of any construction activities, the applicant shall meet on site with staff from the USFWS and the authorized biologist. The applicant shall provide information on the general location of construction activities within habitat of the arroyo toad and the actions taken to reduce impacts to this species. Because arroyo toads may occur in various locations during different seasons of the year, the applicant, USFWS, and authorized biologists will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on arroyo toads. The goal of this effort is to reduce the level of mortality of arroyo toads during construction. The parties realize that, if arroyo toads are present, complete prevention of all mortality is likely not possible because some arroyo toads may occur anywhere within suitable habitat during any given season; the detection of every individual over large areas is impossible because of the small size, fossorial habits, and cryptic coloration of the arroyo toad.
- 5) Where construction can occur in habitat where arroyo toads are widely distributed, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG. All workers will be advised that equipment and vehicles must remain within the fenced work areas.
- 6) The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any arroyo toads from within the fenced area to suitable habitat outside of the fence. If arroyo toads are observed

on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS/CDFG.

- 7) Fencing to exclude arroyo toads will be at least 24 inches in height.
- 8) The type of fencing must be approved by the authorized biologist and the USFWS/CDFG.
- 9) Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of arroyo toads may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the applicant in scheduling its work activities accordingly.
- 10) If arroyo toads are found within an area that has been fenced to exclude arroyo toads, activities will cease until the authorized biologist moves the arroyo toads.
- 11) If arroyo toads are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the arroyo toads. The authorized biologist in consultation with USFWS/CDFG will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS.
- 12) Any arroyo toads found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.
- 13) The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
- 14) Staging areas for all construction activities will be located on previously disturbed upland areas designated for this purpose. All staging areas will be fenced within potential toad habitat.

- 15) To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force (DAPTF 2009) will be followed at all times.
- 16) Drift fence/pitfall trap surveys will be implemented in toad sensitive areas prior to construction in an effort to reduce potential mortality to this species. Prior to any construction activities in the project area, silt fence shall be installed completely around the proposed work area and a qualified biologist should conduct a preconstruction/clearance survey of the work area for arroyo toads. Any toads found in the work area should be relocated to suitable habitat. The silt fence shall be maintained for the duration of the work activity.
- 17) The applicant shall restrict work to daylight hours, except during an emergency, in order to avoid nighttime activities when arroyo toads may be present on the access road. Traffic speed should be maintained at 15 mph or less in the work area.

MV 4.3-5 Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 500 feet of construction sites and access roads shall be surveyed at the appropriate season for southwestern pond turtle. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between April 1 and June 1. The survey schedule may be adjusted in consultation with CDFG to reflect the existing weather or stream conditions. The applicant shall develop a Plan to address the relocation of southwestern pond turtle. The Plan shall include but not be limited to the timing and location of the surveys that would be conducted for this species; identify the locations where more intensive efforts should be conducted; identify the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating individuals; and provide for the documentation/recordation of the numbers of animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground-disturbing activities within potentially occupied habitat.

If southwestern pond turtles are detected in or adjacent to the project, nesting surveys shall be conducted. Focused surveys for evidence of southwestern pond turtle nesting shall be conducted in, or adjacent to, the project when suitable nesting habitat

exists within 1,300 feet of occupied habitat in an area where project-related ground disturbance will occur (*e.g.*, development, ground disturbance). If both of those conditions are met, a qualified biologist shall conduct focused, systematic surveys for southwestern pond turtle nesting sites. The survey area shall include all suitable nesting habitat within 1,300 feet of occupied habitat in which project-related ground disturbance will occur. This area may be adjusted based on the existing topographical features on a case-by-case basis with the approval of CDFG. Surveys will entail searching for evidence of pond turtle nesting, including remnant eggshell fragments, which may be found on the ground following nest depredation.

If a southwestern pond turtle nesting area would be adversely impacted by construction activities, the applicant shall avoid the nesting area. If avoidance of the nesting area is determined to be infeasible, the authorized biologist shall coordinate with CDFG to identify if it is possible to relocate the pond turtles. Eggs or hatchlings shall not be moved without written authorization from CDFG.

The qualified biologist shall be present during all activities immediately adjacent to or within habitat that supports populations of southwestern pond turtle. Clearance surveys for pond turtles shall be conducted within 500 feet of potential habitat by the authorized biologist prior to the initiation of construction each day. The resume of the proposed biologist will be provided to CDFG for approval prior to conducting the surveys.

MV 4.3-6 Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 300 feet of construction sites and access roads shall be surveyed at the appropriate season for two-striped garter snake and south coast garter snake. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between April 1 and September 1. The survey schedule may be adjusted in consultation with CDFG to reflect the existing weather or stream conditions. If located, the species will be relocated to suitable pre-approved locations identified in the two-striped garter snake and/or south coast garter snake Relocation Plan.

The applicant shall develop a Plan to address the relocation of two-striped garter snake and south coast garter snake. The Plan shall include but not be limited to the timing and location of the surveys that would be conducted for each species, identify the locations where more intensive efforts should be conducted, identify the habitat and conditions in

the proposed relocation site(s), identify the methods that would be utilized for trapping and relocating the individual species, and provide for the documentation/recordation of the species and number of animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground-disturbing activities, within potentially occupied habitat.

The qualified biologist shall be present during all activities immediately adjacent to or within habitat that supports populations of two-striped garter snake and/or south coast garter snake. Clearance surveys for garter snakes shall be conducted within 200 feet of potential habitat by the authorized biologist prior to the initiation of construction each day. The resume of the proposed biologists will be provided to CDFG for approval prior to conducting the surveys.

MV 4.3-7 Prior to construction the applicant shall develop a relocation plan for coast horned lizard, silvery legless lizard, coastal western whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake. The Plan shall include but not be limited to the timing and location of the surveys that would be conducted for each species; identify the locations where more intensive efforts should be conducted; identify the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating the individual species; and provide for the documentation/recordation of the species and number of the animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground disturbing activities within potentially occupied habitat.

The Plan shall include the specific survey and relocation efforts that would occur for construction activities that occur both during the activity period of the special status species (generally March to November) and for periods when the species may be present in the work area but difficult to detect due to weather conditions (generally December through February). Thirty days prior to construction activities in coastal scrub, chaparral, oak woodland, riparian habitats, or other areas supporting these species qualified biologists shall conduct surveys to capture and relocate individual coast horned lizard, silvery legless lizard, coastal western whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake in order to avoid or minimize take of these special-status species. The plan shall require a minimum of three (3) surveys conducted during the time of year/day when each species is most likely to be observed. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. If construction is scheduled to occur during the low activity period (generally December through February) the

surveys shall be conducted prior to this period if possible and exclusion fencing shall be placed to limit the potential for re-colonization of the site prior to construction. The qualified biologist will be present during ground-disturbing activities immediately adjacent to or within habitat that supports populations of these species. Clearance surveys for special-status reptiles shall be conducted by a qualified biologist prior to the initiation of construction each day.

Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

MV 4.3-8 During any stream diversion or culvert installation activity, a qualified biologist(s) shall be present and shall patrol the areas within, upstream, and downstream of the work area. The biologists shall inspect the diversion and inspect for stranded fish or other aquatic organisms. Under no circumstances shall the unarmored threespine stickleback be collected or relocated, unless USFWS personnel or their agents implement this measure. Any event involving stranded fish shall be recorded and reported to CDFG and USFWS within 24 hours.

MV 4.3-9 Temporary bridges, culvert crossings, or other feasible methods of providing access across the river shall be constructed outside of the winter season and not during periods when spawning is occurring. Prior to the construction of any temporary or permanent crossing of the Santa Clara River, the applicant shall develop a Stream Crossing and Diversion Plan. The plan shall include the following elements: the timing and methods for pre-construction aquatic species surveys; a detailed description of the diversion methods (e.g., berms shall be constructed of on-site alluvium materials of low silt content, inflatable dams, sand bags, or other approved materials); special-status species relocation; fish exclusion techniques, including the use of block netting and fish relocation; methods to maintain fish passage during construction; channel habitat enhancement, including the placement of vegetation, rocks, and boulders to produce riffle habitat; fish stranding surveys; and the techniques for the removal of crossings prior to winter storm flows. The Plan shall be submitted to the USFWS and CDFG for approval at least 30 days prior to implementation.

If adult special-status fishes are present and spawning has not occurred, they shall be relocated prior to the diversion or crossing. Block nets of 0.125-inch woven mesh will be set upstream and downstream. On days with possible high temperature or low humidity

(temperatures in excess of 80° F), work will be done in the early morning hours, as soon as sufficient light is available, to avoid exposing fishes to high temperatures and/or low humidity. If high temperatures are present, the fishes will be herded to downstream areas past the block net. Once the fishes have been excluded by herding, a USFWS staff member or his or her agents shall inspect the site for remaining or stranded fish. A USFWS staff member or his or her agents shall relocate the fish to suitable habitat outside the project area (including those areas potentially subject to high turbidity). During the diversion/relocation of fishes, the USFWS or his or her agents shall be present at all times.

MV 4.3-10 Installation of bridges, culverts, or other structures shall not impair the movement of fish and aquatic life. Bottoms of temporary culverts shall be placed at or below channel grade. Bottoms of permanent culverts shall be placed below channel grade. Culvert crossings shall include provisions for a low flow channel where velocities are less than two feet per second to allow fish passage.

MV 4.3-11 a. **Stream diversion bypass channels:**

Stream diversion bypass channels will be constructed when the active wetted channel is within the work zone. Diversion bypass channels will be built in accordance with **MV 4.3-9** and in consultation with CDFG/USFWS. Equipment shall not be operated in areas of ponded or flowing water unless authorized by CDFG/USFWS.

The diversion channel shall be of a width and depth comparable to the natural river channel. In all cases where flowing water is diverted from a segment of the stream channel, the bypass channel will be constructed prior to the diversion of the active stream. The bypass channel will be constructed prior to diverting the stream, beginning in the downstream area and continuing in an upstream direction. Where feasible and in consultation with CDFG/USFWS, the configuration of the diversion channel will be curved (sinuous) with multiple sets of obstructions (*i.e.*, boulders, large logs, or other CDFG/USFWS-approved materials) placed in the channel at the point of each curve (*i.e.*, on alternating sides of the channel). If emergent aquatic vegetation is present in the original channel, the applicant will transplant suitable vegetation into the diversion channel and on the banks prior to or at the time of the water diversion. A qualified restoration ecologist will supervise the construction of the diversion channels on site. The integrity of the channel and diversion shall be maintained throughout the intended diversion period. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area.

Construction of diversion channels shall not occur if surveys determine that gravid fish are present, spawning has recently occurred, or juvenile fish are present in the proposed construction areas.

At the conclusion of the diversion, either at the commencement of the winter season, or the completion of construction, the applicant will coordinate with CDFG/USFWS to determine if the diversion should be left in place or the stream returned to the original channel. If CDFG/USFWS determine the stream should be diverted to the original channel, the original channel will be modified prior to re-diversion (*i.e.*, while dry) to construct curves (sinuosity) into that channel, including the placement of obstructions (*i.e.*, boulders, large logs, or other CDFG/USFWS-approved materials). The original channel will be replanted with emergent vegetation as the diversion channel was planted. If the diversion channel is abandoned, the boulders will remain in place.

b. Dewatering:

Construction dewatering in close proximity to stream flow shall implement the following:

Assess local stream and groundwater conditions, including flow depths, groundwater elevations, and anticipated dewatering cone of influence (radius of draw down).

Assess surface water elevations upstream, adjacent to, and downstream of the extraction points, to assess any critical flow regimes susceptible to excessive draw down and therefore fish stranding issues.

Assess surface water elevations downstream of the discharge locations (if discharge is proposed to the flowing stream) to assess any flow regimes and overbank areas that may be susceptible to flooding and therefore fish stranding at the cessation of discharge. Discharge locations shall also be assessed for potential channel bed erosion from dewatering discharge, and appropriate BMPs must be implemented to prevent excessive erosion or turbidity in the discharge.

The information above shall be summarized and provided in a plan approved by CDFG and Corps.

Fish shall be excluded from any artificial flowing channels from dewatering discharge. Methods to ensure separation may include, but are not limited to: block netting at the

confluence; creation of a physical drop greater than 4 inches at the confluence; or maintaining a velocity range unsuitable for fish passage, such as a berm at the confluence with small diameter pipes for discharge.

- MV 4.3-12 Slow-moving water habitats shall be constructed upstream and downstream of any river crossing or bridge construction area to provide refuge for special-status fishes during construction. Where feasible and in consultation with CDFG and USFWS, the applicant shall enhance slow-moving water habitats for each linear foot disturbed by hand-excavating shallow side channels and placing multiple sets of obstructions (*e.g.*, boulders, large logs, or other CDFG- and USFWS-approved materials) in the channel.
- MV 4.3-13 Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or be placed in locations that may be subject to normal storm flows during periods when storm flows can reasonably be expected to occur.
- MV 4.3-14 Thirty days prior to construction activities, a qualified biologist shall conduct a pre-construction survey for mountain lion natal dens. The survey area shall include the construction footprint and the area within 2,000 feet of the project disturbance boundaries. Should an active natal den be located, the applicant shall cease work within 2,000 feet and inform CDFG within 24 hours. No construction activities shall occur in the 2,000-foot buffer until a qualified biologist in consultation with CDFG establishes an appropriate setback from the den that would not adversely affect the successful rearing of the cubs. No construction activities or human intrusion shall occur within the established setback until the cubs have been successfully reared or the cats have left the area.
- MV 4.3-15 Within 30 days of ground-disturbing activities associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March through August in the project region, or as determined by a qualified biologist), the applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the disturbance zone or within 300 feet (500 feet for raptors) of the disturbance zone. The surveys shall continue on a weekly basis, with the last survey being conducted no more than 7 days prior to initiation of disturbance work. If ground-disturbing activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than 7 days will have elapsed between the survey and ground-disturbing activities.

If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with CDFG, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. In the event that golden eagles establish an active nest in the River Corridor SMA/SEA 23, the buffers will be established in consultation with CDFG. Potential golden eagle nesting will be reported to CDFG within 24 hours. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur. Results of the surveys shall be provided to CDFG in the annual mitigation status report.

For listed riparian songbirds (least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo) USFWS protocol surveys shall be conducted. If active nests are found, clearing and construction within 300 feet of the nest shall be postponed or halted, at the discretion of the biologist in consultation with CDFG and USFWS, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. If no active nests are observed, construction may proceed. If active nests are found, work may proceed provided that construction activity is located at least 300 feet from active nests (or as authorized through the context of the Biological Opinion and 2081b Incidental Take Permit). This buffer may be adjusted provided noise levels do not exceed 60 dB(A) hourly L_{eq} at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician.

If the noise meets or exceeds the 60 dB(A) L_{eq} threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dB(A) L_{eq} hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. The qualified

biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to CDFG and USFWS.

For coastal California gnatcatcher, the applicant shall conduct USFWS protocol surveys in suitable habitat within the project area and all areas within 500 feet of access or construction-related disturbance areas. Suitable habitats, according to the protocol, include "coastal sage scrub, alluvial fan, chaparral, or intermixed or adjacent areas of grassland and riparian habitats." A permitted biologist shall perform these surveys according to the USFWS' (1997a) Coastal California Gnatcatcher Presence/Absence Survey Guidelines. If a territory or nest is confirmed, the USFWS and CDFG shall be notified immediately. If present, a 500-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. No project activities may occur in these areas unless otherwise authorized by USFWS and CDFG. Construction activities in suitable gnatcatcher habitat will be monitored by a full-time qualified biologist. The monitoring shall be of a sufficient intensity to ensure that the biologist could detect the presence of a bird in the construction area.

MV 4.3-16 Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego black-tailed jackrabbit and San Diego desert woodrat.

If San Diego black-tailed jackrabbits are present, non-breeding rabbits shall be flushed from areas to be disturbed. Dens, depressions, nests, or burrows occupied by pups shall be flagged and ground-disturbing activities avoided within a minimum of 200 feet during the pup-rearing season (February 15 through July 1). This buffer may be reduced based on the location of the den upon consultation with CDFG. Occupied maternity dens, depressions, nests, or burrows shall be flagged for avoidance, and a biological monitor shall be present during construction. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The applicant shall document all San Diego black-tailed jackrabbit identified, avoided, or moved and provide a written report to CDFG within 72 hours. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

If active San Diego desert woodrat nests (stick houses) are identified within the disturbance zone or within 100 feet of the disturbance zone, a fence shall be erected

around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of the qualified biologist in consultation with CDFG. Clearing and construction within the fenced area will be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur. If avoidance is not possible, the applicant will take the following sequential steps: (1) all understory vegetation will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) each occupied nest will then be disturbed by a qualified wildlife biologist until all woodrats leave the nest and seek refuge off site, and (3) the nest sticks shall be removed from the project site and piled at the base of a nearby hardwood tree (preferably a coast live oak or California walnut). Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. The applicant shall document all woodrat nests moved and provide a written report to CDFG.

All woodrat relocation shall be conducted by a qualified biologist in possession of a scientific collecting permit.

MV 4.3-17 Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for American badger.

If American badgers are present, occupied habitat shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during the pup-rearing season (February 15 through July 1) and a minimum 200 foot buffer established. This buffer may be reduced based on the location of the den upon consultation with CDFG. Maternity dens shall be flagged for avoidance, identified on construction maps, and a qualified biologist shall be present during construction. If avoidance of a non-maternity den is not feasible, badgers shall be relocated either by trapping or by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers shall occur only after consultation with CDFG. A written

report documenting the badger removal shall be provided to CDFG within 30 days of relocation.

Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

MV 4.3-18 No earlier than 30 days prior to the commencement of construction activities, a pre-construction survey shall be conducted by a qualified biologist to determine if active roosts of special-status bats are present on or within 300 feet of the project disturbance boundaries. Should an active maternity roost be identified (in California, the breeding season of native bat species is generally from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, until the roost is vacated and juveniles have fledged. Surveys shall include rocky outcrops, caves, structures, and large trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities). Trees and rocky outcrops shall be surveyed by a qualified bat biologist (i.e., a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing the biologist to handle bats). If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided (i.e., not removed) by the project. If avoidance of the maternity roost must occur, the bat biologist shall survey (through the use of radio telemetry or other CDFG approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of CDFG that there are alternative roost sites used by the maternity colony and young are not present then no further action is required.

If a maternity roost will be impacted by the project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the project site no less than three months prior to the eviction of the colony. Large concrete walls (e.g., on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative potential roosting habitat appropriate for maternity colonies. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. CDFG shall also be notified of any hibernacula or active nurseries within the construction zone.

If non-breeding bat hibernacula are found in trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the individuals shall be safely evicted,

under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist in consultation with CDFG shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (*i.e.*, there shall be no less or more than one night between initial disturbance and the grading or tree removal). These actions should allow bats to leave during nighttime hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight.

If an active maternity roost is located on the project site, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (*i.e.*, prior to March 1) or after young are flying (*i.e.*, after July 31) using the exclusion techniques described above.

MV 4.3-19 Any special-status species bat day roost sites found by a qualified biologist during pre-construction surveys conducted per **MV 4.3-18**, to be directly (within project disturbance footprint) or indirectly (within 300 feet of project disturbance footprint) impacted are to be mitigated with creation of artificial roost sites. The project applicant shall establish (an) alternative roost site(s) within suitable preserved open space located at an adequate distance from sources of human disturbance.

MV 4.3-20 Thirty days prior to construction activities, a qualified biologist shall conduct CDFG protocol surveys to determine whether the burrowing owl is present at the site. The surveys shall consist of three site visits and shall be conducted in areas dominated by field crops, disturbed habitat, grasslands, and along levee locations, or if such habitats occur within 500 feet of a construction zone. If located, occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If the burrowing owl is detected but nesting is not occurring, construction work can proceed after any

owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95).

Unless otherwise authorized by CDFG, a 500-foot buffer, within which no activity will be permissible, will be maintained between project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.

Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report.

- MV 4.3-21 Waste and recycling receptacles that discourage foraging by wildlife species adapted to urban environments shall be installed in common areas and parks throughout the Mission Village site.
- MV 4.3-22 All oaks that will not be removed that are regulated under CLAOTO with driplines within 50 feet of land clearing (including brush clearing) or areas to be graded shall be enclosed in a temporary fenced zone for the duration of the clearing or grading activities. Fencing shall extend to the root protection zone (i.e., the area at least 15 feet from the trunk or 5 feet beyond the drip line, whichever distance is greater). No parking or storage of equipment, solvents, or chemicals that could adversely affect the trees shall be allowed within 25 feet of the trunk at any time. Removal of the fence shall occur only after the project arborist or qualified biologist confirms the health of preserved trees.
- MV 4.3-23 Mitigation Measures **SP 4.6-1** through **SP 4.6-16** specify requirements for riparian mitigation conducted in the High Country SMA/SEA 20, Salt Creek area, and Open Area. The applicant will prepare and implement a plan for mitigation of both riparian and upland habitats (such as riparian adjacent big sagebrush scrub), and incorporates these Mitigation Measures (**SP 4.6-1** through **SP 4.6-16**). A Comprehensive Mitigation Implementation Plan (CMIP) has been developed by Applicant that provides an outline of mitigation to offset impacts. The CMIP demonstrates the feasibility of creating the required mitigation acreage to offset project impacts (see **MV 4.3-31**). However, the CMIP does not identify mitigation actions specifically for impacts to waters of the United

States. But since these waters are a subset of CDFG jurisdiction, the applicable Corps mitigation requirements would be met or exceeded.⁵¹¹

Detailed riparian/wetland mitigation plans, in accordance with the CMIP, shall be submitted to, and are subject to the approval of, the Corps and CDFG as part of the sub-notification letters for individual projects. Individual project submittals shall include applicable CMIP elements, complying with the requirements outlined below. The detailed wetlands mitigation plan shall specify, at a minimum, the following: (1) the location of mitigation sites; (2) site preparation, including grading, soils preparation, irrigation installation, (2a) the quantity (seed or nursery stock) and species of plants to be planted (all species to be native to region); (3) detailed procedures for creating additional vegetation communities; (4) methods for the removal of non-native plants; (5) a schedule and action plan to maintain and monitor the enhancement/restoration area; (6) a list of criteria by which to measure success of the mitigation sites (*e.g.*, percent cover and richness of native species, percent survivorship, establishment of self-sustaining native plantings, maximum allowable percent of non-native species); (7) measures to exclude unauthorized entry into the creation/enhancement areas; and (8) contingency measures in the event that mitigation efforts are not successful. The detailed wetlands mitigation plans shall also classify the biological value (as “high,” “moderate,” or “low”) of the vegetation communities to be disturbed as defined in these conditions, or may be based on an agency-approved method (*e.g.*, Hybrid Assessment of Riparian Communities (HARC)). The biological value shall be used to determine mitigation replacement ratios required under **MV 4.3-31** and **MV 4.3-39**. The detailed wetlands mitigation plans shall provide for the 3:1 replacement of any Southern California black walnut to be removed from the riparian corridor for individual projects. The plan shall be subject to the approval of the CDFG and the Corps and approved prior to the impact to riparian resources. **MV 4.3-33** describes that the functions and values will be assessed for the riparian areas that will be removed, and **MV 4.3-31** and **MV 4.3-39** describe the replacement ratios for the habitats that will be impacted.

MV 4.3-24 Approximately 616.3 acres of coastal scrub shall be preserved on site within Open Area and/or off site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village. This measure ensures that preserved areas will be part of a greater

⁵¹¹ For detailed information concerning the Corps compensatory mitigation program for impacts to waters of the United States, please reference Appendix 11.0 of the Section 404(b)1 Alternatives Analysis, included in Appendix F1.0 of the Final EIS/EIR.

managed preserved system of numerous natural vegetation communities meant to support both common and special-status wildlife species. These areas support the same types of habitat that would be lost through construction and would be further enhanced through management and monitoring activities.

MV 4.3-25 Prior to ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot toad within all portions of the project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species could be detected (e.g., the presence of rain pools). If western spadefoot toad is identified on the project site, the following measures will be implemented:

- (1) Under the direct supervision of the qualified biologist, western spadefoot toad habitat shall be created within suitable natural sites on the Specific Plan site outside of the proposed development envelope. The amount of occupied breeding habitat to be impacted by the project shall be replaced at a 2:1 ratio. The actual relocation site design and location shall be approved by CDFG. The location shall be in a suitable habitat as far away as feasible from any of the homes and roads to be built. The relocation ponds shall be designed such that they only support standing water for several weeks following seasonal rains in order that aquatic predators (e.g., fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing ponds as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied ponds until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot toad adult, tadpoles, and egg masses detected are moved to the created pool habitat.
- (2) Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation communities within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released in identified/created relocation ponds described above.

- (3) The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately following peak breeding season such that surveys can be conducted for adults as well as for egg masses and larval and post-larval toads. Further, survey data will be provided to CDFG by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFG at the end of the monitoring effort. Success criteria for the monitoring program shall include verifiable evidence of toad reproduction at the relocation site.

MV 4.3-26 Prior to ground disturbance, vegetation clearing, construction, or site preparation activities, a qualified biologist shall be retained to conduct a Worker Environmental Awareness Program (WEAP) for all construction/contractor personnel. A list of construction personnel who have completed training prior to the start of construction shall be maintained on site and this list shall be updated as required when new personnel start work. No construction worker may work in the field for more than five days without participating in the WEAP. The qualified biologist shall provide ongoing guidance to construction personnel and contractors to ensure compliance with environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following:

- Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements.
- A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of non-compliance with these acts.
- Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts).
- Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction limitations (e.g., limitations on nighttime work) will be provided

to the environmental monitors and construction crews prior to ground disturbance. This applies to preconstruction activities, such as site surveying and staking, natural resources surveying or reconnaissance, establishment of water quality BMPs, and geotechnical or hydrological investigations.

- Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife.
- Review/designate the construction area in the field with the contractor in accordance with the final grading plan.
- Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected).
- Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity.
- Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas.
- Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented.
- To reduce the potential for the spread of New Zealand mud snails and weeds (including weed seeds) during project preconstruction and construction, all heavy equipment proposed for use on the project site shall be verified cleaned (including wheels, tracks, undercarriages, and bumpers, as applicable) before delivery to the project site. Equipment must be documented as mud snail and weed free upon delivery to the project site initial staging area, including: (1) vegetation clearing equipment (skid steer loaders, loaders, dozers, backhoes, excavators, chippers, grinders, and any hauling equipment, such as off-road haul trucks, flat bed, or other vehicles); (2) earth-moving equipment (scrapers, dozers, excavators, loaders, motor-graders, compactors, backhoes, off-road water trucks, and off-road haul trucks); and (3) all project-associated vehicles (including personal vehicles) that, upon inspection by the monitoring biologist, are deemed to present a risk for

spreading mud snails or weeds. Equipment shall be cleaned at existing construction yards or at a wash station. The biological monitor shall document that all construction equipment (as described above) has been cleaned prior to working within the project work site. Any equipment/vehicles determined to not be free of mud snails and weeds shall immediately be sent back to the originating construction yard for washing, or wash station where rinse water is collected and disposed of in either a sanitary sewer or other legal point of disposal. Equipment/vehicles moved from the site must be inspected, and re-washed as necessary, prior to re-engaging in construction activities in the project work area. A written daily log shall be kept for all vehicle/equipment washing that states the date, time, location, type of equipment washed, methods used, and location of work;

- Be present during initial vegetation clearing and grading.
- Submit to the CDFG an immediate report (within 72 hours) of any conflicts or errors resulting in impacts to special-status biological resources.

MV 4.3-27

The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan (Dudek 2007) shall be revised and submitted to CDFG for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The revised plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open space (i.e., the Salt Creek area or High Country SMA/SEA 20, spineflower preserves, or River Corridor SMA/SEA 23) without conflicting with other resource management objectives. Habitat replacement/enhancement will be at a 1:1 ratio (acres restored/enhanced to acres impacted).

The revised plan will describe habitat improvement/restoration measures to be completed prior to introducing slender mariposa lily. Habitat improvement/restoration will be based on native occupied slender mariposa lily habitat. The revised plan will specify: (1) the location of mitigation sites (may be selected from among 559 acres of suitable mitigation land in the High Country SMA/SEA 20 and Salt Creek area identified in the Draft Newhall Ranch Mitigation Feasibility Study (Dudek 2007); (2) a description of “target” vegetation (native shrubland or grassland) to include estimated cover and abundance of native shrubs and grasses in occupied slender mariposa lily habitat on Newhall Ranch land (either at sites to be destroyed by construction or at sites to be preserved); (3) site preparation measures to include topsoil treatment, soil decompaction,

erosion control, temporary irrigation systems, or other measures as appropriate; (4) methods for the removal of non-native plants (*e.g.*, mowing, weeding, raking, herbicide application, or burning); (5) the source of all plant propagules (seed, potted nursery stock, *etc.*), the quantity and species of seed or potted stock of all plants to be introduced or planted into the restoration/enhancement areas; (6) a schedule and action plan to maintain and monitor the enhancement/restoration areas, to include at minimum, qualitative annual monitoring for revegetation success and site degradation due to erosion, trespass, or animal damage for a period no less than two years; (7) as needed where sites are near trails or other access points, measures such as fencing, signage, or security patrols to exclude unauthorized entry into the restoration/enhancement areas; and (8) contingency measures such as replanting, weed control, or erosion control to be implemented if habitat improvement/restoration efforts are not successful.

Habitat restoration/enhancement will be judged successful when (1) percent cover and species richness of native species reach 50 percent of their cover and species richness at undisturbed occupied slender mariposa lily habitat at reference sites; and (2) the replacement vegetation has persisted at least one summer without irrigation. At that point slender mariposa lily propagules (seed or bulbs) will be introduced onto the site.

The revised plan will specify methods to collect propagules and introduce slender mariposa lily into these mitigation sites. Introductions will use source material (seeds or bulbs) from no more than 1.0 mile distant, similar slope exposures, and no more than 500 ft. elevational difference from the mitigation site, unless otherwise approved by CDFG. Bulbs may be salvaged and transplanted from slender mariposa lily occurrences to be lost; alternately, seed may be collected from protected occurrences, following CDFG-approved seed collection guidelines (*i.e.*, MOU for rare plant seed collection). No bulbs will be translocated into areas within 300 feet of proposed or existing development. The Applicant or its designee will monitor the reintroduction sites for no fewer than five additional years to estimate slender mariposa lily survivorship (for bulbs) or seedling establishment (for seeded sites).

Annual monitoring reports will be prepared and submitted to CDFG and will be made available to the public to guide future mitigation planning for slender mariposa lily. Monitoring reports will describe all restoration/enhancement measures taken in the preceding year; describe success and completion of those efforts and other pertinent site conditions (erosion, trespass, animal damage) in qualitative terms; and describe mariposa lily survival or establishment in quantitative terms.

A minimum of 133 acres of slender mariposa lily cumulative occupied area will be conserved and managed in the RMDP and SCP project boundaries. Of these 133 acres, approximately 103 acres of slender mariposa lily cumulative occupied area will be conserved and managed in the RMDP and SCP project boundary in the High Country SMA/SEA 20 and Salt Creek area, and 2 acres occur within the River Corridor SMA/SEA 23 and/or proposed spineflower preserves. Additional cumulative occupied area will be conserved and managed in the San Martinez Grande Canyon area at a 1:1 ratio (acres conserved and managed to acres impacted) based on impacts to cumulative occupied area within the Entrada planning area, as a means to ensure regional biodiversity of the species. Up to an additional 28 acres of slender mariposa lily cumulative occupied area can be conserved and managed in the San Martinez Grande Canyon area for this purpose.

- MV 4.3-28 The Oak Resource Replacement Plan to be prepared (as described in Newhall Ranch Specific Plan Program EIR Mitigation Measure SP 4.6-48) shall include measures to create, enhance, and/or restore 9.7 acres of coast live oak woodland and valley/oak savannah within the High Country SMA/SEA 20. The plan shall be subject to the requirements outlined in **SP 4.6-48**.

The applicant shall prepare an Oak Resource Management Plan that incorporates the findings of the Draft Newhall Ranch Mitigation Feasibility Report (Dudek 2007) and areas identified (in the technical report) as being suitable for oak woodland enhancement and creation shall be used as mitigation. Other mitigation sites may be used upon approval by the County. The plan shall be reviewed by the County Forester. The plan shall include the following: (1) site selection and preparation; (2) selection of proper species, including sizes and planting densities; (3) protection from herbivores; (4) site maintenance; (5) success criteria; (6) remedial actions; and (7) a monitoring program.

- MV 4.3-29 The project applicant will retain a qualified biologist to develop an Exotic Wildlife Species Control Plan and implement a control program for bullfrog, African clawed frog, and crayfish. The program will require the control of these species during construction within the River corridor and modified tributaries (bridges, diversions, bank stabilization, drop structures). The Plan shall include a description of the species targeted for eradication, the methods of harvest that will be employed, the disposal methods, and the measures that would be employed to avoid impacts to sensitive wildlife (*e.g.*, stickleback, arroyo toad, nesting birds) during removal activities (*i.e.*, timing, avoidance of specific areas). Annual monitoring shall occur for the first five years after construction

of project facilities. Monitoring will be conducted within sentinel locations along the River Corridor SMA/SEA 23 and where the project provides potential habitat for these species (e.g., future ponds and water features). Control shall be conducted within project facilities where monitoring results indicate that exotic species have colonized an area. After the first 5 years, the NLMO or other entity will be responsible for controlling exotic aquatic species.

- MV 4.3-30 In order to reduce impacts to biological resources from grading and construction activities, all related activities will be conducted to facilitate the escape of animals to natural areas. Construction and grading activities will begin in disturbed areas in order to avoid stranding animals in isolated patches of vegetation. Trenches will be covered at night or escape routes provided to prevent animals from falling into and being trapped in trenches. If escape routes are provided in lieu of covering trenches, the excavations will be inspected by a qualified biologist prior to restart of work.
- MV 4.3-31 The permanent removal of existing habitats in Corps and/or CDFG jurisdictional areas in the Santa Clara River and tributaries shall be replaced by creating habitats of similar functions and values/services (see **MV 4.3-33**) on the project site, or as allowed under **MV 4.3-39**. The riparian habitat mitigation will meet CDFG mitigation requirements listed in **Table 4.3-11**, consistent with success criteria for mitigation in **MV 4.3-36**.
- MV 4.3-32 Creation of new vegetation communities and restoration of impacted vegetation communities shall occur at suitable sites in or adjacent to jurisdictional areas or in areas where bank stabilization would occur. Locations where the excavation of uplands for bank protection/stabilization results in creation of new, unvegetated riverbed or other disturbance shall receive the highest level of priority for vegetation community restoration. Restoration sites may also occur at locations outside the riverbed where there are appropriate hydrologic conditions to create a self-sustaining riparian vegetation community and where upland and riparian vegetation community values are absent or very low. All sites shall contain suitable hydrological conditions and surrounding land uses to ensure a self-sustaining functioning riparian vegetation community. Candidate restoration sites shall be described in the annual mitigation status report (see **MV 4.3-43**). Sites will be approved when the detailed wetlands mitigation plans are submitted to the Corps and CDFG as part of the sub-notification letters submitted for individual projects. Status of the sites will be addressed through agency review of the annual mitigation status report and mitigation accounting form. Each mitigation plan will include acreages,

maps and site specific descriptions of the proposed revegetation site, including analysis of soils, hydrologic suitability, and present and future adjacent land uses.

Table 4.3-11
CDFG Jurisdictional Permanent Impacts Mitigation Ratios

| Ratios Listed by Vegetation Types & Quality | | | | |
|--|-------------------------------------|-------------------|----------------------|--------------------|
| Vegetation Community | Veg Code / ID | HIGH Reach Value* | MEDIUM Reach Value** | LOW Reach Value*** |
| | | (Mit. Ratio) | (Mit. Ratio) | (Mit. Ratio) |
| Southern Cottonwood-Willow Riparian Forrest | SCRWF | 4:1 | 3:1 | 2:1 |
| Southern Willow Scrub | SWS | 3:1 | 2.5:1 | 2:1 |
| Oak Woodland (Coast Live, Valley) | CLOW / VOW | 3:1 | 2.5:1 | 2:1 |
| Big Sagebrush Scrub | BSS | 2.5:1 | 2:1 | 1.5:1 |
| Mexican Elderberry Scrub | MES | 2.5:1 | 2:1 | 1.5:1 |
| Cismontane Alkaline Marsh | CAM | 2.5:1 | 2:1 | 1.5:1 |
| Coastal and Valley Fresh Water Marsh | CFWM | 2:1 | 1.5:1 | 1:1 |
| Mulefat Scrub | MFS | 2:1 | 1.5:1 | 1.25:1 |
| Arrowweed Scrub | AWS | 2:1 | 1.5:1 | 1:1 |
| California Sagebrush scrub, and CSB-dominated habitats | CSB, CSB-A, -BS, -CB, -CHP, and -PS | 2:1 | 1.5:1 | 1:1 |
| Herbaceous Wetland | HW | 1.5:1 | 1.25:1 | 1:1 |
| River Wash, emergent veg. | RW | 1.5:1 | 1.25:1 | 1:1 |
| Chaparral, Chamise Chaparral | CHP, CC | 1.5:1 | 1.25:1 | 1:1 |
| Coyote Brush Scrub | CYS | 1.5:1 | 1.25:1 | 1:1 |
| Eriodictyon Scrub | EDS | 1.5:1 | 1.25:1 | 1:1 |
| California Grass Lands | CGL | 1:1 | 1:1 | 1:1 |
| Agricultural/Disturbed/Developed | AGR/DL/DEV | 1:1 | 1:1 | 1:1 |

Notes:

* HIGH reach value indicates a portion of the Santa Clara River or main tributary that scored above 0.79 Total Score utilizing the HARC methodology described in **Section 4.2, Geomorphology and Riparian Resources**, of the Draft RMDP-SCP EIS/EIR.

** MEDIUM reach value indicates a portion of the Santa Clara River or main tributary that scored between 0.4 and 0.79 Total Score utilizing the HARC methodology described in **Section 4.2**.

*** LOW reach value indicates a portion of the Santa Clara River or main tributary that scored below 0.4 Total Score utilizing the HARC methodology described in **Section 4.2**.

MV 4.3-33 Replacement vegetation communities shall be designed to replace the functions and values of the vegetation communities being removed. The replacement vegetation communities shall have similar dominant trees and understory shrubs and herbs (excluding exotic species) to those of the affected vegetation communities (see **Table 4.3-12** for example of recommended plant species for the River Corridor SMA/SEA 23 and

tributaries). In addition, the replacement vegetation communities shall be designed to replicate the density and structure of the affected vegetation communities once the replacement vegetation communities have met the mitigation success criteria.

Table 4.3-12
Potential Plant Species for Vegetation Community Restoration in the River Corridor SMA/SEA 23 and Tributaries

| Trees | |
|--------------------|--|
| red willow | <i>Salix laevigata</i> |
| arroyo willow | <i>Salix lasiolepis</i> |
| Fremont cottonwood | <i>Populus fremontii</i> |
| black cottonwood | <i>Populus balsamifera</i> ssp. <i>Trichocarpa</i> |
| western sycamore | <i>Platanus racemosa</i> |
| Shrubs | |
| Mulefat | <i>Baccharis salicifolia</i> |
| sandbar willow | <i>Salix exigua</i> |
| arrow weed | <i>Pluchea sericea</i> |
| Herbs | |
| Mugwort | <i>Artemisia douglasiana</i> |
| western ragweed | <i>Ambrosia psilostachya</i> |
| Cattail | <i>Typha latifolia</i> |
| Bulrush | <i>Scirpus americanus</i> |
| prairie bulrush | <i>Scirpus maritimus</i> |

Note: This is a recommended list. Other species may be found suitable based on site conditions and state and federal permits.

MV 4.3-34 Average plant spacing shall be determined based on an analysis of vegetation communities to be replaced. The applicant shall develop plant spacing specifications for all riparian vegetation communities to be restored. Plant spacing specifications shall be reviewed and approved by the Corps and CDFG when restoration plans are submitted to the agencies as part of the sub-notification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation status report and mitigation accounting form.

MV 4.3-35 If at any time prior to CDFG/Corps approval of the restoration area, the site is subject to an act of God (flood, fires, or drought), the applicant shall be responsible for replanting the damaged area. The site will be subject to the same success criteria as provided for **MV 4.3-36**. Should a second act of God occur prior to CDFG/Corps approval of the restoration area, the applicant shall coordinate with the CDFG/Corps to develop an

alternative restoration strategy(ies) to meet success requirements. This may include restoration elsewhere in the River corridor or tributaries.

MV 4.3-36 The revegetation site will be considered “complete” upon meeting all of the following success criteria. In a sub-notification letter, the applicant may request modification of success criteria on a project by project basis. Acceptance of such request will be at the discretion of CDFG and the Corps.

1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion.
2. The percent cover and species richness of native vegetation shall be evaluated based on local reference sites established by CDFG and the Corps for the plant communities in the impacted areas.
3. Native shrubs and trees shall have at least 80 percent survivorship after two years beyond the beginning of the success evaluation start date. This may include natural recruitment.
4. Non-native species cover will be no more than 5 percent absolute cover through the term of the restoration.
5. Giant reed (*Arundo donax*), tamarisk (*Tamarix ramosissima*), perennial pepperweed (*Lepidium latifolium*), tree of heaven (*Ailanthus altissimus*), pampas grass (*Cortaderia selloana*) and any species listed on the California State Agricultural list, or Cal-IPC list of noxious weeds will not be present on the revegetation site as of the date of completion approval.
6. Using the HARC assessment methodology, the compensatory mitigation site shall meet or exceed the baseline functional scores of the impact area in Corps’ jurisdictional waters, as described in the Conceptual Mitigation Plan⁵¹² for Waters of the United States.

MV 4.3-37 Temporary irrigation shall be installed as necessary for plant establishment. Irrigation shall continue as needed until the restoration site becomes self sustaining regarding

⁵¹²For detailed information concerning the Corps compensatory mitigation program for impacts to waters of the United States, please reference Appendix 11.0 of the Section 404(b)1 Alternatives Analysis, included in Appendix F1.0 of the Final EIS/EIR.

survivorship and growth. Irrigation shall be terminated in the fall to provide the least stress to plants. Following irrigation termination, the irrigation piping will be removed where not destructive to the established plants.

- MV 4.3-38 In areas where invasive exotic plant species control is authorized by CDFG in lieu of creating or restoring other riparian habitat mitigation (**MV 4.3-31**), removal areas shall be kept free of exotic plant species for 5 years after initial treatment. In areas where extensive exotic removal occurs, revegetation with native plants or natural recruitment shall be documented.
- MV 4.3-39 The exotics control program may utilize methods and procedures in accordance with the provisions in the Upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan Final Environmental Impact Report, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval pursuant to a sub-notification letter. By example: a 10-acre site occupied by 10% exotic species will be credited for 1 acre of mitigation.
- MV 4.3-40 All native riparian trees with a 3-inch diameter at breast height (dbh) or greater in temporary construction areas shall be replaced using 1- or 5-gallon container plants, containered trees, or pole cuttings in the temporary construction areas in the winter following the construction disturbance. The growth and survival of the replacement trees shall meet the performance standards specified in **MV 4.3-36**. In addition, the growth and survival of the planted trees shall be monitored until they meet the self-sustaining success criteria in accordance with the methods and reporting procedures specified in **MV 4.3-36**, **MV 4.3-42**, and **MV 4.3-43**.
- MV 4.3-41 Vegetation communities temporarily impacted by the proposed project shall be revegetated as described in **MV 4.3-31**. Large trunks of removed trees may also remain on site to provide habitat for invertebrates, reptiles, and small mammals or may be anchored within the project site for erosion control. To facilitate restoration, mulch, or native topsoil (the top 6- to 12-inch deep layer containing organic material), may be salvaged from the work area prior to construction. Following construction, salvaged topsoil shall be returned to the work area and placed in the restoration site. Within one year, the project biologist will evaluate the progress of restoration activities in the temporary impact areas to determine if natural recruitment has been sufficient for the site to reach performance goals. In the event that native plant recruitment is determined by the project biologist to be inadequate for successful habitat establishment, the site shall be

revegetated in accordance with the methods designed for permanent impacts (i.e., seeding, container plants, and/or a temporary irrigation system may be recommended). This will help ensure the success of mitigation areas. The applicant shall restore the temporary construction area per the success criteria and ratios described in **MV 4.3-23**, **MV 4.3-31**, and **MV 4.3-36**. Annual monitoring reports on the status of the recovery or temporarily impacted areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (**MV 4.3-42** and **MV 4.3-43**).

MV 4.3-42 To provide an accurate and reliable accounting system for mitigation, the applicant shall file a mitigation accounting form annually with the Corps and CDFG by April 1.

MV 4.3-43 An annual mitigation status report shall be submitted to the Corps and CDFG by April 1 of each year until satisfaction of success criteria identified in **MV 4.3-36**. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed “in-lieu fees,” restoration methods, and vegetation community restoration performance standards. For active vegetation community creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; an accounting of colonization by native plants; and photographs. The report shall also include the mitigation accounting form (see **MV 4.3-42**), which outlines accounting information related to species planted or exotics control and mitigation credit remaining. The annual mitigation and monitoring report shall document the current functional capacity of the compensatory mitigation site using the HARC assessment methodology, as well as documenting the baseline functional scores of the impact site in jurisdictional waters of the United States.

MV 4.3-44 Require focused surveys for the spring snail (*Pyrgulopsis castaicensis* **n. sp.**) by a qualified biologist prior to the commencement of grading/construction activities in any drainage area supporting perennial flow. Any individuals of the *Pyrgulopsis castaicensis* **n. sp.** found within the Middle Canyon drainage shall be relocated to appropriate habitat within Middle Canyon Spring. If *Pyrgulopsis castaicensis* **n. sp.** are discovered during aquatic and semi-aquatic pre-construction surveys in any other perennial flowing water, the applicant shall consult with CDFG prior to initiating disturbance of the area. A report documenting the number of *Pyrgulopsis castaicensis* **n. sp.** located, the conditions of the

area, and where the species has been relocated to, if applicable, shall be submitted to CDFG within 60 days following the relocation.

- MV 4.3-45 An Integrated Pest Management (IPM) plan that addresses the use of pesticides (including rodenticides and insecticides) on site will be prepared prior to the issuance of building permits for the initial tract map. The IPM will implement appropriate Best Management Practices to avoid and minimize adverse effects on the natural environment, including vegetation communities, special-status species, species without special status, and associated habitats, including prey and food resources (*e.g.*, insects, small mammals, seeds). Potential management practices include cultural (*e.g.*, planting pest-free stock plants), mechanical (*e.g.*, weeding, trapping), and biological controls (*e.g.*, natural predators or competitors of pest species, insect growth regulators, natural pheromones, or biopesticides), and the judicious use of chemical controls, as appropriate (*e.g.*, targeted spraying versus broadcast applications). The IPM will establish management thresholds (*i.e.*, not all incidences of a pest require management); prescribe monitoring to determine when management thresholds have been exceeded; and identify the most appropriate and efficient control method that avoids and minimizes risks to natural resources. Preparation of the covenants, conditions, and restrictions (CC&Rs) for each tract map shall include language that prohibits the use of anticoagulant rodenticides in the project site.
- MV 4.3-46 The Natural Lands Management Organization (NLMO) shall fund or otherwise coordinate the regular removal of trash and debris from riparian habitats on or adjacent to the project site. The removal of trash shall be conducted in a manner as to not disturb sensitive habitats.
- MV 4.3-47 Each tract map Home Owners' Association shall supply educational information to future residents regarding pets, wildlife, and open space areas. The material shall discuss the presence of native animals (*e.g.*, coyote, bobcat, mountain lion), indicate that those native animals could prey on pets, indicate that no actions shall be taken against native animals should they prey on pets allowed outdoors, indicate that residents should not feed wildlife intentionally or unintentionally by leaving pet food outside, and indicate that pets must be leashed while using the designated trail system and/or in any areas within or adjacent to open space. Control of stray and feral cats and dogs will be conducted in open space areas on an as-needed basis by the NLMO(s) or the Newhall Ranch *joint powers authority* (JPA) managing the River Corridor SMA/SEA 23, High Country SMA/SEA 20, or Salt Creek area or by the HOAs managing the Open

Areas. Feral cats and dogs may be trapped and deposited with the local Society for the Prevention of Cruelty to Animals or the Los Angeles County Department of Animal Control.

MV 4.3-48 Upon completion of landscaping within a development area, quarterly monitoring shall be initiated for Argentine ants along the urban–open space interface at sentinel locations where invasions could occur (e.g., where moist microhabitats that attract Argentine ants may be created). A qualified biologist shall determine the monitoring locations. Ant pitfall traps will be placed in these sentinel locations and operated on a quarterly basis to detect invasion by Argentine ants. If Argentine ants are detected during monitoring, direct control measures will be implemented immediately to help prevent the invasion from worsening. These direct controls may include but are not limited to nest/mound insecticide treatment, or available natural control methods being developed. A general reconnaissance of the infested area would also be conducted to identify and correct the possible source of the invasion, such as uncontrolled urban runoff, leaking pipes, or collected water. Monitoring and control of Argentine ants would occur for a 5-year period. After the first 5 years, the NLMO or other entity will be responsible for controlling Argentine ants.

MV 4.3-49 Thirty days prior to construction activities, a qualified biologist shall conduct a preconstruction survey for ringtail. The survey area shall include suitable riparian and woodland habitat (southern coast live oak riparian forest, southern cottonwood–willow riparian forest, southern willow scrub, coast live oak woodland, valley oak woodland, and mixed oak woodland) within the construction disturbance zone and a 300-foot buffer around the construction site. Should the ringtail be observed in the breeding and rearing period of February 1 through August 31, no construction-related activities shall occur within 300 feet of the occupied area for the period of February 1 through August 31 or until the ringtail has been determined by a qualified biologist (in consultation with CDFG) to no longer occupy areas within 300 feet of the construction zone and/or that construction activities would not adversely affect the successful rearing of young. If the ringtail is observed within the construction disturbance zone or in the 300-foot buffer around the construction site in the nonbreeding/rearing period of September 1 through January 31, and avoidance is not possible, denning ringtail shall be safely evicted under the direction of a qualified biologist (as determined by a Memorandum of Understanding with CDFG). All activities that involve the ringtail shall be documented and reported to CDFG.

- MV 4.3-50 Any Southern California black walnut and mainland cherry trees or shrubs outside riparian areas greater than 1-inch dbh shall be replaced in the ratio of at least 2:1. Multi-trunk trees/shrub dbh shall be calculated based on combined trunk dbh. Mitigation shall be deemed complete when each replacement tree attains at least 1 inch in diameter 1 foot above the base.
- MV 4.3-51 Bridges over the Santa Clara River shall be designed to minimize impacts to natural areas and riparian resources from associated lighting and stormwater runoff. All lighting will be designed to be directed away from natural areas (pursuant to SP-4.6-56) using shielded lights, low sodium-vapor lights, bollard lights, or other available light and glare minimization methods. Bridges will be designed to minimize normal vehicular lighting from trespassing into natural areas using side walls a minimum of 24 inches high. All stormwater from the bridges will be directed to water treatment facilities for water quality treatment.
- MV 4.3-52 Construction plans shall include necessary design features and construction notes to ensure protection of vegetation communities and special-status plant and aquatic wildlife species adjacent to construction. In addition to applicable erosion control plans and performance under SCAQMD Rule 403d dust control (SCAQMD 2005), the project stormwater pollution prevention plan (SWPPP) shall include the following minimum BMPs. Together, the implementation of these requirements shall ensure protection of adjacent habitats and wildlife species during construction. At a minimum, the following measures/restrictions shall be incorporated into the SWPPP, and noted on construction plans where appropriate, to avoid impacting special-status species during construction:
- Avoid planting or seeding invasive species in development areas within 200 feet of native vegetation communities.
 - Provide location and details for any dust control fencing along project boundaries (MV 4.3-53).
 - Vehicles shall not be driven or equipment operated in areas of ponded or flowing water, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the 404 Permit or 1603 Agreement.
 - Silt settling basins installed during the construction process shall be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes.

- If a stream channel has been altered during the construction and/or maintenance operations, its low flow channel shall be returned as nearly as practical to pre-project topographic conditions without creating a possible future bank erosion problem or a flat, wide channel or sluice-like area. The gradient of the streambed shall be returned to pre-project grade, to the extent practical, unless it represents a wetland restoration area.
- Temporary structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.
- Staging/storage areas for construction equipment and materials shall be located outside of the ordinary high water mark.
- Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily, to prevent leaks of materials that could be deleterious to aquatic life if introduced to water.
- Stationary equipment such as motors, pumps, generators, and welders which may be located within the riverbed construction zone shall be positioned over drip pans. No fuel storage tanks shall be allowed in the riverbed.
- No debris, bark, slash sawdust, rubbish, cement or concrete or washing thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature, shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into, watercourses included in the permit. When construction operations are completed, any excess materials or debris shall be removed from the work area.
- No equipment maintenance shall be done within or near any stream where petroleum products or other pollutants from the equipment may enter these areas with stream flow.
- The operator shall install and use fully covered trash receptacles to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash will be regularly picked up in construction areas.
- The operator shall not permit pets on or adjacent to the construction site.

- No guns or other weapons are allowed on the construction site during construction, with the exception of the security personnel and only for security functions. No hunting shall be authorized/permitted during construction.

MV 4.3-53 Development areas shall have dust control measures implemented and maintained to prevent dust from impacting vegetation communities and special-status plant and aquatic wildlife species. Dust control shall comply with SCAQMD Rule 403d (SCAQMD 2005). Where construction activities occur within 100 feet of known special-status plant species locations, chemical dust suppression shall not be utilized. Where determined necessary by a qualified biologist, a screening fence (*i.e.*, a six-foot-high chain link fence with green fabric up to a height of 5 feet) shall be installed to protect special-status species locations. See **MV 4.3-65** for dust control requirements related to spineflower preserves.

MV 4.3-54 Permanent fencing shall be installed along all River Corridor SMA/SEA 23 trails adjacent to the Santa Clara River, or other sensitive resources, in order to minimize impacts associated with increased human presence on protected vegetation communities and special-status plant and wildlife species. The fencing will be split rail to avoid inhibiting wildlife movement. Viewing platforms will be located in land covers currently mapped as agriculture, disturbed land, or developed land.

MV 4.3-55 To protect Middle Canyon Spring and to reduce potential direct impacts to any special-status species that may be located within the spring complex due to unrestricted access, the project applicant or its designee shall avoid all construction-related activities within the Middle Canyon Spring complex and erect and maintain temporary orange fencing and prohibitive signage around the Middle Canyon Spring prior to and during all phases of construction within 200 feet of the spring and, if applicable, around the Middle Canyon drainage within 100 feet of flowing water. A qualified biologist will be present to monitor construction activities within 200 feet of the spring and, if applicable, around the Middle Canyon drainage within 100 feet of flowing water. The areas behind the temporary fencing shall not be used for the storage of any equipment, materials, construction debris, or anything associated with construction activities. Any upslope runoff from construction areas will be directed away from the Middle Canyon Spring.

Following the final phase of construction of any Newhall Ranch subdivision tract adjacent to Middle Canyon Spring, the project applicant or its designee shall install and maintain permanent fencing along the subdivision tract bordering the spring. Permanent

signage shall be installed on the fencing along the spring boundary to indicate that the fenced area is a biological preserve that contains protected species and habitat. No trail shall be constructed that passes within 100 feet of the Middle Canyon Spring (see **Figure 4.3-4B** above).

- a. The Commerce Center Drive Bridge will be designed to minimize secondary impacts associated with lighting and water quality impacts through the installation of indirect and downcast lighting, and routing of stormwater to water quality treatment facilities.

MV 4.3-56 A Middle Canyon Spring Habitat Management Plan will be developed that details the measures to be implemented to maintain the populations of the spring snail (*Pyrgulopsis castaicensis* n. sp.) and Newhall sunflower species. The plan shall be subject to the approval of CDFG and implemented by the Applicant prior to disturbance within 100 feet of flowing water in Middle Canyon Creek and/or 200 feet of Middle Canyon Spring.

.MV 4.3-57 Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and fuel modification zone (FMZ) areas within 200 feet of native vegetation communities shall be reviewed by a qualified restoration specialist to ensure that the proposed landscape plants will not naturalize and require maintenance or cause vegetation community degradation in the open space areas (River Corridor SMA/SEA 23, High Country SMA/SEA 20, Salt Creek area, and natural portions of the Open Area). Container plants to be installed within public areas within 200 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants within 200 feet of native vegetation communities shall not be on the Cal-IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental Plants listed in Appendix B of the Spineflower Conservation Plan (SCP). The current Cal-IPC list can be obtained from the Cal-IPC web site (<http://www.cal-ipc.org/ip/inventory/index.php>). Landscape plans will include a plant palette composed of native or non-native, non-invasive species that do not require high irrigation rates. Except as required for fuel modification, irrigation of perimeter landscaping shall be limited to temporary irrigation (*i.e.*, until plants become established).

MV 4.3-58 A final SCP shall be adopted and implemented after approval by CDFG, including the permanent dedication of preserves (see draft in Appendix 4.3). The proposed spineflower

preserve areas shall be offered to CDFG as a permanent conservation easement within one year after issuance of the requested 2081 Permit to ensure long-term protection. The conservation easement shall be to CDFG and contain appropriate funding and restrictions to help ensure that the spineflower preserve lands are protected in perpetuity.

- MV 4.3-59 The spineflower preserves shall be managed by Applicant and their preserve manager(s) and/or natural lands management organization(s) (NLMO). Applicant shall submit a statement of qualifications for their proposed preserve manager(s)/NLMO(s) for approval by CDFG. Applicant will fund in full all implementation of spineflower preserve management as described in the SCP and all mitigation measures listed in this document.
- MV 4.3-60 Spineflower preserve temporary fencing shall be shown on construction plans and installed prior to initiating construction clearing and grubbing activities within 500 feet of spineflower preserves, including the buffers. The spineflower preserve manager or a qualified biologist shall monitor fence installation. Clearing for fence installation shall be minimized to what is necessary to install the fence and, where possible, shall leave the roots of native plants in place to allow regrowth. As necessary, native vegetation will be restored and weed management will be performed following fence installation to ensure temporarily cleared native plant areas do not become weed dominated after installation. General project clearing and grubbing within 500 feet of the fence may commence upon verification by the spineflower preserve manager or the qualified biologist that protective fencing is in place and is adequate. Appropriate BMPs shall be installed at the edge of development manufactured slopes when the spineflower preserve is within 500 feet and down-slope of proposed development.
- MV 4.3-61 Construction documents shall indicate that the grading contractor is responsible for protecting spineflower preserves during construction work. The construction documents shall indicate that the contractor is responsible for informing all employees and subcontractors of the environmentally sensitive areas and the proper conduct of work when working near (e.g., within 500 feet) of these areas. The construction documents shall require a pre-construction meeting to perform an “environmental education session” with the grading contractor/contractor’s employees, subcontractors, and equipment operators prior to commencing construction work within 500 feet of the spineflower preserves. The environmental education session shall be conducted by the spineflower preserve manager or a qualified biologist and focus on informing workers of

the location and sensitivity of the spineflower and the requirements for protecting it. The construction documents shall indicate that the grading contractor shall be responsible for mitigating any impacts to spineflower preserves due to the negligence of the grading contractor/contractor's employees, subcontractors, or equipment operators. If accidental trespass into a spineflower preserve occurs during construction, the violation shall be documented by the preserve manager and immediately reported to CDFG. Follow-up action will be taken in accordance with the Section 2081 of the Fish and Game Code, Incidental Take Permit issued by CDFG.

MV 4.3-62

Construction plans shall include necessary design features and construction notes to demonstrate consistency of development in the vicinity of spineflower preserves with the Spineflower Conservation Plan (SCP). In addition to applicable erosion control plans and performance under SCAQMD Rule 403d dust control (SCAQMD 2005), the project stormwater pollution prevention plan (SWPPP). Together, the implementation of these requirements shall ensure that spineflower preserve populations are protected during construction. At a minimum, the following measures/restrictions shall be incorporated into the SWPPP and noted on construction plans, where appropriate, to avoid impacting spineflower preserves during construction:

- Avoid planting or seeding invasive species in development areas during construction phases.
- Do not use erosion control devices that may contain weeds, such as hay bales, etc., within 200 feet of spineflower preserves, or anywhere upstream of spineflower preserves.
- Do not windrow or stockpile soil within 200 feet of spineflower preserve boundaries or anywhere upstream of spineflower preserves.
- Do not locate staging areas, maintenance, or concrete washout areas within 500 feet (unless otherwise authorized by CDFG, and no closer than 200 feet in any instance), where adjacent to or anywhere upstream of spineflower preserves.
- Do not store toxic compounds, including fuel, oil, lubricants, paints, release agents, or any other construction materials that could damage spineflower habitat if spilled near spineflower preserve areas, or anywhere upstream of spineflower preserves, or along spineflower preserve boundaries.

- Provide location and details for any fencing for temporary and permanent access control along preserve boundaries (per **MV 4.3-64** for temporary fencing and **MV 4.3-69** for permanent fencing).
- Provide location and details for any dust control fencing along preserve boundaries (per **MV 4.3-65**).
- Provide location and details for any stormwater run-on controls/BMPs coming from development area to spineflower preserve (per **MV 4.3-71** and **MV 4.3-72**).

MV 4.3-63 The spineflower preserve manager or qualified biologist shall review construction plans and specifications, SWPPP, and, where appropriate, erosion control plans and implementation of SCAQMD Rule 403d dust control measures (SCAQMD 2005) prior to construction within 500 feet of spineflower preserves for compliance with the Spineflower Conservation Plan and associated permits and project-related environmental documents. A copy of the SWPPP and associated monitoring reports will be provided to CDFG.

MV 4.3-64 Spineflower preserves shall be protected prior to clearing and during construction with temporary construction fencing as described in **MV 4.3-60**. Openings shall be included in the fence when located within wildlife corridors and vegetation community connectivity areas to allow for the safe passage of wildlife. The spineflower preserve manager or a qualified biologist shall indicate the location and width of each of these openings. The fencing shall be three-strand non-barbed wire fence or bright orange ultraviolet stabilized polyethylene construction “snow” fencing, attached to metal t-posts that extend at least 4 feet above grade or equivalent. Protective fencing shall be maintained in good condition until completion of project construction. Where construction activities occur within 500 feet of a spineflower preserve, the spineflower preserve manager or qualified biologist shall review fencing weekly during construction monitoring visits and note any fencing that is in need of repair. Repairs shall be completed within three working days of notification by the spineflower preserve manager or qualified biologist.

MV 4.3-65 Development areas shall have dust control measures implemented and maintained to prevent dust from impacting vegetation within the spineflower preserve areas. Dust control shall be implemented during construction in compliance with SCAQMD Rule 403d (SCAQMD 2005). Where construction activities occur within 100 feet of a spineflower location, chemical dust suppression shall not be utilized. Where determined

necessary by the spineflower preserve manager or qualified biologist, a screening fence (i.e., a 6-foot-high chain link fence with green fabric up to a height of 5 feet) shall be installed to protect spineflower locations.

MV 4.3-66 The spineflower preserve manager or qualified biologist shall perform weekly construction monitoring for all construction activities within 500 feet of spineflower preserve areas. The spineflower preserve manager's or qualified biologist's construction monitoring tasks shall include reviewing and approving protective fencing, dust control measures, and erosion control devices before construction work begins; conducting a contractor education session at the preconstruction meeting; reviewing the site weekly (minimum) during construction to ensure the fencing, dust control, and BMP measures are in place and functioning correctly and that work is not directly or indirectly impacting spineflower plants; and quarterly monitoring shall be initiated for Argentine ants along the construction–open space interface at sentinel locations where invasions could occur (*e.g.*, where moist microhabitats that attract Argentine ants may be created). A qualified biologist shall determine the monitoring locations. Ant pitfall traps will be placed in these sentinel locations and operated on a quarterly basis to detect invasion by Argentine ants. If Argentine ants are detected during monitoring, direct control measures will be implemented immediately to help prevent the invasion from worsening. These direct controls may include but are not limited to nest/mound insecticide treatment, or available natural control methods being developed. A general reconnaissance of the infested area would also be conducted to identify and correct the possible source of the invasion, such as uncontrolled urban runoff, leaking pipes, or collected water. Each site visit shall be followed up with a summary monitoring report sent electronically to Applicant indicating the status of the site. Monthly monitoring reports, as needed, shall be submitted to CDFG and the County of Los Angeles). Monitoring reports shall include remedial recommendations and issue resolution discussions when necessary.

MV 4.3-67 Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other landscaped and FMZ areas within 200 feet of a spineflower preserve shall be reviewed and approved within 30 days by the spineflower preserve manager or qualified biologist and CDFG to ensure that the proposed landscape plants will not naturalize and require maintenance or cause vegetation community degradation in the spineflower preserve and buffer areas. Container plants to be installed within public areas within 200 feet of the spineflower preserves shall be inspected by the spineflower preserve manager or qualified biologist for the presence of disease, weeds, and pests, including Argentine

ants. Plants with pests, weeds, or diseases shall be rejected. In addition, for public areas within 200 feet of spineflower preserves, landscape plants shall not be on the Cal-IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental Plants listed in Appendix B of the SCP. The current Cal IPC list can be obtained from the Cal-IPC web site (<http://www.cal-ipc.org/ip/inventory/index.php>).

MV 4.3-68 All portions of the spineflower preserves shall be closed, with the exception of pre-identified existing dirt roads and utility easements. The pre-identified existing dirt roads and utility easement access roads shall function as access routes for the spineflower preserve manager, spineflower preserve maintenance personnel, utility personnel, and emergency services vehicles only (e.g., police, fire, and medical). No other vehicle or foot traffic, including nature or recreational trails, will be permitted in the preserve, including the buffer. The dirt roads shall be gated and locked at the outside edges of the buffer zone. Signs discouraging unauthorized access shall be posted. The only persons or entities issued gate keys shall be the spineflower preserve managers and their employees, easement holding utility companies, emergency services, the Applicant, and CDFG.

MV 4.3-69 Fencing shall be installed along the outside edge of the spineflower preserve and buffer areas adjacent to proposed developments, parks, golf courses, or other “active land uses” to prevent unauthorized access. Specific areas that are adequately protected by steep terrain (1.5:1 or steeper) and/or dense vegetation may not require fencing but would require signage. The determination of the need for fencing in these areas shall be subject to the approval of the spineflower preserve manager or qualified biologist. If monitoring determines that slope and/or vegetation is not effective at deterring unauthorized access, additional fencing may be required to be added by the spineflower preserve manager or qualified biologist. Fencing is not required in areas bordered by large parcels of conserved natural open space areas or the Santa Clara River riparian corridor, as installing fencing in these areas would be unnecessary and damaging to existing vegetation and wildlife corridors.

Fencing must extend a minimum of 4 feet above grade and include wood-doweled split rail fencing, exterior grade heavy-duty vinyl three-railed fencing, three-strand non-barbed wire, or approved alternate. Fencing installed adjacent to native vegetation communities and natural open space areas will allow for the passage of animals.

MV 4.3-70 Outdoor all-weather signs measuring approximately 12 by 16 inches shall be posted on all spineflower preserve access gates and along spineflower preserve fencing at

approximately 800 feet on center, except adjacent to road crossings, where signs will be posted. The placement will take topography into account, emphasizing placement on ridgelines where signs will be visible to emergency fire personnel and others. Signs shall state in English and Spanish that the area is a biological preserve that hosts a state-listed endangered and federal candidate plant species and that trespassing is prohibited (in accordance with Newhall Ranch Specific Plan Program EIR Mitigation Measure SP 4.6-68). Signs shall indicate that fuel modification and management work is not allowed within the spineflower preserve (including buffer areas). The signage shall state that people who do not abide by these rules or who damage the protected species will be subject to prosecution, including fines and/or imprisonment. All signage shall include emergency contact information and shall be reviewed and approved by the spineflower preserve manager or qualified biologist.

MV 4.3-71 Storm drain outfalls from proposed development areas shall only be installed uphill from spineflower preserve areas where necessary to retain pre-construction hydrological conditions within the spineflower preserves, sustain existing riparian and wetland vegetation communities, and/or allow for the restoration of currently disturbed areas to native riparian/alluvial vegetation communities. When located in a spineflower preserve area, storm drains must meet the following criteria:

- Storm drains must not impact spineflower either directly or indirectly, and
- Under no circumstances shall storm drains daylight onto steeply sloped areas or other areas that would cause erosion.

MV 4.3-72 Any surface water entering a spineflower preserve area from development areas during construction is required to pass through BMP measures, which will be described in the SWPPP. Storm drain outlets must contain hydrologic controls (e.g., adequate energy dissipaters) to prevent downstream erosion and stream channel down-cutting. Additionally, storm drain outlets must be designed based on pre- and post-construction hydrological studies (in accordance with Newhall Ranch Specific Plan Program EIR Mitigation Measure SP 4.6-69). Storm drains and permanent structural BMPs shall be designed by a licensed civil engineer. Requirements of MV 4.3-62 and MV 4.3-71, where applicable, shall be incorporated into the facility design and shall be subject to approval by the spineflower manager or qualified biologist. Long-term maintenance of storm drain BMPs will be the responsibility of the designated maintenance entity.

MV 4.3-73 Disturbed portions (*i.e.*, agricultural lands, disturbed lands, and developed lands) of the spineflower preserves, including buffers, will be restored through revegetation with native plant communities. In summary, areas that have greater than 30 percent relative cover by weeds will be restored to have relative cover comparable to that of existing occupied spineflower habitat. Habitat restoration and enhancement plans (including restoration plans) for areas within the preserves shall be prepared at the direction of the preserve manager by a qualified biologist and submitted to the County and CDFG for approval prior to implementation. In addition, Cal-IPC List A and B plants that are present within the spineflower preserve will be controlled. Restoration and enhancement efforts within the spineflower preserve areas shall be in conformance with the Spineflower Conservation Plan and will not include permanent irrigation.

MV 4.3-74 In the event that a spineflower preserve, or buffer, or a portion of a spineflower preserve, or buffer burns in a wildfire or suffers from mass movements (*e.g.*, landslides, slope sloughing, or other geologic events), the spineflower preserve manager and the Applicant shall promptly review the site and determine what action, if any, should be taken. The primary anticipated post-fire spineflower preserve management activity involves monitoring the site and controlling annual weeds that may invade burned areas following a fire event, especially when such weeds (that were not previously present or not present in similar densities) exceed the 30 percent maximum threshold (see **MV 4.3-73**). If fire-control lines or other forms of bulldozer damage occur in the spineflower preserves, these areas will be repaired and revegetated to pre-burn conditions or better. An emergency fire response plan will be prepared (in accordance with Mitigation Measure SP-4.6-72) prior to the establishment of the spineflower preserves and approved by CDFG and Los Angeles County Fire Department. The preserve manager will contact the Los Angeles County Fire Department at least once every 5 years to review the plan and consult with them on implementation of the plan.

The same methods will be applied to mass-movement, landslide, or slope-sloughing types of events. This measure shall be implemented in conformance with the Spineflower Conservation Plan.

MV 4.3-75 Focused surveys for the undescribed species of everlasting (a special-status plant species) shall be conducted by a qualified botanist prior to the commencement of grading/construction activities wherever suitable habitat (primarily river terraces) could be affected by direct, indirect, or secondary construction impacts. The surveys shall be conducted no more than one year prior to commencement of construction activities

within suitable habitat, and the surveys shall be conducted at a time of year when the plants can be located and identified. Should the species be documented within the project boundary, avoidance measures shall be implemented to minimize impacts to individual plants wherever feasible. These measures shall include minor adjustments to the boundaries/location of haul routes and other project features. If, due to project design constraints, avoidance of all plants is not possible, then further measures, described in **MV 4.3-76**, shall be implemented to salvage seeds and/or transplant individual plants. All seed collection and/or transplantation methods, as well as the location of the receptor site for seeds/plants (assumed to be within preserved open space areas of Newhall Ranch along the Santa Clara River), shall be coordinated with CDFG prior to impacting known occurrences of the undescribed everlasting.

MV 4.3-76 For any individual project, or any phase of an individual project, to be located where undescribed everlasting plants may occur, the Applicant shall prepare and implement an Undescribed Everlasting Mitigation and Monitoring Plan prior to the issuance of grading permits.

The Plan shall provide for replacement of individual plants to be removed at a minimum 1:1 ratio, within suitable habitat at a site where no future construction-related disturbance will occur. The plan shall specify the following: (1) the location of the mitigation site in protected/preserved areas within the Specific Plan site; (2) methods for harvesting seeds or salvaging and transplantation of individual plants to be impacted; (3) measures for propagating plants (from seed or cuttings) or transferring living specimens from the salvage site to the introduction site; (4) site preparation procedures for the mitigation site; (5) a schedule and action plan to maintain and monitor the mitigation area; (6) the list of criteria and performance standards by which to measure the success of the mitigation site (below); (7) measures to exclude unauthorized entry into the mitigation areas; and (8) contingency measures such as erosion control, replanting, or weeding to implement in the event that mitigation efforts are not successful. The performance standards for the Undescribed Everlasting Mitigation and Monitoring Plan shall be the following:

- (a) Within four years after reintroducing the undescribed everlasting to the mitigation site, the extent of occupied acreage and the number of established, reproductive plants will be no smaller than at the site lost for project construction.

- (b) Non-native species cover will be no more than 5 percent absolute cover through the term of the restoration.
- (c) Giant reed (*Arundo donax*), tamarisk (*Tamarix ramosissima*), perennial pepperweed (*Lepidium latifolium*), tree of heaven (*Ailanthus altissimus*), pampas grass (*Cortaderia selloana*), and any species listed on the California State Agricultural list (CDFA 2009) or Cal-IPC list of noxious weeds (Cal-IPC 2006, 2007) will not be present on the revegetation site as of the date of completion approval.

MV 4.3-77 A cowbird trapping program shall be implemented once vegetation clearing begins and maintained throughout the construction, maintenance, and monitoring period of the riparian restoration sites. A minimum of five traps shall be utilized, with at least one trap adjacent to the project site and one or two traps located at feeding areas or other CDFG-approved location. The trapping contractor may consult with CDFG to request modification of the trap location(s). CDFG must approve any relocation of the traps. Traps will be maintained beginning each year on April 1 and concluding on/or about November 1 (may conclude earlier, depending upon weather conditions and results of capture). The trapping contractor may also consult CDFG on a modified, CDFG-approved trapping schedule modification. The applicant shall follow CDFG and USFWS protocol. In the event that trapping is terminated after the first few years, subsequent phases of the development will require initiation of trapping surveys to determine whether re-establishment of the trapping program is necessary.

MV 4.3-78 Bridge and culvert designs, where practicable, shall provide roosting habitat for bats. A qualified biologist shall work with the project engineer in identifying and incorporating structures into the design that provide suitable roosting habitat for bat species occurring in the project area. The final design of the roosting structures would be chosen in consultation with CDFG.

MV 4.3-79 To preclude the invasion of Argentine ants into the spineflower preserves and their associated buffers, controls will be implemented using an integrated pest management (IPM) approach in accordance with the approved SCP. The controls include (1) providing "dry zones" between urban development and spineflower populations; (2) building dry areas such as parking lots and roadways next to preserve boundaries, and sloping these areas away from the spineflower preserves; (3) constructing pedestrian pathways next to preserves out of decomposed granite or other gravel to minimize the holding of moisture; (4) ensuring that landscape container plants installed within 200 feet of

spineflower preserves are ant free prior to installation; (5) maintaining natural hydrological conditions in the spineflower preserves, including the buffers, through project design features; and (6) using drought-resistant plants in FMZs and minimizing irrigation to the extent feasible.

11. CUMULATIVE IMPACTS

a. Introduction

The Mission Village project is a component of the Newhall Ranch Specific Plan. The Specific Plan guides the long-term development of the 11,999-acre Newhall Ranch community, comprising a broad range of residential, mixed-use, and non-residential land uses developed within five village areas. Buildout of the Newhall Ranch Specific Plan will occur through submission of individual tentative subdivision maps. Landmark Village was the first subdivision map filed within the Specific Plan area, and Mission Village represents the second subdivision map. Other subdivision maps on file with the County or that are considered reasonably foreseeable include Potrero and Homestead.

Buildout of the Specific Plan would permanently convert acreage from a natural, albeit partially disturbed habitat condition, to that of an urban environment. Buildout of individual tracts filed under the Specific Plan would significantly impact the following vegetation communities absent mitigation: coastal scrub, big sagebrush scrub, oak communities, Mexican elderberry scrub, riparian scrub, riparian woodland, coastal and valley freshwater marsh, southern cottonwood-willow riparian, alluvial scrub, and cismontane alkali marsh.

Construction and operation of uses developed within the Specific Plan would directly disturb wildlife on and near the site. Within the planned development areas, species of low mobility would be lost during site preparation. Conversion of existing open space to developed uses consisting of structures and ornamental landscaping would eliminate natural communities on developed portions of the site and result in a reduction in native wildlife species diversity. Buildout of uses within the Specific Plan would also limit the local movement of wildlife species that currently make use of areas proposed for development.

Other proposed and reasonably foreseeable projects beside those in the Newhall Ranch Specific Plan are described below. Where the potential impacts are known, the impacts likely to be associated with these projects are first identified. The potential for these impacts to combine with similar impacts due to the proposed project is also evaluated. This list of projects is not intended to include all projects that are proposed in the project region. Instead, the analysis focuses on those projects that support or would potentially affect similar plant communities, jurisdictional resources, and special-status plant and animal

species that occur on the Mission Village project site. The analysis also focuses on those related projects that would likely be constructed during the same timeframe as Mission Village. Those projects that also are adjacent to or that otherwise may affect resources associated with the Santa Clara River were included.

In close proximity to the proposed Mission Village site is the VCC. The VCC project consists of a light industrial and commercial development over 1,500 acres on undeveloped farmlands north of the Newhall Ranch Specific Plan site and SR-126, and west of I-5. Castaic Creek traverses the VCC site. The County approved this VCC project in 1992, and a considerable portion of the site is now developed. A 404 Permit was issued for the VCC project by the Corps to line the existing banks with gunite bank protection. Castaic Creek contains dense riparian woodland and supports the least Bell's vireo and arroyo toad. As such, construction of the VCC and the development projects associated with the proposed Valencia Company 404 Permit could cause the following potentially significant cumulative impacts: (1) loss of riparian habitat from the study area; (2) disturbance of riparian wildlife due to the proximity of urban development; (3) potential degradation of water quality in the Santa Clara River due to urban stormwater runoff; (4) permanent loss of prime farmlands; (5) temporary and permanent disturbance to habitat for the least Bell's vireo; (6) impacts to mariposa lily, everlasting, and San Fernando Valley spineflower; and (7) modification of visual qualities due to urban development, bank protection, and bridges. The remaining undeveloped portion of the VCC project is assessed as a part of the Mission Village applicant's RMDP/SCP project.

Also in proximity to the proposed Mission Village project is the proposed Entrada project. The Entrada project, consisting of approximately 505 acres, is located within unincorporated Los Angeles County in the Santa Clarita Valley. More specifically, the project site is located directly west of I-5, both north and south of Magic Mountain Parkway. The project applicant proposes to develop the property with up to 3,300 residential units and 3.1 million square feet of commercial floor area. Approximately 48 percent of the site would be retained as open space. Bank stabilization along a portion of the Santa Clara River would be constructed in conjunction with the project. Construction and development of this project could cause potentially significant cumulative impacts to mariposa lily, everlasting, San Fernando Valley spineflower, and valley oak savannah. As stated, a portion of Entrada includes spineflower. To facilitate a portion of the development within Entrada, the project applicant is currently seeking a Section 2081 permit authorizing the take of spineflower as part of the RMDP/SCP project. This separate project is being evaluated in a Draft EIS/EIR prepared under the direction of the Corps and CDFG.

In addition, the project applicant is currently processing federal and state permit applications and the preparation of a combined EIS/EIR under both the National Environmental Policy Act (NEPA) and CEQA to assess the environmental implications of implementing the Newhall Ranch Resource

Management and Development Plan/Spineflower Conservation Plan (RMDP/SCP) project. The project's RMDP component consists of those improvements, facilities, and activities associated with implementation of the Newhall Ranch Specific Plan, which will require federal and state permits and agreements from the Corps and the CDFG. The RMDP consists specifically of various flood control improvements, stream bank protection, drainage facilities, roads, building pads, pipeline and utility river crossings, nature trails, new and widened bridges, and the Newhall Ranch WRP outfall facilities. The proposed SCP component consists of a conservation management framework to permanently protect and manage designated preserve areas designed to maximize the long-term persistence of the spineflower, and to authorize the take of spineflower located outside of the preserve system.

The proposed federal action required to implement the RMDP/SCP project consists of the issuance of a long-term Section 404 permit for the Newhall Ranch RMDP facilities and improvements associated with the Newhall Ranch Specific Plan that would potentially result in the discharge of fill or dredged material in and adjacent to the Santa Clara River and its side drainages. As part of the federal permit review process, the Corps also will comply with Section 7 of the Endangered Species Act, which requires consultation with the USFWS for any federal permit that may affect an ESA-listed species or its critical habitat. In addition, a federal Clean Water Act Section 401 water quality certification will be required from the Los Angeles Regional Water Quality Control Board (RWQCB) as part of the Corps permit review process. The USFWS also will review a candidate conservation agreement and the SCP for the spineflower and consider whether to enter into such an agreement for the long-term conservation of the spineflower.

The proposed state action required to implement the RMDP/SCP project consists of the issuance by CDFG of a long-term master streambed alteration agreement under Section 1600 of the California Fish and Game Code for Newhall Ranch RMDP construction activities associated with the Newhall Ranch Specific Plan that occur within the bed, bank, or streambed channel of the Santa Clara River and its side drainages. The proposed state action also would include issuance by CDFG of an incidental take permit for Newhall Ranch RMDP construction activities that impact state-listed species under the California Endangered Species Act. The proposed state action also includes CDFG's review and possible approval of the SCP and issuance of a Section 2081 incidental take permit for spineflower.

b. Cumulative Impact Analysis Study Area

Under the *State CEQA Guidelines*,⁵¹³ the lead agency should provide a reasonable explanation of the geographic limitation used in the cumulative impacts analysis. As permitted under California Code of

⁵¹³ 14 C.C.R. Sec. 15130(b)(3)

Regulations, Title 14, section 15130, this cumulative impacts analysis uses a “project list” approach.⁵¹⁴ Under such an approach, the proposed project’s impacts are considered in conjunction with impacts from past, present, and reasonably foreseeable projects within a designated study area, which, in this case, is the Santa Clara River Watershed (SCRW). Because the SCRW is so large and spans across multiple jurisdictions, the project list for this cumulative impacts analysis includes projects only in the watershed from: (1) Los Angeles County and the City of Santa Clarita; and (2) Ventura County, extending west to the City of Santa Paula and including the community of Piru and the City of Fillmore. Note that this analysis generally addresses past, present, and reasonably foreseeable projects located within the watershed itself; however, for some biological resources other scales are more applicable and are used as appropriate. For certain species, the scope of analysis extends beyond the watershed boundary (e.g., San Fernando Valley spineflower), and for other species the scope of analysis is more focused based on limited distribution and use of habitat within the watershed (e.g., unarmored threespine stickleback).

This cumulative analysis describes the effects of past, present, and reasonably foreseeable projects on the biological resources of SCRW. The list of past, present, and reasonably foreseeable cumulative development projects used to conduct this cumulative impact analysis was prepared for the Santa Clara River Watershed Study.⁵¹⁵ The Watershed Study is provided in **Appendix 4.3** of this EIR. The Watershed Study, which forms the basis of this cumulative impacts analysis, includes a review of cumulative impacts within the Santa Clara River watershed based on information from permits issued between 1988 and 2006⁵¹⁶ by the Corps and CDFG regarding impacts to jurisdictional wetlands and waters and mitigation for those impacts. In addition, 14 cumulative development projects with potential impacts to biological resources were added to the analysis because they were not included on the Watershed Study project list. In general, the additional projects are located in the Santa Clarita area and are small- to moderately sized (i.e., 1 to 100 acres) urban “infill” projects. In total, the 14 additional projects encompass an area of 337 acres.

For this EIR, the geographic scope of the cumulative impacts analysis is shown on **Figure 4.3-12, Cumulative Individual Project Location Map**.⁵¹⁷ The “Project Area” shown on this figure is the

⁵¹⁴ 14 C.C.R. Sec. 15130(b)(1)(A)

⁵¹⁵ Dudek, *Santa Clara River Watershed Study* (Encinitas, California: Dudek, 2008).

⁵¹⁶ The permits from CDFG date back to 1983, but the information provided on those permits was insufficient to quantify impacts. Therefore, impacts were quantified beginning from 1988.

⁵¹⁷ This scope was used for analysis of the following resource categories: Hydrology, Geomorphology, Water Quality, Cultural Resources, Paleontological Resources, Geology, Land Use, Visual Resources, Parks and Recreation, Hazards and Hazardous Materials, Public Services, Socioeconomics and Environmental Justice, and Solid Waste.

Newhall Ranch Specific Plan and the VCC and Entrada planning areas, including the Mission Village project site.

An analysis of CDFG section 2081 Permits and USFWS section 7 and 10a Permits is also included. This review included, but was not limited to, the subset geographic area used for the analysis of the remainder of the cumulative analysis. This analysis thus included data from a watershed perspective. (See, e.g., Santa Clara River Watershed Study.)⁵¹⁸

This analysis also reviewed major NCCPs and HCPs for other areas of Southern California, including Kern, Riverside, Orange, and San Diego Counties, but found those areas to be so geographically distant (e.g., greater than 25 to 30 miles) from the Mission Village project area as to have little bearing on the resource issues in the SCRW. (See **subsection 4.3.11.a.(1.9)** below.)

In order to present a reasonable cumulative impacts analysis in this EIR, the local development and infrastructure projects lists were reduced and consolidated according to the following parameters: (1) projects outside the geographic scope, with the exception of a few large projects, were excluded from further analysis due to their distance from the proposed project; (2) projects more than 5 miles away from the project area (but within the roughly 10-mile geographic scope) and/or smaller-scale projects are listed in a consolidated manner, and are grouped by local jurisdiction (note that due to the approximately 12,000-acre size of the Newhall Ranch Specific Plan area, including the proposed Mission Village project, “smaller-scale” projects in this context include projects roughly 700 acres and smaller); and (3) large projects within 5 miles of the Newhall Ranch Specific Plan area are listed individually. Projects selected for individual listing also are included in the consolidated lists, to reflect overall development patterns in the geographic study area. The consolidated project lists are grouped according to the following jurisdictions: City of Santa Clarita; unincorporated areas of Los Angeles County; City of Fillmore (Ventura County); City of Santa Paula (Ventura County); Corps (section 404 permit); USFWS biological opinions; CDFG (streambed); and CDFG (take authorizations).⁵¹⁹

⁵¹⁸ Dudek, *Santa Clara River Watershed Study*.

⁵¹⁹ The geographic study areas utilized in this cumulative impacts analysis are more comprehensive than the study area currently being used by the City of Santa Clarita and Los Angeles County to create a General Plan document and EIR for the entire Santa Clarita Valley Planning Area, called “One Valley, One Vision” or “OVOV.” Although this EIR cannot rely on the City and County’s joint OVOV effort as it has not yet been finalized and adopted, it is worth noting that the OVOV planning effort will cover the City, including its four communities: Canyon Country, Newhall, Saugus, and Valencia, as well as County communities of Agua Dulce, Castaic, Newhall Ranch, Stevenson Ranch, and Val Verde. City of Santa Clarita and Los Angeles County, “Notice of Preparation for General Plan document and EIR for the Santa Clarita Valley Planning Area: One Valley, One Vision,” (2008).

(1) Consolidated Projects

(a) City of Santa Clarita Consolidated Projects

Table 4.3-13, City of Santa Clarita Consolidated Projects (Includes Individually Reviewed Projects), contains the City of Santa Clarita consolidated projects analysis. Projects more than 5 miles away from the Newhall Ranch Specific Plan area and/or smaller-scale projects (less than 700 acres) are listed in a consolidated manner, and are grouped by local jurisdiction. **Table 4.3-13** also includes the projects selected for individual listing, which are discussed further in **subsection 4.3.11.a.(2)**, below.

**Table 4.3-13
City of Santa Clarita Consolidated Projects (Includes Individually Reviewed Projects)**

| Name | Location | Dwelling Units | Commercial/Industrial (sf) | Acres ¹ | Status |
|--|---|----------------|----------------------------|------------------------|--|
| Residential/Mixed Use Projects | | | | | |
| Golden Valley Ranch (TR 52414) | Newly annexed area southeast of SR-14 and north of Placerita Canyon Road; 8 miles east of the RMDP/SCP project. | 498 | 618,759 | 1,259 (974 open space) | Approved 2002; Under Construction |
| Whittaker Bermite/Porta Bella Project (TR 51599) | Map ID #8 - West of Golden Valley Road, south of Soledad Canyon Road, and east of San Fernando Road; 3 miles east of the RMDP/SCP project. | 2,911 | 609,832 | 996 (407 open space) | On Hold Pending Remediation Activities |
| River Park (TR 53425) | Map ID #12 - Located at the eastern terminus of Newhall Ranch Road, east of Bouquet Canyon Road, and north of Soledad Canyon Road and the Santa Clara River; 4 miles east of the RMDP/SCP project. | 1,089 | 16,000 | 695 | Under Construction |
| North Valencia Specific Plan No. II (MC 04-205) | Two miles east of the Newhall Ranch Specific Plan along the east side of San Francisquito Creek, north of Newhall Ranch Road, south of Decoro Drive, east of Rye Canyon Road, and west of McBean Parkway; 2 miles east of the RMDP/SCP project. | 1,900 | 210,000 | 596 | Approved 2000; Near Buildout |
| Keystone/Synergy Project (TR 60258) | South of Bouquet Canyon Road, adjacent to the River Park project; 5 miles east of the RMDP/SCP project. | 499 | 30,476 | 246 (137 open space) | Approved 2006 |
| Stonecrest Annexation | Annexation of existing developed area on the far east side of the City of Santa Clarita, north of Soledad Canyon Road, and east of Shadow Pines Boulevard; 10 miles east of the RMDP/SCP project; no new construction. | 631 | 0 | 427 | Annexed 2006; Existing Development |

Table 4.3-13 (Continued)
City of Santa Clarita Consolidated Projects (Includes Individually Reviewed Projects)

| Name | Location | Dwelling Units | Commercial/Industrial (sf) | Acres ¹ | Status |
|--|---|----------------|---|--------------------|--------------------|
| Downtown Newhall Specific Plan | Redevelopment of downtown Newhall area (along San Fernando Road), 3 miles southeast of the RMDP/SCP project. | 1,092 | 1,017,000 | 320 | Approved |
| North Newhall Specific Plan | Redevelopment along San Fernando Road in Newhall, 3 miles southeast of the RMDP/SCP project. | 673 | 660,500 (Comm.) 261,000 (Elem. School) | 213 | Pending |
| Lyons Ranch (TR 53653) | West of I-5 and south of Pico Canyon Road; 2 miles east of the RMDP/SCP project. | 186 | 800 | 235 | Approved |
| Stetson Ranch (TR 49621) | East of Sand Canyon Road at the northern terminus of Gary and Marilyn Drives; 9 miles east of the RMDP/SCP project. | 265 | 0 | 176 | Approved |
| Sand Canyon Joint Venture (TT 53255, 53074) | The northeast corner of Soledad Canyon Road and Sand Canyon Road; 9 miles east of the RMDP/SCP project. | 87 | 110,000 | 89 | Approved |
| DR Horton (TR 48892) | Northeast corner of Sierra Highway and Golden Valley Road; 6 miles east of the RMDP/SCP project. | 148 | 0 | 61 | Approved |
| Centex Homes (TR 61811) | Located north of Golden Valley Road, west of Sierra Highway; 6 miles east of the RMDP/SCP project. | 52 | 0 | 14 | Under Construction |
| Soledad Village Project (MC 04-444) | North of Soledad Canyon Road, south of Santa Clara River, approximately 1 mile east of Bouquet Canyon Road; 6 miles east of the RMDP/SCP project. | 407 | 8,000 | 30 | Approved 2006 |
| Friendly Valley Association 11 (TR 52385) | Generally located north of Sierra Highway and east of Via Princessa; 6 miles east of the RMDP/SCP project. | 43 | 0 | 22 | Proposed |
| Valle de Oro (TR 53419) | Located at the northwest corner of Sierra Highway and Golden Valley Road; 6 miles east of the RMDP/SCP project. | 111 | 0 | 21 | Completed |
| Soledad Circle Estates | South of Soledad Canyon Road at Penlon Court, 4 miles east of the RMDP/SCP project. | 147 | 0 | 20 | Pending |
| Flying Tiger (TR 259166) | North of Via Princessa and east of Sierra Highway; 7 miles east of the RMDP/SCP project. | 200 | 0 | 13 | Approved |
| Total Santa Clarita Residential/Mixed Use | | 10,939 | 3,542,367 | 5,433 | |

Table 4.3-13 (Continued)
City of Santa Clarita Consolidated Projects (Includes Individually Reviewed Projects)

| Name | Location | Dwelling Units | Commercial/Industrial (sf) | Acres ¹ | Status |
|---|---|----------------|----------------------------|----------------------|--------------------|
| Commercial/Industrial Projects | | | | | |
| Rye Canyon Business Park (TR 23916, 51826) | At the northeast corner of Rye Canyon Road and Newhall Ranch Road; 2 miles northeast of the RMDP/SCP project. | 0 | 4,400,000 | 376 | Under Construction |
| Gate King (TR 50283) | Southern Santa Clarita, west of SR-14 and Sierra Highway, south of San Fernando Road; 6 miles southeast of the proposed project. | 0 | 4,200,000 | 682 | Approved |
| Centre Pointe Business Park (TR 42670) | South of Soledad Canyon road, east of Bouquet Canyon Road, west of Golden Valley Road; 5 miles east of the RMDP/SCP project. | 0 | 2,300,000 | 45 | Near Buildout |
| North Valencia Specific Plan No. I | Map ID #11 - South of Newhall Ranch Road, north of Magic Mountain Parkway, east of Rye Canyon Road, west of Bouquet Canyon Road; 0.5 mile east of the RMDP/SCP project. | 2,000 | 803,000 | 707 (365 open space) | Near Buildout |
| Valencia Town Center Expansion | Northeast corner of Valencia Boulevard and McBean Parkway; 2 miles east of the RMDP/SCP project. | 0 | 491,860 | 10 | Proposed |
| Bridgeport Market Place | Northeast corner of McBean Parkway and Newhall Ranch Road, 2 miles east of the RMDP/SCP project. | 0 | 160,000 | 32 | Under Construction |
| Henry Mayo Newhall Memorial Master Plan (MC 04-325) | 23845 West McBean Parkway; 2 miles east of the RMDP/SCP project. | 0 | 600,000 | 21 | Proposed |
| Tourney North | Magic Mountain Parkway west of The Old Road and I-5; 1 mile east of the RMDP/SCP project. | 0 | 450,000 | 100 | Under Construction |
| Tourney South | Wayne Mills Place east of I-5; 1 mile east of the RMDP/SCP project. | 0 | 165,000 | 12 | Under Construction |
| Aspen Investment Company (MC 02-273) | North of Soledad Canyon Road and west of Valley Center Drive; 6 miles east of the RMDP/SCP project. | 0 | 109,000 | 6 | Proposed |
| Chinque Terra Office Park | On Sierra Highway between Dockweiler Drive and San Fernando Road, 4 miles southeast of the RMDP/SCP project. | 0 | 90,900 | 6 | Pending |
| Rice Self Storage (MC 02-231) | Southwest corner of Seco Canyon Road and Copperhill Drive; 3 miles north east of the RMDP/SCP project. | 0 | 84,000 | 3 | Completed |
| Facey Medical Building | 26357 McBean Parkway; 2 miles east of the RMDP/SCP project. | 0 | 79,000 | 4 | Completed |

Table 4.3-13 (Continued)
City of Santa Clarita Consolidated Projects (Includes Individually Reviewed Projects)

| Name | Location | Dwelling Units | Commercial/Industrial (sf) | Acres ¹ | Status |
|---|---|----------------|----------------------------|--------------------|-----------|
| HH Seco II LLC (MC 01-317) | Southwest corner of Seco Canyon Road and Copperhill Drive; 3 miles northeast of the RMDP/SCP project. | 0 | 40,000 | 2 | Completed |
| VTC Square | Northwest corner of McBean Parkway and Valencia Boulevard, 2 miles east of the RMDP/SCP project. | 10 | 37,000 | 1 | Pending |
| Rodgers Development Master Case 02-232 | Northeast corner of Bouquet Canyon Road and Plum Canyon Road; 7 miles northeast of the RMDP/SCP project. | 0 | 34,000 | 4 | Completed |
| Total Santa Clarita Commercial/Industrial | | 2,010 | 14,043,760 | 2,011 | |
| Institutional Projects | | | | | |
| College of the Canyons Expansion | South of Valencia Boulevard and west of Rockwell Canyon Road, 1.5 miles east of the RMDP/SCP project. | n/a | 180,000 | 5 | Pending |
| Master's College Master Plan and TM 66503 | 21726 Placerita Canyon Road; 2 miles east of the RMDP/SCP project. | 54 | 0 | 95 | Pending |
| UCLA Film Archives | North of McBean Parkway and west of Rockwell Canyon Road, 3 miles northeast of the RMDP/SCP project. | n/a | 368,730 | 65 | Pending |
| Total Santa Clarita Institutional | | 54 | 548,730 | 165 | |
| Infrastructure Projects | | | | | |
| Sand Canyon Road Bridge Widening | Tentative Tract Map No. 52004 filed with City of Santa Clarita, Robinson Ranch Golf Course project. Crosses the Santa Clara River 6 miles upstream of the RMDP/SCP project area where riverbed is dry. Two new lanes are proposed for an existing bridge. | n/a | n/a | n/a | Approved |
| Wiley Canyon Road/Via Princessa Bridge (South fork) | 1,100-foot bridge, crosses South Fork of Santa Clara River near city of Santa Clarita; 5 miles east of the RMDP/SCP project. | n/a | n/a | n/a | Permitted |
| Saugus Water Reclamation Plant | Near Bouquet Canyon Road, discharges to Santa Clara River; 3 miles east of the RMDP/SCP project. | n/a | n/a | n/a | Completed |

Table 4.3-13 (Continued)
City of Santa Clarita Consolidated Projects (Includes Individually Reviewed Projects)

| Name | Location | Dwelling Units | Commercial/Industrial (sf) | Acres ¹ | Status |
|--|------------------------|----------------|----------------------------|--------------------|---|
| City of Santa Clarita General Plan Circulation Element Amendment, all watercourses | City of Santa Clarita. | n/a | n/a | n/a | City General Plan Circulation Element |
| Total Santa Clarita Infrastructure | | n/a | n/a | n/a | |
| Total Santa Clarita | | 13,003 | 18,134,857 | 7,609 | (includes at least 1,883 acres of open space) |

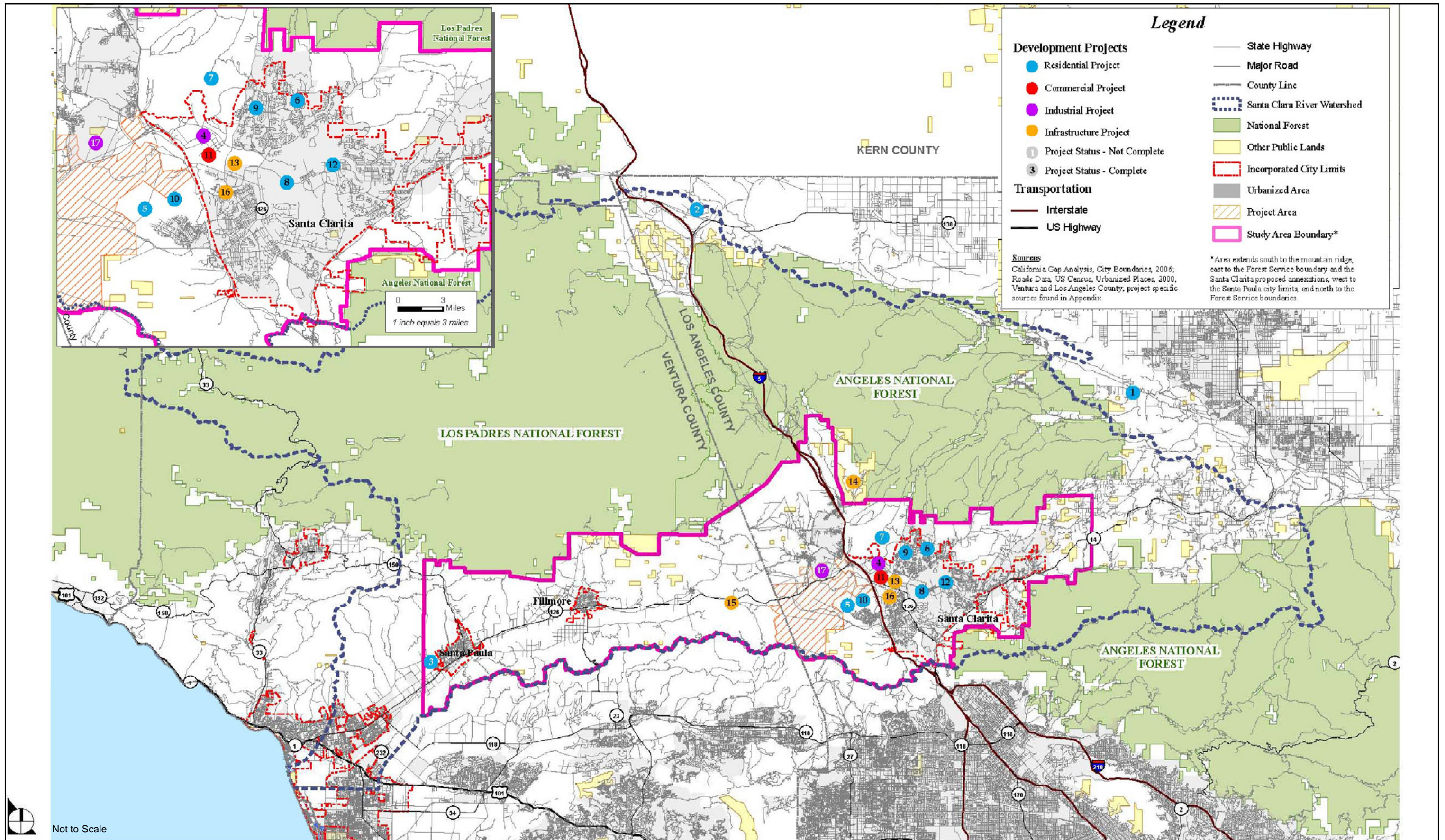
¹ Open space acreage information was not available for all projects, but is provided where available.

Source:

City of Santa Clarita.

(b) Unincorporated Los Angeles County Consolidated Projects

Table 4.3-14 contains the Los Angeles County consolidated projects analysis. Projects more than 5 miles away from the Newhall Ranch Specific Plan area and/or smaller-scale projects (less than 700 acres) are listed in a consolidated manner, and are grouped by local jurisdiction. **Table 4.3-14** also includes the projects selected for individual listing, which are discussed further in **subsection 4.3.11.a.(2)**, below.



SOURCE: URS 2008; Impact Sciences Inc. 2009

FIGURE 4.3-12

Mission Village EIR

Cumulative Individual Project Location Map

**Table 4.3-14
Los Angeles County Consolidated Projects**

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|--|---|--------|--|-----------------------------|---------------------|
| Residential/Mixed Use Projects | | | | | |
| Ritter Ranch ³ | Map ID #1 - South of Bouquet Canyon Road and Elizabeth Lake Road, west of Antelope Valley Freeway, and north of Sierra Highway; 40 miles east of the RMDP/SCP project. | 7,200 | 3,000,000 | 10,258 | Partially Built Out |
| Centennial ³ | Map ID #2 - Located on the Tejon Ranch, approximately 60 miles north of Los Angeles, just south of the Kern County/Los Angeles County border, located next to SR-138, just east of I-5; 40 miles north of the RMDP/SCP project. | 23,000 | 14,000,000 | 11,700 | Pending |
| Fair Oaks Ranch (TR 47200, 52833, 52938) | East of SR-14, northeast of Via Princessa, and west of Sand Canyon Road; 7 miles east of the RMDP/SCP project. | 1,476 | 19 acres [827,640 sf] | 839 (497 open space) | Under Construction |
| Stevenson Ranch Phase IV (PD #2528; TR 52796, 43896) | West of I-5 and southwest of Magic Mountain Parkway; 0.5 mile east of the RMDP/SCP project. | 1,130 | 0 | 488 (113 open space) | Built out |
| Plum Canyon (TR 46018) | East of Bouquet Canyon Road and north of the northern terminus of Whites Canyon Road; 6 miles northeast of the RMDP/SCP project. | 4,051 | 150,000 | 603 | Under Construction |
| Skyline Ranch (TR 060922) | East of Whites Canyon Road, west of Sierra Highway; 8 miles northeast of the RMDP/SCP project. | 1,325 | 0 | 2,196 (1,604 open space) | Pending |
| Plum Canyon (SunCal) (TR 31803) | South of Plum Canyon Road, east of Bouquet Canyon Road; 5 miles east of the RMDP/SCP project. | 499 | 0 | 209 (90 open space) | Under Construction |
| Legacy Village (formerly Stevenson Ranch V) | Map ID #5 - Adjacent to/southeast of the Newhall Ranch Specific Plan area. | 3,425 | 840,200 | 1,759 | Pre-Application |
| Tesoro del Valle (TR 51644) | Map ID #6 - West side of San Francisquito Creek, north of Copperhill Drive; 5 miles northeast of the RMDP/SCP project. | 1,791 | 0 | 1,793 | Under Construction |
| West Creek/West Hills Valencia Project (TR 52445) | Map ID #9 - West side of San Francisquito Creek, north of Newhall Ranch Road and south of the Copperhill Drive bridge; 4 miles northeast of the RMDP/SCP project. | 2,545 | 180,000 | 966 | Under Construction |

Table 4.3-14 (Continued)
Los Angeles County Consolidated Projects

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|---|---|-------|--|---------------------------|--------------------|
| Westridge Project (TR 45433 & MP 19050) | Map ID #10 - Just west of I-5, north of Stevenson Ranch, and directly south of Six Flags Magic Mountain Amusement Park; 0.5 mile east of the RMDP/SCP project. | 1,939 | 192,000 | 794 | Under Construction |
| Northlake (TR 51852) | Near Castaic Lake; 7 miles north of the RMDP/SCP project. | 1,698 | 388,775 | 1,330 (312 open space) | Pending |
| Tapia Ranch (TR 53822) | Map ID #7 - Tapia Canyon Road, west of Tesoro Residential Development. Access to the site currently via Parker Road exit from I-5; 4 miles east of the RMDP/SCP project. | 405 | 0 | 1167 | Pending |
| Spring Canyon (TR 48086) | East of city of Santa Clarita boundary, south of Sierra Highway, north of SR-14 and Soledad Canyon Road; 14 miles east of the RMDP/SCP project. | 542 | 0 | 548 (279 open space) | Approved |
| Bee Canyon (TR 54020) | East of city of Santa Clarita boundary, south of SR-14; 12 miles east of the RMDP/SCP project. | 556 | 0 | 211 (76 open space) | On Hold |
| Tick Canyon/Park Place (TR 060259) | Along Shadow Pines Boulevard just east of city of Santa Clarita boundary, north of Stonecrest Annexation area and SR-14; miles east of the RMDP/SCP project. | 492 | 0 | 523 (272 open space) | Pending |
| Hasley Golf Course (TR 52584) | North of Hasley Canyon Road, west of I-5; 3 miles north of the RMDP/SCP project. | 209 | 0 | 438 (67 open space) | Approved |
| Meadow Peak Project (TT 47760) | South of the Angeles National Forest, north of the city of Santa Clarita boundary, and northeast of the intersection of Copperhill Drive and Haskell Canyon Road; 6 miles east of the RMDP/SCP project. | 495 | 0 | 454 | Pending |
| Tincher (TR 060319) | Located at The Old Road and Villa Canyon Road; 2 miles north of the RMDP/SCP project. | 36 | 0 | 8 | Pending |
| G. H. Palmer and Associates (TR 45023) | North of Fair Oaks Ranch, east of SR-14; 7 miles east of the RMDP/SCP project. | 752 | 0 | 8 | Map Recorded |

Table 4.3-14 (Continued)
Los Angeles County Consolidated Projects

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|---|--|-------|--|---------------------------|---------------------|
| North Park (TR 46389) | West of Seco Canyon Road, east of Mc Bean Parkway, north of Decoro Drive; 2 miles east of the RMDP/SCP project. | 744 | 0 | 350 | Map Recorded |
| Pacific Bay Homes (TR 36943) | East of city of Santa Clarita boundary and Stonecrest Annexation area, north of Highway 14; 12 miles east of the RMDP/SCP project. | 636 | 0 | 213 | Completed |
| Stevenson Ranch III (TR 33608) | North of Pico Canyon Road, west of The Old Road; 1 mile southeast of the RMDP/SCP project. | 972 | 0 | 112 | Built Out |
| Fair Oaks Ranch (TR 44492) | East of Sierra Highway, north of Via Princessa; 9 miles east of the RMDP/SCP project. | 634 | 0 | 37 | Map Recorded |
| Centex Homes Bouquet Canyon (TR 46908) | South of the Angeles National Forest, north of Copperhill Drive, west of the Meadow Peak project; 6 miles northeast of the RMDP/SCP project. | 594 | 0 | 381 | Completed |
| Ion Communities, Castaic (Tract 46443) | West of I-5 in Castaic; 3 miles north of the RMDP/SCP project. | 95 | 0 | 159 | Pending |
| Johannes Van Tiburge (TR 43570) | West of I-5, east of Hasley Golf Course; 3 miles north of the RMDP/SCP project. | 540 | 0 | 8 | Map Recorded |
| Curtis Development Corporation (TR 47657) | North of Haskell Canyon Road and Copperhill Drive; 6 miles northeast of the RMDP/SCP project. | 223 | 0 | 63 | Map Recorded |
| G. H. Palmer and Associates (TR 45287) | On Sandy Drive and Jakes Way, between Sierra Highway and SR-14, south of the Santa Clara River; 10 miles east of the RMDP/SCP project. | 463 | 0 | 23 | Map Recorded |
| Davidon Homes (TR 35783) | North of Copperhill Drive and east of Seco Canyon Road; 5 miles east of the RMDP/SCP project. | 419 | 0 | 149 | Map Recorded |
| Green Valley Ranch Residential (TR 62000, 60257, and 062275) | Located south of Del Valle Road near Cromwell Avenue. The property is located approximately 0.5 mile west of the intersection of Hasley Canyon Road and Del Valle Road, and approximately 1.5 miles north of SR-126; 1 mile north of the RMDP/SCP project. | 233 | 30,000 | 224 (25 open space) | Pending Approval |

Table 4.3-14 (Continued)
Los Angeles County Consolidated Projects

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|--|--|-------|--|--------------------------|-----------------|
| Newhall Land (TR 44429) | Along Ridge Route Road, east of I-5 in Castaic; 3 miles north of the RMDP/SCP project. | 293 | 0 | 113 | Map Recorded |
| Valencia Company (TR 48202) | Northeast corner of Decoro Drive and Copperhill Drive; 3 miles northeast of the RMDP/SCP project. | 458 | 3.5 acres [152,460 sf] | 9 | Map Recorded |
| Valencia Company (TR 45084) | Corner of Commerce Center Drive and Hasley Canyon Road; 2 miles north of the RMDP/SCP project. | 294 | 0 | 150 | Completed |
| Valencia Company (TR 36668) | West of The Old Road, north of Commerce Center Drive; 2 miles north of the RMDP/SCP project. | 359 | one lot | 134 | Completed |
| Curtis Development Corporation (TR 45958) | West of I-5 in Castaic; 5 miles north of the RMDP/SCP project. | 296 | 0 | 357 | Map Recorded |
| Gerald Nordeman (TR 44373) | Along Hillcrest Parkway, west of I-5, north of Hasley Golf Course; 2 miles north of the RMDP/SCP project. | 1,114 | 4 acres [174,240 sf] | 376 | Map Recorded |
| Vista Canyon Ranch | Along Lost Canyon Road and the Santa Clara River, east of the Fair Oaks Ranch community, south of the 14 Freeway and west of Sand Canyon Road, 7 miles east of the RMDP/SCP project. | 1,600 | 1,500,000 | 217 (80 open space) | Pending |
| Davidon Homes (TR 46183) | West of Haskell Canyon Road, north of Copperhill Drive; 5 miles northeast of the RMDP/SCP project. | 213 | 0 | 80 | Completed |
| Forest Edge Project (Western Pacific Housing, TR 51789) | West of Haskell Canyon Road, north of Copperhill Drive; 5 miles northeast of the RMDP/SCP project. | 194 | 0 | 79 (30 open space) | Map Recorded |

Table 4.3-14 (Continued)
Los Angeles County Consolidated Projects

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|---|---|-------|--|-------------------------|--------------|
| Bouquet Canyon Land Fund 8, LLC (TR 52193) | Located west of Bouquet Canyon Road near the intersection of Bouquet and Vasquez Canyon Road; 6 miles northeast of the RMDP/SCP project. | 179 | 20,000 | 260 | Pending |
| Westshire (Pardee Homes, TR 063483) | Located immediately south of SR-14, southwest of Via Princessa and north of Lost Canyon Road; 7 miles east of the RMDP/SCP project. | 190 | 0 | 13 (3 open space) | Pending |
| Overland National Land Fund (TR 52192) | Southwest of the intersection of Bouquet Canyon Road and Vasquez Canyon Road; 6 miles northeast of the RMDP/SCP project. | 155 | 0 | 204 | Pending |
| Condo III Development, Larwin Company, Val Verde (TR 51995) | West of I-5, south of Hillcrest Parkway; 3 miles north of the RMDP/SCP project. | 114 | 0 | 15 | Map Recorded |
| Forecast Homes (TR 46353) | Located in Mint Canyon just southeast of Sierra Highway and west of Sand Canyon Road, just north of the city of Santa Clarita boundary; 9 miles east of the RMDP/SCP project. | 110 | 0 | 65 | Map Recorded |
| Golden Valley Ranch (TR 52535) | West of I-5 in Castaic; 6 miles north of the RMDP/SCP project. | 80 | 0 | 260 | Pending |
| Decoro Drive Residential (TR 45440) | West of McBean, east of San Francisquito Creek; 3 miles northeast of the RMDP/SCP project. | 182 | 0 | 99 | Completed |
| Dierckman & Mayh (PM 19784) | West of Commerce Center Drive, north of SR-126; 0.25 mile north of the RMDP/SCP project. | 115 | 0 | 288 | Map Recorded |
| (TR 42537) | West of I-5 in Castaic; 4 miles north of the RMDP/SCP project. | 95 | 0 | 553 | Approved |
| Sierra Way Estates (TR 47573) | Located northeast of the intersection of Sierra Highway and Vasquez Canyon Road; 12 miles northeast of the RMDP/SCP project. | 75 | 0 | 246 (179 open space) | Pending |
| (TR 47807) | West of Sloan Canyon Road and I-5 in Castaic; 3 miles north of the RMDP/SCP project. | 77 | 0 | 197 | Approved |
| SunCal Burnam Project (TR 53189) | Along San Francisquito Creek, west of McBean Parkway and north of Copperhill Drive; 5 miles northeast of the RMDP/SCP project. | 60 | 0 | 186 | Pending |

Table 4.3-14 (Continued)
Los Angeles County Consolidated Projects

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|---|---|---------------|--|--------------------|---------------------------------------|
| Hasley Ranch Co. Greystone Homes Inc. (TR 45645) | Hasley Canyon Road and Romero Canyon Road, west of the Hasley Canyon Golf Course and I-5; 2 miles north of the RMDP/SCP project. | 67 | 0 | 160 | Approved |
| Arciero and Sons, Inc. (TR 53725) | West of Hasley Canyon Golf Course and I-5; 2 miles north of the RMDP/SCP project. | 42 | 0 | 139 | Pending |
| Del Valle Project (TR 060665) | South of Hasley Canyon Golf Course; 0.5 mile north of the RMDP/SCP project. | 111 | 0 | 134 | Pending |
| Tract 52475 | North of Hasley Canyon Road, west of Del Valle Road, 3 miles north of the RMDP/SCP project. | 46 | 0 | 70 | Pending |
| Sterling Gateway (TR 60030) | Located east of Chiquita Canyon Road, just north of the RMDP/SCP project area; 0.5 mile north of the RMDP/SCP project. | 21 | 1,300,000 | 108 | Pending |
| Total Los Angeles County Residential/Mixed Use³ | | 35,459 | 5,755,315 | 20,565 | |
| Industrial/Commercial Projects | | | | | |
| Castaic Junction (PM 26574) | North of Henry Mayo Drive, west of The Old Road, north of the I-5 and SR-126 interchange; 0.25 mile northeast of the RMDP/SCP project. | 0 | 1,879,500 | 114 | Under Construction |
| Valencia Industrial Center | Map ID #4 - East of I-5, south of Newhall Ranch Road, north of Magic Mountain Parkway; 0.25 mile northeast of the RMDP/SCP project. | 0 | 12,900,000 | 1,840 | Approved |
| PM 18654 | Northwest of The Old Road and Magic Mountain Parkway, near Six Flags Magic Mountain Amusement Park; 0.25 mile east of the RMDP/SCP project. | 0 | 200,000 | 9 | Approved |
| Curtis Sand and Gravel Mine and Aggregate Plant | Upper Santa Clara River, about 10 miles upstream from Newhall Ranch Specific Plan area. | 0 | n/a | 185 | Operating since 1955 |
| Transit Mix (CEMEX) Soledad Canyon Mine | East of City of Santa Clarita boundary, at the entrance to Soledad Canyon; 16 miles east of the RMDP/SCP project. | 0 | n/a | 300 | Suspended pending federal legislation |
| Chiquita Canyon Landfill Expansion | Map ID #17 - West of I-5, north of SR-126 at Wolcott Way; 0.5 mile north of the RMDP/SCP project. | 0 | n/a | 98 | Pending |
| Industrial/Commercial Subtotal | | 0 | 14,879,500 | 2,546 | |

Table 4.3-14 (Continued)
Los Angeles County Consolidated Projects

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|--|---|----------|--|--------------------|-------------------------------------|
| Institutional Projects | | | | | |
| Castaic High School | North of Lake Hughes Road, east of Ridge Route Road, 4 miles north of the RMDP/SCP project. | 0 | 500,000 | 50 | Pending |
| Total Los Angeles County Institutional | | 0 | 500,000 | 50 | |
| Infrastructure Projects | | | | | |
| CLWA Reclaimed Water Master Plan (Santa Clara River) | Map ID #14 - Los Angeles County and city of Santa Clarita; 6 miles north of the RMDP/SCP project. | n/a | n/a | n/a | Pending |
| Bouquet Canyon Bridge Widening | Adding one lane in each direction on Bouquet Canyon Bridge at Santa Clara River; 2 miles east of the RMDP/SCP project. | n/a | n/a | n/a | Completed |
| Copperhill Drive Bridge | Upper San Francisco Creek, 565-foot bridge, 6 lanes; 3 miles northeast of the RMDP/SCP project. | n/a | n/a | n/a | Completed |
| Commerce Center Drive Extension | Extension of Commerce Center Drive and Bridge over Castaic Creek; 0.25 mile east of the RMDP/SCP project. | n/a | n/a | n/a | Completed |
| Cross Valley Connector | Two-mile extension of Newhall Ranch Road to east of Bouquet Canyon Road, including approximately 120-foot-wide bridge over Santa Clara River, connecting with Golden Valley Road; 3 miles east of the RMDP/SCP project. | n/a | n/a | n/a | Approved; estimated completion 2008 |
| Santa Clara Valley Joint Sewerage Facilities Plan | Map ID #16—Los Angeles County. | n/a | n/a | n/a | Approved |
| DPW Channel maintenance (South Fork) | 70 acres of channel excavation, center of Santa Clara River, South Fork. | n/a | n/a | n/a | Provisional Corps permit in 1997 |
| Natural River Management Plan (NRMP) | Map ID #13—Natural River Management Plan for 1,200 acres along the Santa Clara River. | n/a | n/a | n/a | Approved in 1998; half built-out |

Table 4.3-14 (Continued)
Los Angeles County Consolidated Projects

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|---|--|---------------|--|--------------------|---|
| Santa Clara River Enhancement and Management Plan | Map ID #15—Santa Clara River from Acton to Pacific Ocean, in Los Angeles and Ventura Counties. | n/a | n/a | n/a | Approved |
| I-5 and SR-126 | I-5/SR-126 interchange; 0.5 mile northeast of the RMDP/SCP project. | n/a | n/a | n/a | Completed |
| I-5/Hasley Canyon Road | Within Valencia Commerce Center, I-5 at the I-5/Hasley Canyon Road interchange; within the RMDP/SCP project area. | n/a | n/a | n/a | Under Construction since 10/07 |
| I-5/Magic Mountain Parkway Interchange Project | Modify the I-5/Magic Mountain Parkway interchange, reconstruct the Santa Clara River Bridge, realign The Old Road, and realign and widen Magic Mountain Parkway from six to eight lanes; 0.5 mile northeast of the RMDP/SCP project. | n/a | n/a | n/a | Construction scheduled to be complete Spring 2009 |
| Valencia Water Reclamation Plant | Immediately downstream of the I-5 bridge, discharges to the Santa Clara River; 0.5 mile east of the RMDP/SCP project. | n/a | n/a | n/a | Completed |
| I-5 Santa Clara River Bridge Replacement | Santa Clara River and I-5; 0.5 mile east of the RMDP/SCP project. | n/a | n/a | n/a | Completed |
| Castaic Junction Project | I-5/SR-126 interchange improvement project; 0.25 mile east of the RMDP/SCP project. | n/a | n/a | n/a | Under Construction |
| DPW Del Valle Sediment Placement Site | Near intersection of SR-126 and Chiquito Canyon Road; 0.5 mile north of the RMDP/SCP project | n/a | n/a | n/a | Pending |
| Soledad Canyon Road Trail (Santa Clara River) | South side of Santa Clara River from Metro Link Station to west side of Bouquet Canyon Bridge, continuing along the west side of Valencia Boulevard across South Fork at the Valencia Bridge; 3 miles east of the RMDP/SCP project. | n/a | n/a | n/a | Pending |
| Infrastructure Subtotal | | n/a | n/a | n/a | |
| Total | | 35,459 | 21,134,815 | 23,161 | (includes at least 3,627 acres of open space) |

Table 4.3-14 (Continued)
Los Angeles County Consolidated Projects

Note: The Las Lomas Project (PM 060792) application was denied, and thus, it was not included in this list because it is currently not reasonably foreseeable.

¹ *In some instances, commercial/industrial square footage was not available but an acreage for such uses was provided. That acreage was converted to square footage [shown in brackets] to provide an estimated basis for aggregating square footage totals.*

² *Open space acreage information was not available for all projects, but is provided where available.*

³ *Ritter Ranch and Centennial are not included in the totals because they are located in a different watershed.*

Source:

Los Angeles County.

(c) City of Fillmore (Ventura County) Consolidated Projects

Table 4.3-15 contains the City of Fillmore consolidated project list. Projects more than 5 miles away from the Newhall Ranch Specific Plan area and/or smaller-scale projects (less than 700 acres) are listed in a consolidated manner, and are grouped by local jurisdiction.

**Table 4.3-15
City of Fillmore Consolidated Projects**

| Name | Location | Units | Commercial/ Industrial (sf) ¹ | Acres ² | Status |
|---|--|--------------|---|------------------------|--|
| Residential/Mixed Use Projects | | | | | |
| Heritage Valley Parks Specific Plan | Located within and adjacent to the southeastern boundary of the city of Fillmore; 10 miles east of the RMDP/SCP project. | 750 | 0 | 301 (52 open space) | Under Construction |
| North Fillmore Specific Plan | North of B Street and 7th Street; 11 miles east of the RMDP/SCP project. | 350 | 15,000 | 101 (2 open space) | Pending |
| Residential Subtotal | | 1,100 | 15,000 | 402 | |
| Commercial/Industrial Projects | | | | | |
| South West Business Park Master Plan Commercial | South West corner of the city of Fillmore; 10 miles west of the RMDP/SCP project. | 0 | 90 acres [3,920,400 sf] | 90 | Under Construction |
| Commercial/Industrial Subtotal | | 0 | 3,920,400 | 90 | |
| Infrastructure Projects | | | | | |
| Fillmore Water Recycling Plant | SR-126 and "E" Street, city of Fillmore; 10 miles west of the RMDP/SCP project. | n/a | n/a | n/a | Under Construction |
| Total | | 1,100 | 3,935,400 | 492 | (includes at least 54 acres of open space) |

¹ In some instances, commercial/industrial square footage was not available but an acreage for such uses was provided. That acreage was converted to square footage [shown in brackets] to provide an estimated basis for aggregating square footage totals.

² Open space acreage information was not available for all projects, but is provided where available.

Source:

City of Fillmore.

(d) City of Santa Paula (Ventura County) Consolidated Projects

Table 4.3-16 contains the City of Santa Paula consolidated project list. Projects more than 5 miles away from the Newhall Ranch Specific Plan area and/or smaller-scale projects (less than 700 acres) are listed in a consolidated manner, and are grouped by local jurisdiction.

**Table 4.3-16
City of Santa Paula Consolidated Projects**

| Name | Location | Units | Commercial (sf) | Acres | Status |
|------------------------------|---|--------------|-----------------|--------------|---------------------------------------|
| Residential Projects | | | | | |
| Adams Canyon | Map ID #3—West of SR-150; 22 miles west of the RMDP/SCP project. | 450 | unknown | 6,578 | Pending (See Table 4.3-21) |
| East Area 1 Specific Plan | The property is bounded by hillside agricultural land to the north, Haun Creek to the east, Main Street and Southern Pacific Railroad to the south, and Santa Paula Creek to the west; 20 miles west of the RMDP/SCP project. | 900 | 810,800 | 541 | Annexation Pending |
| Residential Subtotal | | 1,350 | 810,800 | 7,119 | |
| Total | | 1,350 | 810,800 | 7,119 | |

Source:
City of Santa Paula.

(e) Unincorporated Ventura County Consolidated Projects

Table 4.3-17 contains the unincorporated Ventura County consolidated project list. Projects more than 5 miles away from the Newhall Ranch Specific Plan area and/or smaller-scale projects (less than 700 acres) are listed in a consolidated manner, and are grouped by local jurisdiction.

**Table 4.3-17
Ventura County Consolidated Projects**

| Name | Location | Units | Commercial/ Industrial (sf) | Status |
|---------------------------------------|--|-----------|--------------------------------|----------|
| Residential/Mixed Use Projects | | | | |
| Permit No. LU08-0062 | Located within the Piru area of Ventura County; approximately 7 miles west of the RMDP/SCP project. | 66 | 0 | Pending |
| Residential Subtotal | | 66 | 0 | |
| Commercial/Industrial Projects | | | | |
| Permit No. LU08-0047 | Located in the Piru area of Ventura County; approximately 7 miles west of the RMDP/SCP project. | 0 | 19,300 | Pending |
| Commercial/Industrial Subtotal | | 0 | 19,300 | |
| Recreational Projects | | | | |
| Permit No. LU07-0088 | Located in the Piru area of Ventura County; approximately 8 miles northwest of the RMDP/SCP project. | 0 | (1) | Approved |
| Total | | 66 | 19,300 | |

(1) This project consists of minor improvements to existing buildings, structures and utilities at Lake Piru

Source:

Ventura County

(f) Consolidated Projects Overview

Table 4.3-18 contains a summary of the consolidated project information contained in **Tables 4.3-13 to 4.3-16**, above.

**Table 4.3-18
Summary of Total City/County/Caltrans Consolidated Projects**

| Agency | Units | Comm./Ind (sf)¹ | Total Acres/Open Space Acres² |
|--------------------|---------------|---------------------------------------|---|
| Santa Clarita | 13,003 | 18,134,857 | 7,609/1,883 |
| Los Angeles County | 35,459 | 21,134,815 | 23,161/3,627 |
| Fillmore | 1,100 | 3,935,400 | 492/54 |
| Santa Paula | 1,350 | 810,800 | 7,119 |
| Ventura County | 66 | 19,300 | unknown |
| Total | 50,978 | 44,035,172 | 59,929/5,564 |

Notes:

¹ Includes some instances where commercial/industrial acreages were converted to square footage [shown in brackets in **Tables 4.3-13 to 4.3-15**] to provide an estimated basis for aggregating square footage totals.

² Open space acreage information was not available for all projects; therefore, the "Open Space Acres" number represents the minimum open space that is planned for the projects in **Tables 4.3-13 to 4.3-15**.

Source:

Tables 4.3-13 to 4.3-17.

(g) Corps (Section 404 Permit) Projects

Between 1988 and 2006, the Corps issued an average of approximately 12.6 section 404 permits per year within the Santa Clara River watershed. (See **Figure 4.3-13, Consolidated Corps Projects (1988 and 2006)**, and **Figure 4.3-14, Consolidated Corps Permits, Acreage of Impacts and Mitigation (1988 to 2006)**, below.) The greatest number of permits was issued in 1998 and 2005, respectively, which were both El Nino years. As a result, the amount of jurisdictional area affected, in terms of acreage, was greatest in these 2 years. This is likely due to the fact that dramatic flood events necessitate the need for repairs and maintenance of existing facilities, and may also underscore the general need to construct additional flood and erosion facilities for protection against future disasters.

Of the 228 projects permitted by the Corps under section 404 permits in the Santa Clara River watershed between 1988 and 2006, more were associated with emergency repairs and maintenance than any other type of activity. Combined, the permits issued for emergency repairs and maintenance of existing facilities accounted for a 25 percent of the total permits issued (16 percent were emergency repairs, 9 percent maintenance). Flood protection activities, including bank protection, riprap, rock groin, and culver/levee improvements, accounted for 25 percent of the total permits issued. Another 17 percent of the permits issued were associated with residential development. Unknown activities (largely from older permits with minimal available data) comprised 15 percent of the permits. The remaining 18 percent include bridges, channel alterations, sediment removal, storm drains, and other projects. (See **Figure 4.3-15, Corps Permitted Activities by Types (1998-2006)**.)

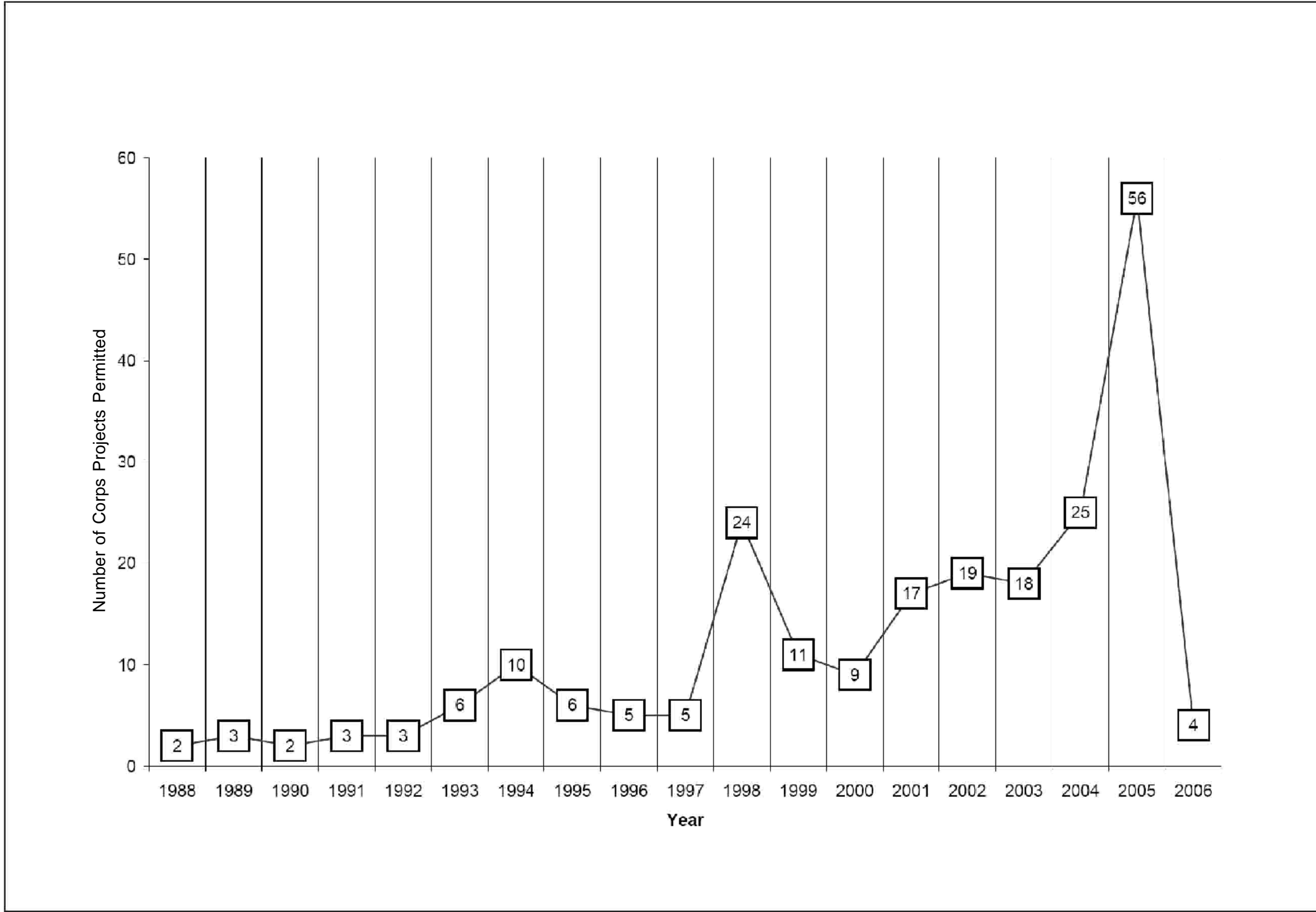
(h) Federal Biological Opinions

Table 4.3-19 summarizes federal biological opinions issued in the Santa Clara River watershed between 1993 and 2006 as they relate to the species that are the most likely to be reviewed by the USFWS and CDFG as part of the species-related determinations and/or authorizations that are being sought as part of the Newhall Ranch Specific Plan process. A total of 25 USFWS biological opinions were reviewed. One of those opinions is not incorporated below because it did not affect any species of primary concern. Three opinions have been combined into one entry below because they concern the same request.

(i) CDFG Streambed Projects

Between 1983 and 2006, CDFG issued an average of 21 streambed alteration agreements per year in the Santa Clara River watershed. (See **Figure 4.3-16, Consolidated CDFG Streambed Projects (1983-2006)**, and **Figure 4.3-17, Consolidated CDFG Streambed Permits, Acreages of Impacts and Mitigation (1983-2006)**.) In general, the acreages of jurisdictional streambeds affected by projects authorized under the Fish and Game Code section 1600 program, in a given year, were related to the number of projects authorized that year. The years following the 1998 and 2005 El Niño events showed peaks in the number of authorizations granted, and a corresponding trend with respect to acreages of jurisdictional areas impacted. This is likely due to the fact that dramatic flood events necessitate the need for repairs and maintenance of existing facilities, and may also underscore the need to construct additional flood and erosion facilities for protection against future disasters.

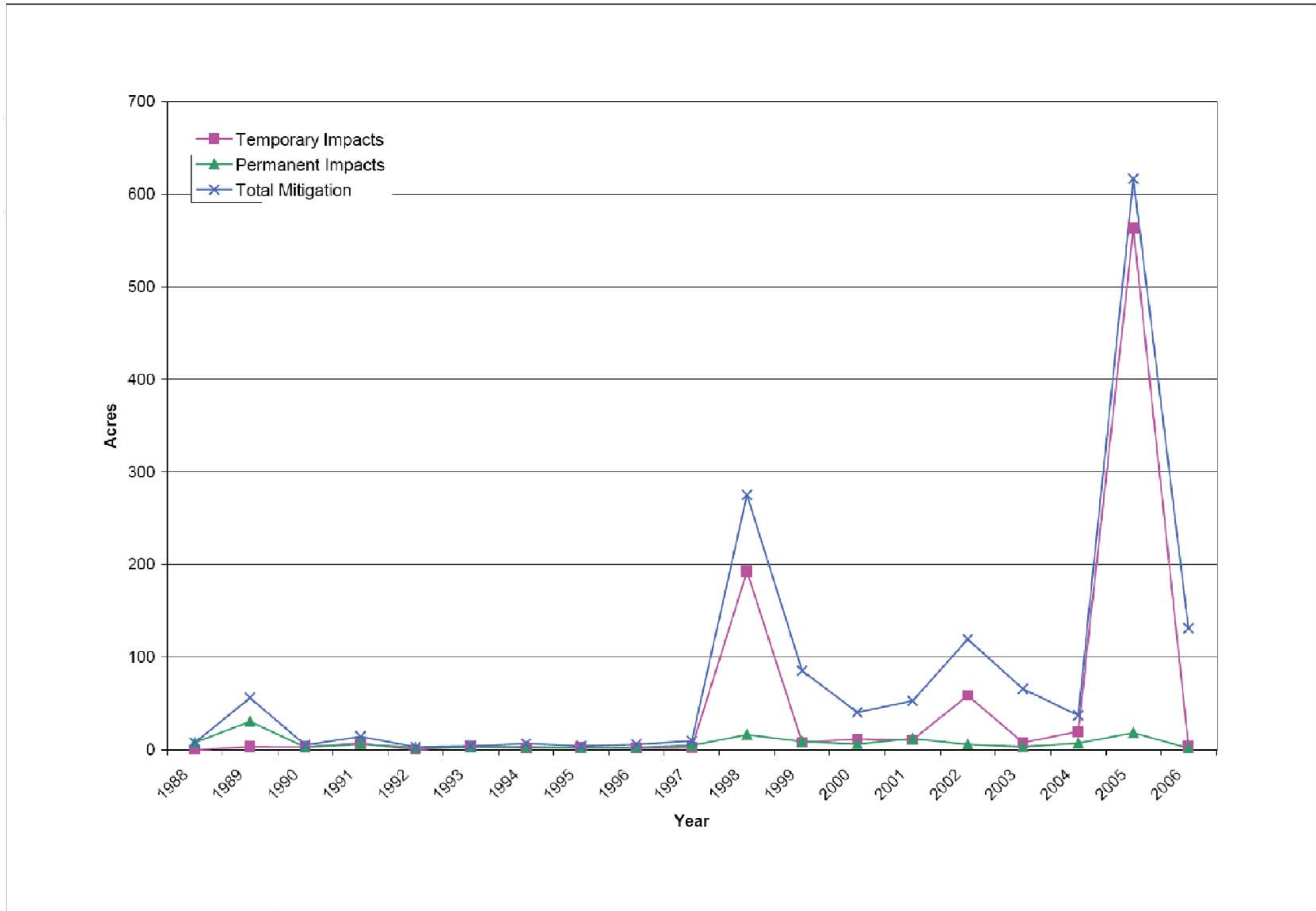
Of the 503 projects permitted under the section 1600 program in the Santa Clara River watershed between 1983 and 2006, 32 percent of the project activities were associated with bridges and maintenance activities. The combined number of streambed alteration agreements issued for the installation of riprap, bank protection, and miscellaneous flood/erosion control facilities accounted for 19 percent of the total authorizations issued. Sediment removal and fill activities accounted for 12 percent of the authorized activities, while channel alterations account for 11 percent of the total authorized activities. Unknown activities (largely from older permits with minimal available data) comprised 3 percent of the permits. (See **Figure 4.3-18, Consolidated CDFG Streambed Permits by Type (1983-2006)**.) The remaining 23 percent include culverts, storm drains, vegetation removal, and other projects.



SOURCE: Corps 2008; Impact Sciences Inc. 2009

FIGURE 4.3-13

Mission Village EIR

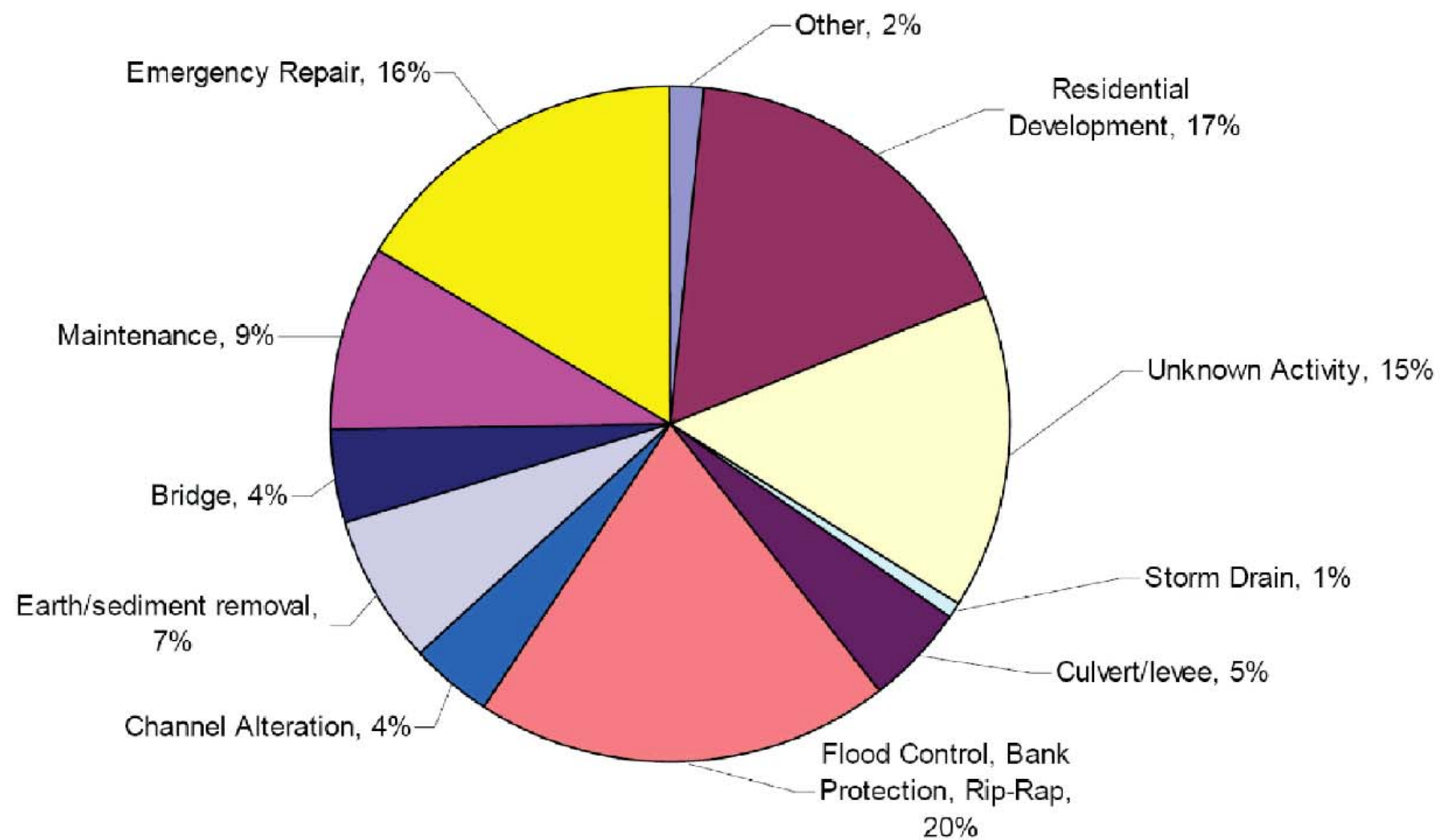


SOURCE: Corps 2008; Impact Sciences Inc. 2009

FIGURE 4.3-14

Mission Village EIR

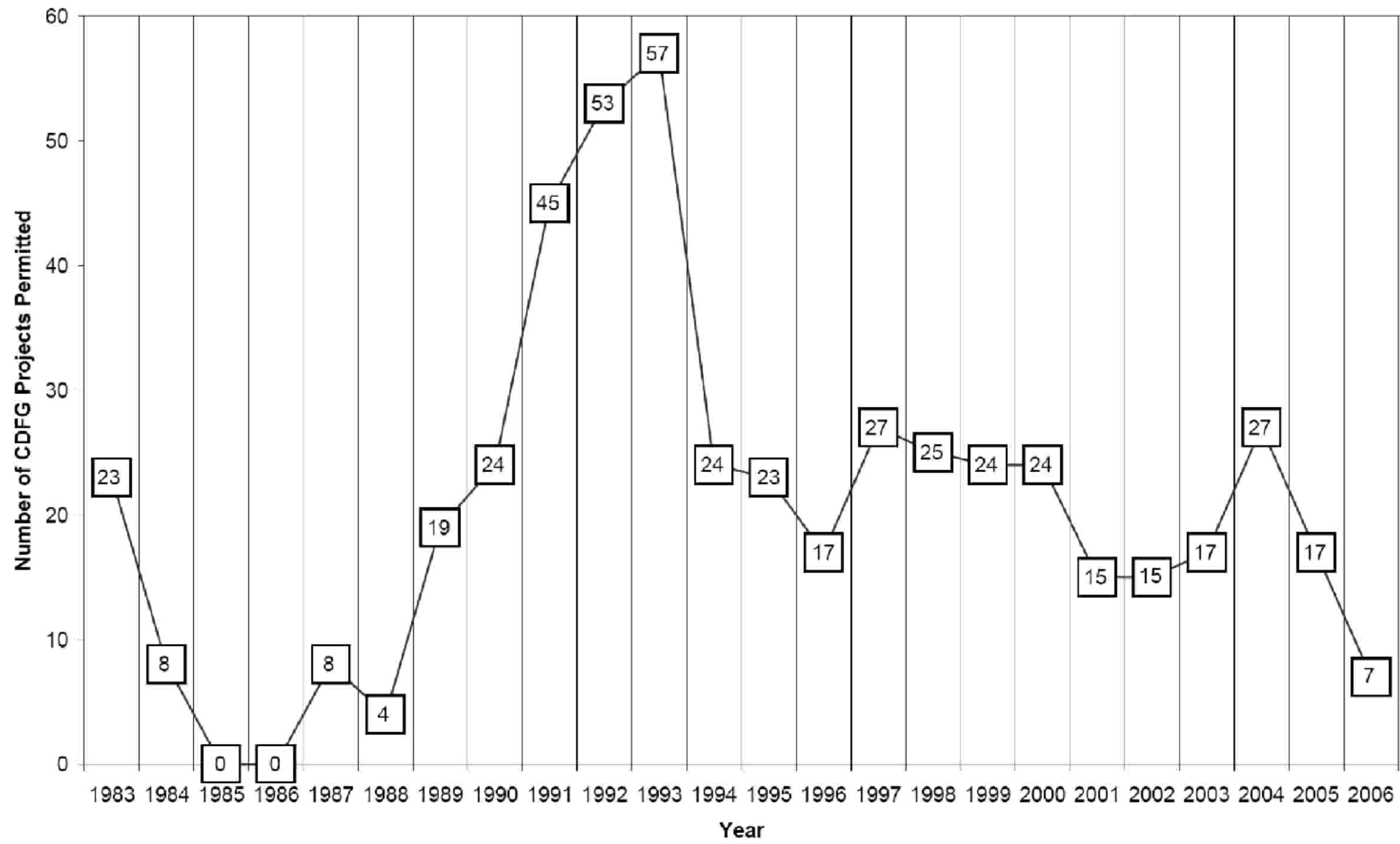
Consolidated Corps Permits, Acreage of Impacts and Mitigation (1988 to 2006)



SOURCE: Corps 2008; Impact Sciences Inc. 2009

FIGURE 4.3-15

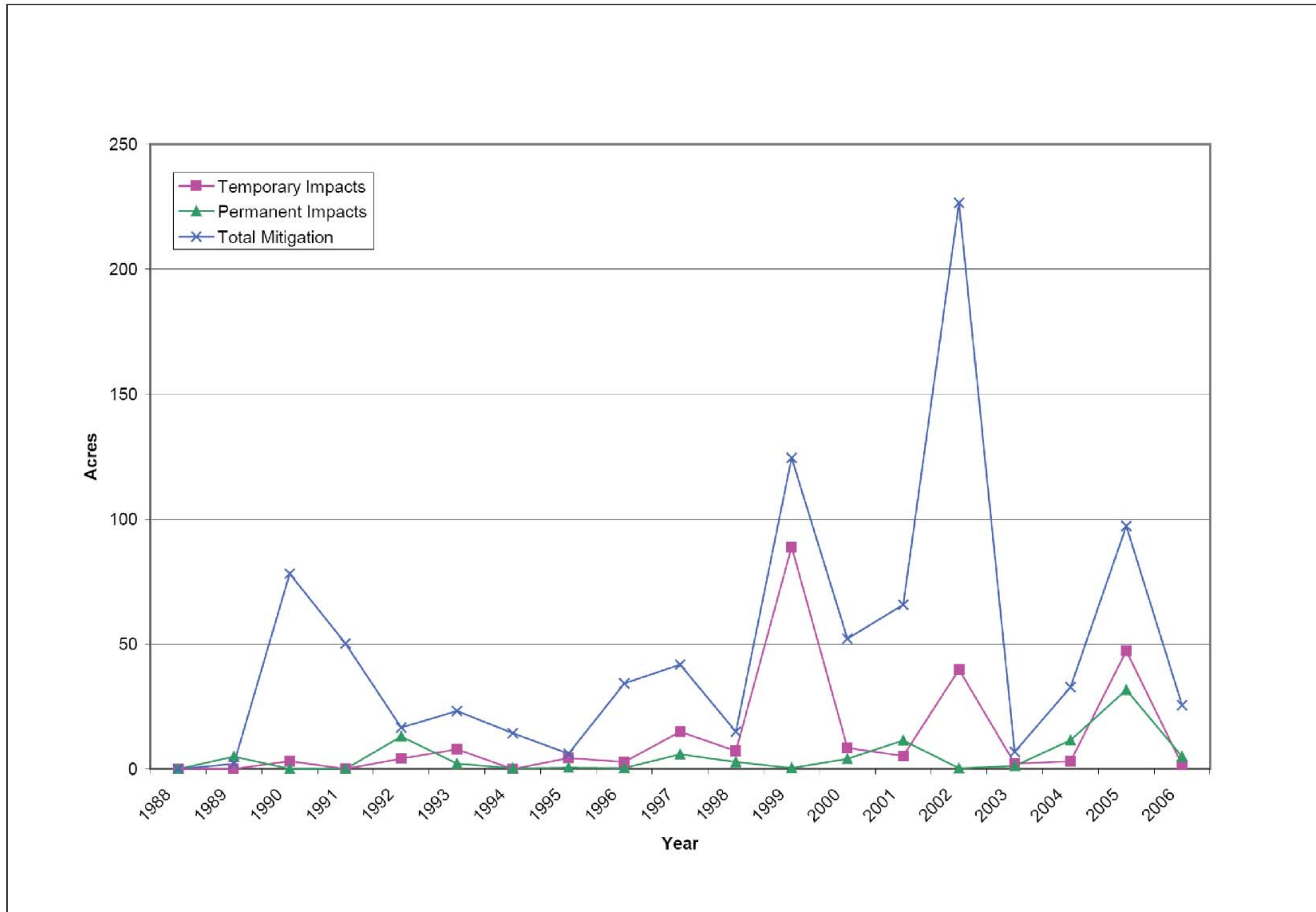
Mission Village EIR



SOURCE: Impact Sciences Inc. 2009

FIGURE 4.3-16

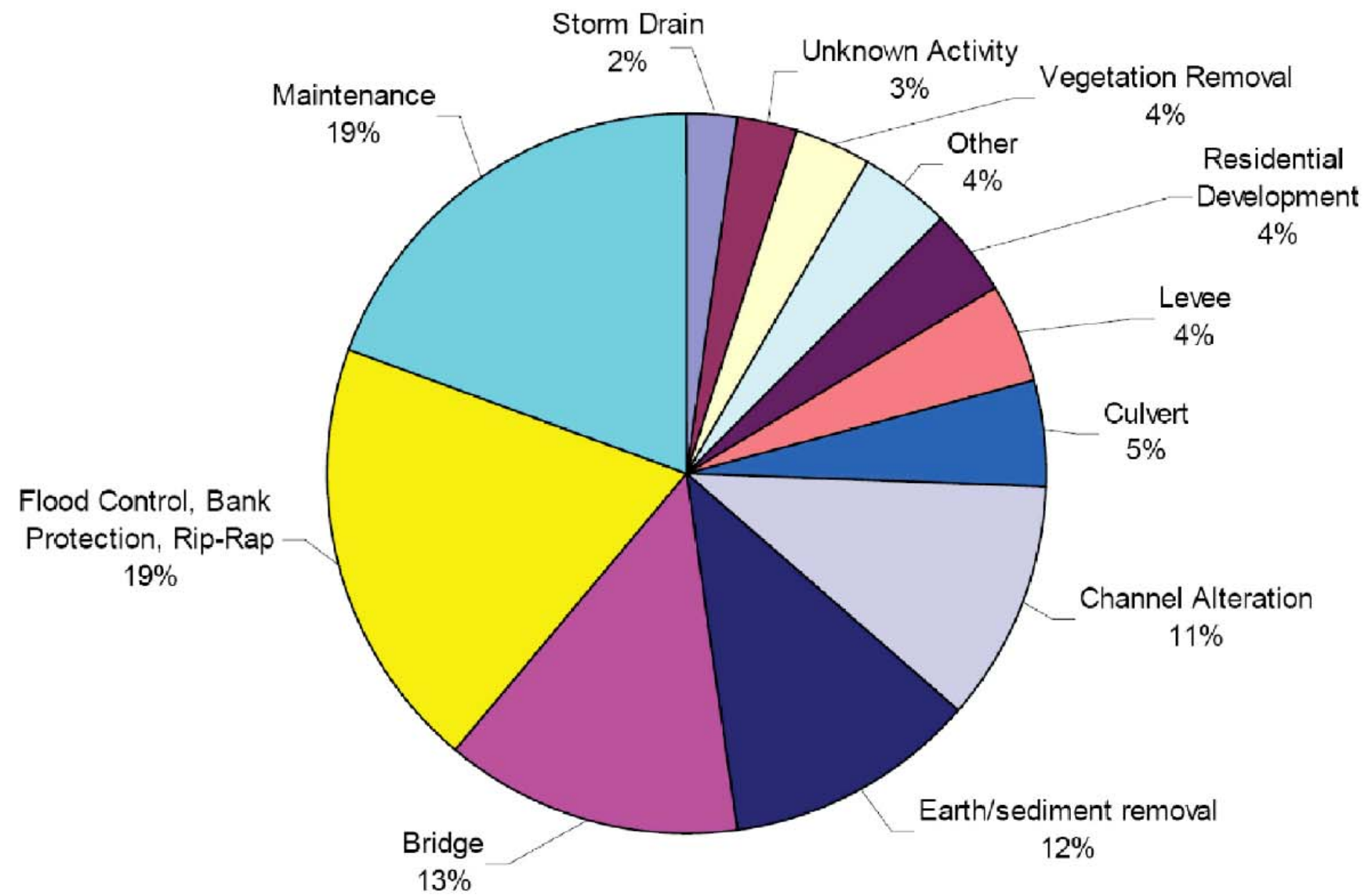
Mission Village EIR



SOURCE: Impact Sciences Inc. 2009

FIGURE 4.3-17

Mission Village EIR



SOURCE: Impact Sciences Inc. 2009

FIGURE 4.3-18

Mission Village EIR

**Table 4.3-19
Federal Biological Opinion Summary, Santa Clara Watershed (19932006)**

| Project | Species Covered | Acres Permanently (P) or Temporarily (T) Disturbed | Location | Description | Conclusion |
|--|--------------------|--|---|--|--|
| Temporary Diversion Berm on the Santa Clara River on the Newhall Ranch Op. 1065.1163.1544 October 26, 1993 | UTS ⁵²⁰ | 0 P 0.09 T (est.) | Along the Santa Clara River on the Newhall Ranch. | Construction of a 2' x 10' x 400' berm to divert water away from an exempt levee which is to be rebuilt. | Project is not likely to jeopardize the continued existence of the UTS; no adverse modification of critical habitat. |
| Southern Pacific Milling Company Sand and Gravel Mine Op. 1025.1129.1492 February 7, 1994 | LBV ⁵²¹ | 19 P T-unknown | Within and adjacent to the Santa Clara River from the western edge of the city of Santa Paula downstream to the confluence with the Lindsay Barranca in Ventura County. | The applicant proposes to install a sand and gravel mine. | Project is not likely to jeopardize the continued existence of the LBV; no adverse modification of critical habitat. |
| Installation of a Southern California Gas Company Pipeline Op. 1380.1517.2051 August 28, 1995 | UTS | 0 P .23 (est.) T | Santa Clara River at Castaic Creek. | Installation of an 8 mile gas line that crosses the Santa Clara River and Castaic Creek. | Project is not likely to jeopardize the continued existence of the UTS; no adverse modification of critical habitat. |

520 UTS = Unarmored three-spine stickleback

521 LBV = Least Bell's vireo

Table 4.3-19 (Continued)
Federal Biological Opinion Summary, Santa Clara Watershed (19932006)

| Project | Species Covered | Acres Permanently (P) or Temporarily (T) Disturbed | Location | Description | Conclusion |
|--|--------------------------------------|--|---|--|---|
| Installation of Irrigation Pipelines on the Santa Clara River in Newhall Ranch Op. 1392.1533.2075 October 23, 1995 | UTS | 0.005 P 1.45 T | Santa Clara River at Summer Crossing. | Installation of 18" x 12" PVC irrigating pipe and removal of fill that comprises Summer Crossing; purpose is to irrigate nearby Citrus Orchards. | Project is not likely to jeopardize the continued existence of the UTS; no adverse modification of critical habitat. |
| Construction of Erosion Control Facilities for the Valencia Water Reclamation Plant Op. 1406.1547.2098 February 29, 1996 | UTS & LBV | 1.4 P T-unknown | Santa Clara River near the Valencia Water Reclamation Plant. | Construction of a 50' x 12' x 630' keystone retaining wall. | Project is not likely to jeopardize the continued existence of either species; no adverse modification of critical habitat. |
| Repair of I-5 Bridge Over Santa Clara River Op. 1443.1591.2158 September 6, 1996 | UTS ~LBV & ~SWF ⁵²² | 1.4 P T-unknown | The Intersection of I-5 and the Santa Clara River. | The repair of two pier footings of the I-5 bridge crossing the Santa Clara River. | Project is not likely to jeopardize the continued existence of the UTS; no adverse modification of critical habitat. |
| Widening of SR-126 Op. 1472.1623.2199 | LBV | 0.5 P T-unknown | SR-126 just east of Rancho Camulos, from city of Piru to Los Angeles County line. | Grubbing, vegetation removal, and installation of retaining walls for ROW expansion. | Project is not likely to jeopardize the continued existence of the LBV; no adverse modification of critical |

⁵²² SWF = Southwestern willow flycatcher

Table 4.3-19 (Continued)
Federal Biological Opinion Summary, Santa Clara Watershed (19932006)

| Project | Species Covered | Acres Permanently (P) or Temporarily (T) Disturbed | Location | Description | Conclusion |
|--|-----------------|--|---|--|--|
| April 20, 1997 | | | | | habitat. |
| Sewer Line and Force Main Op. 2390.3666.4402 September 28, 1998 | UTS ~LBV | 0.7 P T-unknown | Near the intersection of the Santa Clara River and Old Road Bridge in the city of Santa Clarita. | Replacement of two underground sewer lines that cross the Santa Clara River. | Not likely to jeopardize the continued existence of the species or adversely affect critical habitat. |
| Newhall Land and Farming's Summer Crossings and Water Diversions Op. 911.1015.1329, 911.1015.1330, & 911.1351.1804 September 25, 1998 Note: Duplicate Letters | UTS | 0 P 14 T | Santa Clara River from the Castaic Creek confluence to the Rancho Camulos vicinity. | Installation of six temporary vehicle crossings and four water diversions along the Santa Clara River from native materials. | The action as is not likely to jeopardize the continued existence of the UTS or modify critical habitat. |
| Natural River Management Plan Op. 116.122.166 Nov. 27, 1998 | UTS, LBV & SWF | 96 P 71 T | Along the Santa Clara River and its tributaries in Valencia and Santa Clarita and adjacent unincorporated areas of Los Angeles County at the inlet of the San Francisquito Creek and confluence with the South Fork of the Santa Clara River. | 81,150 lf of bank protection along the River and San Francisquito Creek; a 1,700 foot long inlet structure at the confluence with the South Fork; approximately 85 storm drain outlets; eight new bridges; a replacement for an existing bridge; and upgrades to six existing bridges. | Activities are not likely to jeopardize the continued existence of these species or result in destruction or adverse modification of critical habitat. |
| Replacement of | UTS & | 1.18 P | Where I-5 crosses the Santa | Caltrans (with FHWA funding), | Not likely to jeopardize the |

Table 4.3-19 (Continued)
Federal Biological Opinion Summary, Santa Clara Watershed (19932006)

| Project | Species Covered | Acres Permanently (P) or Temporarily (T) Disturbed | Location | Description | Conclusion |
|---|-----------------|--|---|---|---|
| the I-5 Bridge over the Santa Clara River, Los Angeles County Op. 148.155.1274 December 26, 2000 | LBV | 0.42 | Clara River. | proposes to replace the existing bridges where I-5 crosses the Santa Clara River, with a single structure, consisting of 10 traffic lanes. Construction activities would include major and minor grading, installing pier supports, and the demolition and removal of the existing bridges. | existence of these three species and is not likely to destroy or adversely modify the critical habitat of the LBV or the proposed critical habitat of the UTS. |
| Replacement of the Highway 101 Bridge over the Santa Clara River, Ventura County, California Op. 852.921.1190 May 3, 2001 | LBV & SWF | 1.18 P 0.42 T | Highway 101 and the Santa Clara River; activities are expected to occur only on and under the bridge, and within 100 feet up- and downstream of the bridge. | Caltrans, (with FHWA funding) proposes to replace existing Highway 101 bridges over the Santa Clara River with a single concrete bridge with 12 lanes, a bike path, 12 piers and two abutments. | The action as is not likely to jeopardize the continued existence of these species; no critical habitat present. |
| Amendment to the Biological Opinion for the Santa Clara River Bridge Replacement Project Op. 852.921.1195 April 3, 2002 | LBV & SWF | 1.18 P 0.42 T | Interstate 101 and the Santa Clara River (although the opinion inadvertently references I-5). | Caltrans was unable to comply with term and condition 7 of the May 3, 2001 opinion requiring removal of riparian vegetation within 100 yards of the bridge before March 15 of each construction year. | Qualified ornithologists conducted surveys for breeding birds in the project area and concluded that no LBV or SWF had been detected. Therefore, the biological opinion can be amended without resulting in additional take of the species. |

Table 4.3-19 (Continued)
Federal Biological Opinion Summary, Santa Clara Watershed (19932006)

| Project | Species Covered | Acres Permanently (P) or Temporarily (T) Disturbed | Location | Description | Conclusion |
|---|-------------------|---|--|--|---|
| Hardluck Campground Low Water Crossing Replacement Op. 2409.3697.4463 September 10, 2002 | AT ⁵²³ | 0.25 P T - unknown | Piru Creek near Hardluck Campground in Los Padres National Forest. | Replacement of a concrete low water crossing. | Not likely to jeopardize the continued existence of the AT or adversely affect critical habitat. |
| Natural River Management Plan (NRMP) (Supplement to previous application dated November 27, 1998) Op. 116.154.212 Nov. 15, 2002 | AT | 66 P 71 T (smaller acreage for permanent reflects that a portion of the project had already been completed) | Same as previous. | Same as previous. | The NRMP, as proposed, is not likely to jeopardize the continued existence of the AT. |
| Castaic Creek Bank Protection, Valencia Commerce Center, Los Angeles County, California Op. 189.203.342 December 17, 2002 | UTS & AT ~LBV | 135 P 8.3 T | Castaic and Hasley creeks adjacent to the Santa Clara River. | Installation of approximately 19,400 feet of bank protection along Castaic and Hasley creeks over a period of 4 years. | The project, as proposed, is not likely to jeopardize the continued existence of either of these species. |

523 AT = Arroyo Toad

Table 4.3-19 (Continued)
Federal Biological Opinion Summary, Santa Clara Watershed (19932006)

| Project | Species Covered | Acres Permanently (P) or Temporarily (T) Disturbed | Location | Description | Conclusion |
|--|---------------------|--|---|---|--|
| Re-initiation of the replacement of the I-5 Bridge over the Santa Clara River, Los Angeles County Op. 148.156.215 August 1, 2003 | UTS, LBV, SWF, & AT | 1.28 P 0.42 T | Where I-5 crosses the Santa Clara River. | Same as above, but permanently impacted area will be expanded by 0.1 acres. | Action is not likely to jeopardize the continued existence of the species. |
| Santa Clara River Reaches 71 & 82 Op. 884.976.1397 October 24, 2004 | UTS & AT | 5.81 P T-unknown | Reaches 71 & 82 of the Santa Clara River. | Clearing of soft-bottom channels using both heavy mechanical equipment and hand clearing. | The action is not likely to jeopardize the continued existence of these species. |
| Townhomes at the River Development and Construction of a Flood Control Levee Op. 1726.2067.3266 March 31, 2005 | LBV | 11.4 P T-unknown | City of Fillmore. | 66 residential units on an 11.4 acre site and 26' x 730' x 10' x 90' levee installation. | Not likely to jeopardize the continued existence of the LBV; critical habitat will not be adversely affected. |
| I-5 Hasley Canyon Interchange Improvement Op. 2141.3126.3703 May 31, 2005 | UTS & AT | 0.01 P 0.42 T (est) | I-5 at Castaic Creek and Hasley Canyon. | Replacement of existing over-crossings, ramps, and supports. | Not likely to jeopardize the continued existence of either species; critical habitat will be adversely affected. |

Table 4.3-19 (Continued)
Federal Biological Opinion Summary, Santa Clara Watershed (19932006)

| Project | Species Covered | Acres Permanently (P) or Temporarily (T) Disturbed | Location | Description | Conclusion |
|---|-----------------|--|--|---|---|
| Amendment to Biological Opinion for Santa Clara Bridge Replacement Op. 852.921.4942 February 16, 2006 | LBV & SWF | 1.18 P 0.42 T | Interstate 101 and the Santa Clara River. | Proposed revision of project description to include underground drainage and outlet. | The revised project is not likely to adversely affect these species. |
| Santa Paula Water Recycling Facility Op. 2260.3483.5550 September 5, 2006 | LBV | 0 P 9.4 T | Approximately 58 acres immediately south of SR-126 and west of Peck Road in Santa Paula. | Construction of a new water recycling facility including new percolation ponds that would discharge into the Santa Clara River. | Not likely to jeopardize the continued existence of the LBV; critical habitat will not be adversely affected. |

Notes:

UTS - Unarmored Threespine Stickleback

SWF - Southwestern Willow Flycatcher

LBV - Least Bell's Vireo

AT - Arroyo toad

~ - species mentioned but not discussed

Source:

USFWS.

(j) **CDFG Take Authorizations**

Prior to 1997, CDFG issued Memoranda of Understanding and a few permits for authorization of incidental take of species listed under the California ESA. Between 1988 and 1997, CDFG considered 273 incidental take authorizations statewide, of which 174 were ultimately signed. Of those 174 authorizations, three were for western yellow-billed cuckoo, 11 for least Bell's vireo, and one for unarmored threespine stickleback. In the bioregion that includes the proposed project (the South Coast bioregion), approximately 20 take authorizations were issued during that time period, which authorized a total of roughly 1,000 acres of habitat impacts (including coastal sage scrub, alluvial fan sage scrub, non-native grassland, riparian, and wetland habitat types) and required 2,000 acres of mitigation.⁵²⁴

More recently, CDFG has issued 48 take authorizations in the general regional vicinity of the project (i.e., generally within Los Angeles, Ventura, and Santa Barbara Counties, but also including some authorizations in San Diego County). Most of those authorizations were for projects that are a significant distance from the Newhall Ranch Specific Plan area, including the proposed Mission Village project (e.g., greater than 25-30 miles), and/or for species that are not of primary concern for the proposed project. The four most relevant authorizations are summarized in **Table 4.3-20**, below. Relevancy was determined by proximity to the proposed project and shared species impacts.

⁵²⁴ The California Department of Fish and Game and U.S. Army Corps of Engineers, "Final Environmental Impact Report/Environmental Impact Statement: 404 Permit and 1603 Streambed Alteration Agreement for Portions of the Santa Clara River and its Tributaries, Los Angeles County (SCH No. 1997061090)" (August 1998) is incorporated by reference, as permitted in section 15150 of the *State CEQA Guidelines*. All referenced documents are available for public inspection and review upon request to: County of Los Angeles, Department of Regional Planning, 320 West Temple Street Los Angeles, California 90012 (Samuel Dea; (213) 974-6461) or Impact Sciences, Inc., 803 Camarillo Springs Road, Suite A-1, Camarillo, California 93012 (Susan Tebo; (805) 437-1900).

**Table 4.3-20
Recent CDFG Take Authorizations in Project Vicinity**

| Project Number | Project Name | Project Location | Project Impact Description | Relevant Species |
|------------------|---|---|--|------------------|
| 2080-2001-029-05 | I-5/Santa Clara River Bridge Replacement | City of Santa Clarita. | Unknown. | LBV, SWF, UTS* |
| 2081-2002-008-05 | SR 101 Santa Clara River Bridge Replacement | Santa Clara River Bridge where it is crossed by SR 101, between Post miles 22 and 24 in Ventura County. | The permanent destruction of 1.0 acres of habitat and temporary impacts to 0.9 acres of habitat during 4 breeding seasons. | LBV, SWF |
| 2080-2003-018-05 | I-5 Santa Clara River Bridge Replacement Additional Work Area | City of Santa Clarita. | Permanent acres-1.28; temporary acres-3.30. | LBV, SWF, UTS* |
| 2081-1998-49-5 | NRMP | Santa Clara River in Los Angeles County by City of Santa Clarita. | 74 acres. | LBV, SWF, UTS* |

UTS - Unarmored Threespine Stickleback. *Discussed, but no take authorized.

SWF - Southwestern Willow Flycatcher.

LBV - Least Bell's Vireo.

Source:

CDFG 2007.

In addition, several NCCPs have recently been proposed and/or approved in the Southern California area. These NCCPs (or combination HCP/NCCPs) would provide comprehensive take authorizations for larger planning areas in parts of Kern, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties. However, none of these proposed or approved planning/take authorization documents were deemed to be relevant for analysis in this EIR because of their distance from the proposed project (e.g., greater than 25-30 miles) and/or their lack of similarity of species of primary concern.

(2) Individual Projects

Major residential/mixed use, commercial, and industrial projects of 700 or more acres within 5 miles of the project area, as well as larger-scale infrastructure projects involving the Santa Clara River, are listed below. A summary of these projects' size, location, and current status appears in the following table (Table 4.3-21). These projects are identified by the same numbers used in Figure 4.3-12, Cumulative Individual Project Location Map.

**Table 4.3-21
Individual Project Summary**

| Map ID | Name | Jurisdiction | Project Type | Location and Distance from Proposed Project | Residential Units/Comm./Ind. Square Feet | Size (Acres) | Status |
|--------|------------------------------------|---------------------------------------|---------------------------------------|--|--|--------------|---------------------|
| 1 | Ritter Ranch | City of Palmdale (Los Angeles County) | Residential/Mixed Use | South of Bouquet Canyon Road and Elizabeth Lake Road, west of Antelope Valley Freeway, and north of Sierra Highway; 40 miles east of the proposed project. | 7,200 | 10,258 | Partially Built Out |
| 2 | Centennial | Northern Los Angeles County | Residential/Mixed Use | Located on the Tejon Ranch, just south of the Kern County/Los Angeles County border, located next to SR-138, just east of I-5; 40 miles north of the proposed project. | 23,000 | 11,700 | Pending |
| 3 | Adams Canyon | City of Santa Paula | Residential/Mixed Use | West of SR-150; 22 miles west of the proposed project. | 450 | 6,578 | Pending |
| 4 | Valencia Industrial Center | Los Angeles County | Industrial Park and Commercial Retail | East of I-5, south of Newhall Ranch Road, and north of Magic Mountain Parkway; 0.25 mile northeast of the proposed project. | 12,900,000 | 1,840 | Completed |
| 5 | Legacy Village (Stevenson Ranch V) | Los Angeles County | Residential/Mixed Use | Adjacent to/southeast of the Newhall Ranch Specific Plan area.. | 3,425/ 840,200 | 1,759 | Pre-Application |
| 6 | Tesoro del Valle (TR 51644) | Los Angeles County | Residential/Mixed Use | West side of San Francisquito Creek, north of Copperhill Drive; 5 miles northeast of the proposed project. | 1,791 | 1,793 | Under construction |

Table 4.3-21 (Continued)
Individual Project Summary

| Map ID | Name | Jurisdiction | Project Type | Location and Distance from Proposed Project | Residential Units/Comm./Ind. Square Feet | Size (Acres) | Status |
|--------|--|-----------------------|-----------------------|--|--|----------------------|--|
| 7 | Tapia Ranch (TR 53822) | Los Angeles County | Residential/Mixed Use | Tapia Canyon Road, west of Tesoro Residential Development. Access to the site currently via Parker Road exit from I-5; 4 miles east of the proposed project. | 405 | 1167 | Pending |
| 8 | Whittaker Bermite / Porto Bello Project (TR 51599) | City of Santa Clarita | Residential/Mixed Use | West of Golden Valley Road, south of Soledad Canyon Road, and east of San Fernando Road; 3 miles east of the proposed project. | 2911/609,832 | 996 (407 open space) | On hold pending remediation activities and bankruptcy proceedings. |
| 9 | West Creek/West Hills Valencia Project (TR 52445) | Los Angeles County | Residential/Mixed Use | West side of San Francisquito Creek, north of Newhall Ranch Road, and south of the Copperhill Drive bridge; 4 miles northeast of the proposed project. | 2,545/180,000 | 966 | Near buildout. |
| 10 | Westridge Project (TR 45433 & MP 19050) | Los Angeles County | Residential/Mixed Use | Just west of I-5, north of Stevenson Ranch, and directly south of Six Flags Magic Mountain Amusement Park; 0.5 mile east of the proposed project. | 1,939/192,000 | 794 | Under Construction |

Table 4.3-21 (Continued)
Individual Project Summary

| Map ID | Name | Jurisdiction | Project Type | Location and Distance from Proposed Project | Residential Units/ Comm./Ind. Square Feet | Size (Acres) | Status |
|--------|--|--|------------------------------|---|---|----------------------|----------------------------------|
| 11 | North Valencia Specific Plan No. 1 (Industrial Park) | City of Santa Clarita | Industrial and Business Park | South of Newhall Ranch Road, north of Magic Mountain Parkway, east of Rye Canyon Road, and west of Bouquet Canyon Road; 0.5 mile east of the proposed project. | 2,000/ 803,000 | 707 (365 open space) | Completed |
| 12 | RiverPark (TR 53425) | City of Santa Clarita | Residential/Mixed Use | Located at the eastern terminus of Newhall Ranch Road, east of Bouquet Canyon Road, and north of Soledad Canyon Road and the Santa Clara River; 4 miles east of the proposed project. | 1,089/ 16,000 | 695 | Under Construction |
| 13 | NRMP | Los Angeles County | Infrastructure | Approved NRMP for 1,200 acres of the Santa Clara River. | NA | NA | Approved and Partially Built Out |
| 14 | CLWA Reclaimed Water Master Plan (SCR) | Los Angeles County and the City of Santa Clarita | Infrastructure | Los Angeles County and the City of Santa Clarita; 6 miles north of the proposed project. | NA | NA | Approved |
| 15 | Santa Clara River Enhancement and Management Plan | Los Angeles and Ventura Counties | Infrastructure/Environmental | Santa Clara River from Acton to Pacific Ocean. | NA | NA | Approved |
| 16 | Santa Clarita Valley Joint Sewerage Facilities Plan | Los Angeles County | Infrastructure | Los Angeles County | NA | NA | Approved |

Table 4.3-21 (Continued)
Individual Project Summary

| Map ID | Name | Jurisdiction | Project Type | Location and Distance from Proposed Project | Residential Units/ Comm./Ind. Square Feet | Size (Acres) | Status |
|--------|------------------------------------|--------------------|--------------|--|---|--------------|---------|
| 17 | Chiquita Canyon Landfill Expansion | Los Angeles County | Industrial | West of I-5, north of SR-126 at Wolcott Way; 0.5 mile north of the proposed project. | NA | 98 | Pending |

Source:

1. City of Palmdale Planning Department, Ritter Ranch Specific Plan Final EIR, SCH No. 1990010124 (March 1992).
2. Los Angeles County Regional Planning Department, Notice of Preparation for Centennial Specific Plan, SCH No. 2004031072 (March 2004).
3. Two different projects have been proposed for this site. The Ventura County version would provide for 34 single-family lots ranging in size from 40 to 160 acres (Notice of Preparation for SD05-0035 (Adams Canyon), SCH No. 2007021073, February 2007). In May 2007, City of Santa Paula voters amended the City's urban restriction boundary to include Adams Canyon and amended the City's General Plan to allow 495 residential units, 100 acres of public recreation facilities, open space, a 40-acre school site, a hotel and a golf course on the site. (See <http://www.ci.santa-paula.ca.us/adamscanyon/>; <http://recorder.countyofventura.org/Results/050807/Election%20Result.htm>.) According to City planning staff, as of February 2009, the current proposal for the site is 450 estate homes. Any proposed development on the site would still require discretionary approvals from the City Council (e.g., a specific plan and development agreement), and would require annexation to the City's jurisdiction before it could be developed with City approvals. (See http://www.ci.santa-paula.ca.us/adamscanyon/ImpartialAnalysis_A7.pdf.)
4. Applicant provided information.
5. Applicant provided information.
6. Los Angeles County Regional Planning, Tesoro del Valle/Project No. 92-074/Vesting Tentative Tract Map No. 51644-01 Initial Study, SCH No. 1993021007 (February 2007).
7. Los Angeles County Regional Planning, Tapia Ranch Project/Project No. 02-196/Tentative Tract Map No. 53822 Initial Study, SCH No. 2006121016 (November 2006).
8. City of Santa Clarita, Porta Bella Development Project Notice of Determination, SCH No. 1995101595 (cleanup being processed as Former Whittaker-Bermite (Porta Bella Development Project) SCH No. 2001051089); more information can be found at <http://www.santa-clarita.com/cityhall/cd/planning/bermite.asp>.
9. Los Angeles County, CEQA findings for West Creek Project 98-008 (CUP Zone Change, Oak Tree Permit, Plan Amendments & Tract 52455), SCH No. 1998021052 (July 2005).
10. Los Angeles County Regional Planning, Revised Draft EIR for Westridge Residential Project Unnamed Tributary to Santa Clara River, SCH No. 1990011146 (May 1999), containing text revisions to Draft EIR text based on comments received during the project review process. Los Angeles County certified the Final EIR for this project in May 1999.
11. City of Santa Clarita Planning Department, North Valencia Annexation and Specific Plan Draft EIR, SCH No. 1996071077 (August 1997).
12. City of Santa Clarita, Vesting Tentative Tract Map 53425 Draft EIR, SCH No. 2002091081 (March 2004). The City of Santa Clarita certified a Final EIR for this project in May 2005. The Final EIR did not change the Draft EIR's conclusions regarding impacts and their significance.
13. California Department of Fish and Game, CEQA findings for Valencia Company Master 1603 Lake or Streambed Alteration, SCH No. 1997061090 (August 2003).
14. Castaic Lake Water Agency (CLWA), East Valley Water District's Perchlorate Treatment and Water Distribution Project Draft EIR, SCH No. 2005041138 (November 2006). The CLWA certified a Final EIR for this project in March 2007. The Final EIR did not change the Draft EIR's conclusions regarding impacts and their significance.
15. Document and information available at: <http://www.santaclaritariverparkway.org/wkb/projects/scremp>, last visited on September 9, 2008.
16. County Sanitation Districts 26 and 32 of Los Angeles, 2015 Santa Clarita Valley Joint Sewerage System Final EIR, SCH No. 1998109408 (January 1998).
17. Los Angeles County Regional Planning, Chiquita Canyon Landfill, Project No. RENV200400039 NOP/IS, SCH No. 2005081071 (July 2005).

b. Cumulative Impacts on Biological Resources

The Mission Village proposed project's impacts to biological resources are summarized in **Table 4.3-9, Significant Impacts and Mitigation Summary**.

The following discussion evaluates the proposed Mission Village project's cumulative impacts on biological resources located within the SCRW. The cumulative impacts analysis relies heavily on the Watershed Study (see Appendix 4.3), which addresses impacts related to the Newhall Ranch Resource Management and Development Plan/Spineflower Conservation Plan (RMDP/SCP) project, because the Mission Village project site is included within the RMDP/SCP project area. The RMDP/SCP project area also encompasses the Entrada South project and the VCC project, both of which are located outside the Newhall Ranch Specific Plan area.

The RMDP/SCP project's contribution to a cumulative impact will always include any Mission Village contribution, as the latter is a subset of the former. In some cases, however, the Mission Village project's share of the RMDP/SCP contribution will be so small (or non-existent) that it qualifies as "less than cumulatively considerable," as that term is used in CEQA Guidelines section 15130. Where this occurs, the cumulative impact analysis differentiates the Mission Village contribution from the RMDP/SCP contribution.

The evaluation of cumulative impacts also was based on two vegetation and land cover data sets: (1) for the RMDP/SCP project area, including the proposed Mission Village project site, the project-level vegetation and land covers data were used, as summarized in **Table 4.3-22**; and (2) for areas outside of the RMDP/SCP project area boundaries, data provided by the California Gap Analysis Program (GAP) database⁵²⁵ were used, as these were the only other vegetation and land cover data available for the entire SCRW. The California GAP data were compiled in 1998 by overlaying existing land use maps, vegetation maps, and forest inventory data. The minimum mapping unit for upland vegetation communities was 100 hectares (247 acres), the minimum mapping unit for major wetland areas was 40 hectares (99 acres), and smaller wetlands were included with the same attributes as larger upland polygons. Thus, the California GAP vegetation database was mapped at a broader scale and necessarily lower precision than the RMDP/SCP project-level vegetation community and land cover mapping. Nonetheless, the GAP data provide reasonable estimates of watershed-wide vegetation community conditions (i.e., acreage) that existed *prior* to 1998, and, in conjunction with the project-level data, have been used as a starting point for this assessment's quantitative evaluation of cumulative impacts to

⁵²⁵ University of California, Santa Barbara (UCSB), Biogeography Lab, *California Gap Analysis Project (GAP)* (Santa Barbara, California: Donald Bren School of Environmental Science and Management, coordinated through the U.S. Geological Survey Biological Resources Division, 1999).

various types of vegetation communities and land covers. To estimate cumulative impacts to vegetation communities and land covers that have occurred *since* 1998, this analysis has relied on an assessment of the development projects included on the list of past, present, and reasonably foreseeable future development projects. This list includes development projects located in the watershed area that were under consideration by Los Angeles County and the City of Santa Clarita during a period that generally extends between the late 1990s and 2008. Cumulative development projects within the study area located in Ventura County and the cities of Santa Paula and Fillmore include projects under consideration by those jurisdictions in late 2008 and early 2009.

The surveys, reports, studies, and maps referenced in this section are incorporated by reference, as permitted in section 15150 of the *State CEQA Guidelines*. All referenced documents are available for public inspection and review upon request to: County of Los Angeles, Department of Regional Planning, 320 West Temple Street Los Angeles, California 90012 (Samuel Dea; (213) 974-4808) or Impact Sciences, Inc., 803 Camarillo Springs Road, Suite A-1, Camarillo, California 93012 (Susan Tebo; (805) 437-1900). Additionally, many of these documents are included in the appendices to the Newhall Ranch Resource Management and Development Plan and the Spineflower Conservation Plan Draft EIS/EIR (SCH No. 2000011025), and can be obtained from the California Department of Fish and Game's website at <http://www.dfg.ca.gov/regions/5/newhall/docs/>.

No other readily available sources of habitat data would facilitate the analysis of cumulative impacts on a watershed-wide basis. By estimating impacts to vegetation communities and land covers reasonably expected to occur as a result of the identified past, present, and reasonably foreseeable development projects, and comparing those impact estimates to the available GAP data,⁵²⁶ reasonable characterizations of impact trends throughout the SCRW have been provided. Cumulative impacts have been characterized to reflect the "severity of the impacts and their likelihood occurrence" as required by the *State CEQA Guidelines*.⁵²⁷ Although cumulative impacts are often expressed in this analysis in terms of acres and proportion of habitat loss, etc., it should be recognized that these numbers are meant to be estimates of cumulative impact conditions and trends, and not project-specific evaluations of impacts to biological resources in the watershed. Where acreages are reported for those areas outside of the RMDP/SCP project area, they should be considered approximations and not precise measurements. Because the California GAP data are general and the minimum mapping units are very coarse, these data cannot be used to provide specific analyses of impacts to habitats for wildlife and plant species. However,

⁵²⁶ UCSB, *California Gap Analysis Project*.

⁵²⁷ 14 C.C.R. Sec. 15130(b).

these data can be used to provide the context of the size of the watershed in relation to the impact associated with present and reasonably foreseeable projects.

Where acreages are reported throughout this cumulative impact analysis for the SCRW as a whole, and the California GAP vegetation database⁵²⁸ is referenced, the project-level mapping for the RMDP/SCP boundary has been incorporated into the reported acreage.

This cumulative biology impacts analysis is organized into four separate discussions. The first addresses cumulative impacts to vegetation communities and land covers. The second addresses cumulative impacts to general wildlife (by species guild).⁵²⁹ The third addresses impacts to wildlife habitat linkages, wildlife corridors, and wildlife crossings (again, by species guilds). The fourth addresses impacts to special-status species, as such species are defined in **subsection 4.3.7(d)** of this EIR.

It should be noted that impacts associated with the RMDP/SCP are assessed as direct, indirect, and secondary. Direct and indirect impacts differ in regard to the project component resulting in the impacts. As used here, direct impacts are those that would occur as a result of implementation of the RMDP/SCP project and include temporary disturbance and/or permanent loss of vegetation communities, including sensitive vegetation communities, general wildlife, and special-status plant and animal species. Indirect impacts are those that would occur as a result of buildout of the Newhall Ranch Specific Plan, VCC, and Entrada planning areas. Indirect impacts also include permanent loss of vegetation communities, including sensitive vegetation communities, general wildlife, and special-status plant and animal species. For purposes of analyzing indirect impacts, any temporary disturbance areas are included in the permanent footprint. (There are no temporary impacts identified for buildout of the Specific Plan, VCC, and Entrada planning areas.) Note that in this cumulative impact analysis, the total loss of habitat for direct and indirect effects is evaluated in its entirety.

⁵²⁸ UCSB, *California Gap Analysis Project*.

⁵²⁹ Species guilds are groups of species that use or exploit similar resources or have similar life history characteristics even though they may represent different taxonomic groups.

**Table 4.3-22
Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types in Project Area**

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | RMDP Acreage | VCC Planning Area Acreage | Entrada Planning Area Acreage |
|--|-----------------------------------|---|--|--------------|---------------------------|-------------------------------|
| Grass and Herb Dominated Communities | Non-Native Grassland | California annual grassland | Not mapped to association level | 2,175.5 | 71.1 | 53.2 |
| | Native Grassland | Purple needlegrass | Not mapped to association level | 0.6 | 0.0 | 0.0 |
| Scrub and Chaparral | Coastal Scrub | California sagebrush scrub | Not mapped to association level | 1,529.3 | 35.6 | 59.0 |
| | | | Burned California sagebrush scrub | 1,469.3 | 0.0 | 0.0 |
| | | | California sagebrush– <i>Artemisia californica</i> | 82.5 | 0.0 | 3.4 |
| | | | California sagebrush–purple sage | 393.5 | 0.0 | 0.0 |
| | | | Disturbed California sagebrush–purple sage | 4.5 | 0.0 | 0.0 |
| | | California sagebrush–black sage scrub | California sagebrush–black sage | 196.3 | 0.0 | 0.0 |
| | | California sagebrush–California buckwheat scrub | Not mapped to association level | 310.0 | 6.0 | 97.5 |
| | | California sagebrush scrub–undifferentiated chaparral | Not mapped to association level | 135.0 | 0.0 | 0.0 |
| | | | Burned California sagebrush scrub–undifferentiated chaparral | 5.2 | 0.0 | 0.0 |
| | | Coyote brush scrub | Not mapped to association level | 9.2 | 0.0 | 0.0 |
| | Undifferentiated Chaparral Scrubs | Not mapped to alliance level | Not mapped to association level | 1,106.9 | 0.0 | 24.5 |
| | | | Burned undifferentiated chaparral | 957.2 | 0.0 | 0.0 |
| | Chaparral with Chamise | Chamise chaparral | Not mapped to association level | 55.7 | 0.0 | 0.0 |
| | | | Burned chamise chaparral | 0.0 | 0.0 | 0.0 |
| Chaparral with Oak | Scrub oak chaparral | Not mapped to association level | 1.5 | 0.0 | 0.0 | |
| Other Scrubs | Eriodictyon scrub | Not mapped to association level | 0.2 | 0.0 | 0.0 | |

Table 4.3-22 (Continued)
Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types in Project Area

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | RMDP Acreage | VCC Planning Area Acreage | Entrada Planning Area Acreage |
|--|--------------------------------------|---|---|--------------|---------------------------|-------------------------------|
| Broad Leafed Upland Tree Dominated | Upland Walnut Woodland and Forest | California walnut woodland and forest | California walnut woodland | 27.2 | 0.0 | 0.0 |
| | Oak Woodland and Forest | Coast live oak forest and woodland | Coast live oak woodland | 757.8 | 0.0 | 0.0 |
| | | Mixed oak woodland and forest | Not mapped to association level | 168.9 | 0.0 | 0.0 |
| | | Valley oak forest and woodland | Valley oak woodland | 79.4 | 0.0 | 0.0 |
| | | | Valley oak/grass | 461.4 | 0.0 | 0.0 |
| Bog and Marsh | Marsh | Bulrush-cattail wetland | Not mapped to association level | 1.4 | 0.0 | 0.0 |
| | | Cismontane alkali marsh | Not mapped to association level | 18.6 | 0.0 | 0.0 |
| | | Fresh-brackish water marsh | Coastal and valley freshwater marsh | 2.0 | 0.0 | 0.0 |
| Riparian and Bottomland Habitat | Other Riparian/Wetland | Herbaceous wetland | Not mapped to association level | 183.1 | 0.9 | 0.0 |
| | | River wash | Not mapped to association level | 290.0 | 37.5 | 4.9 |
| | | Alluvial scrub | Not mapped to association level | 1.0 | 0.0 | 0.5 |
| | | Big sagebrush scrub | Not mapped to association level | 76.5 | 0.0 | 14.8 |
| | | Big sagebrush scrub | Big sagebrush-California buckwheat | 0.5 | 0.0 | 0.0 |
| | | Giant reed | Not mapped to association level | 5.6 | 0.0 | 0.0 |
| | Low to High Elevation Riparian Scrub | Arrow weed scrub | Not mapped to association level | 18.7 | 0.0 | 0.0 |
| | | Mexican elderberry | Not mapped to association level | 12.8 | 0.0 | 0.0 |
| | | Mexican elderberry | Disturbed Mexican elderberry | 0.3 | 0.0 | 0.0 |
| | | Mulefat scrub | Not mapped to association level | 71.5 | 0.5 | 0.0 |
| | Riparian Forest and Woodland | Southern willow scrub | Not mapped to association level | 22.7 | 0.0 | 0.0 |
| | | Tamarisk scrub and woodland | Shrub tamarisk | 2.8 | 0.0 | 0.0 |
| | | Coast live oak forest and woodland | Southern coast live oak riparian forest | 0.7 | 0.0 | 0.0 |
| | | Fremont cottonwood riparian forest and woodland | Southern cottonwood-willow riparian | 358.3 | 63.4 | 0.0 |

Table 4.3-22 (Continued)
Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types in Project Area

| General Physiognomic and Physical Location | General Habitat Type | Floristic Alliance | Association | RMDP Acreage | VCC Planning Area Acreage | Entrada Planning Area Acreage |
|--|----------------------|--------------------|-------------|-----------------|------------------------------------|--|
| Man-Made Land Cover Types | Agriculture | NA | | 1,576.4 | 40.5 | 0.0 |
| | Developed land | NA | | 0.5 | 2.2 | 2.0 |
| | Disturbed land | NA | | 1,080.6 | 63.7 | 56.2 |
| Total | | | | 13,651.1 | 321.4 | 316.0 |

Secondary impacts are those reasonably foreseeable effects caused by project implementation on remaining or adjacent biological resources outside the construction disturbance zone. Secondary impacts may affect areas that are within the defined project area but outside the construction disturbance zone, including open space. Secondary impacts may also occur outside the project area, such as downstream. Secondary impacts include short-term effects immediately related to construction activities and long-term or chronic effects related to the human occupation of developed areas. Both implementation of the RMDP/SCP project and buildout of the Specific Plan, VCC, and Entrada planning areas would result in short-term construction-related secondary impacts and long-term secondary impacts.

(1) Impacts to Vegetation Communities and Land Covers

As indicated in **subsection 4.3.9.b.1.(a)**, Project Impacts, the following vegetative communities and land covers may be affected by the proposed Mission Village project and are assessed for cumulative impacts: riparian communities; California annual grassland; coastal scrub communities; chaparral communities; oak woodlands; agricultural land; and disturbed land. See **Table 4.3-8, Plant Community/Land Use Impact Summary**.

There are, however, a host of vegetation communities and land covers that do not occur in the RMDP/SCP project area, which encompasses the Mission Village project, but occur elsewhere in the SCRW and are included in the California GAP vegetation database.⁵³⁰ These include coniferous forests, black oak forest, Mojavean pinyon and juniper woodlands, bare exposed rock, and sandy areas other than beaches. Because the RMDP/SCP project, including the proposed Mission Village project, would not affect these vegetation communities and land covers, they are not included in this cumulative analysis.

The Santa Clara River Watershed is Relatively Undeveloped and Has Substantial Existing and Designated Open Space. Based on the California GAP data,⁵³¹ as of 1998, approximately 52,000 acres of the 1,038,100-acre SCRW⁵³² had been converted to agricultural uses and approximately 47,300 acres had been converted to industrial, commercial, and urban uses. Combined, these developed uses comprise about 99,000 acres of the total watershed.⁵³³ Based on the project-level mapping for the RMDP/SCP project area, including the Mission Village project area, and the California GAP data for areas outside of the RMDP/SCP project area, chaparral is the dominant vegetation community in the SCRW, accounting for about approximately

⁵³⁰ UCSB, *California Gap Analysis Project*.

⁵³¹ UCSB, *California Gap Analysis Project*.

⁵³² The study area is defined as the Santa Clara River Watershed within Los Angeles and Ventura Counties (CalWater Version 2.2; <http://gis.ca.gov/meta.ep1?oid=22174>)

⁵³³ **Table 4.3-23** provides a summary of vegetation communities and land covers based on the California GAP data and the project-level mapping for the RMDP/SCP project area, including the Mission Village project area.

550,300 acres of the watershed. Coastal scrub comprises approximately 174,340 acres in the watershed. The third most common grouping includes higher elevation coniferous and black oak forests and Mojavean pinyon and juniper woodlands, which together account for about 14 percent of the SCRW; as noted above, however, none of these vegetation communities occur within the RMDP/SCP project area, including the Mission Village project area. Riparian and lower elevation oak woodlands account for about 3 percent of the watershed. The remainder is made up of disturbed (but not developed) lands, annual grasslands, and other land covers.

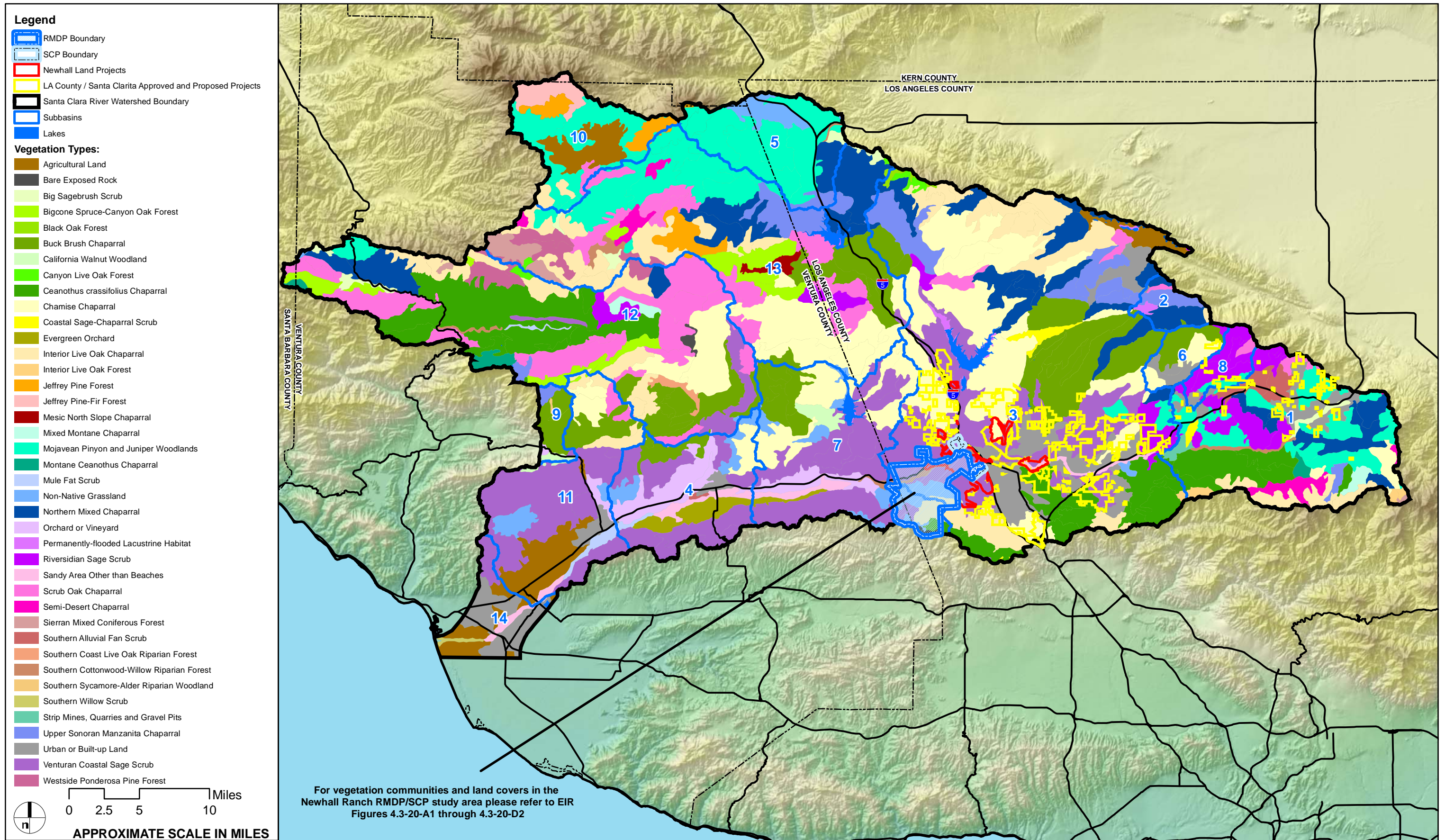
Figure 4.3-19, Santa Clara River Watershed - Existing Vegetation Types, shows that most of the approximately 99,000 acres of land converted to development land uses (i.e., agriculture, and residential, commercial, industrial, infrastructure development) has occurred: (1) in the southern portion of the watershed along the Santa Clara River, where agricultural uses dominate; and (2) in the cities of Ventura, Santa Paula, Santa Clarita, and the communities of Valencia and Acton, where urban development dominates. It should be noted that **Figure 4.3-19** shows the California GAP data for the watershed outside of the RMDP/SCP project area. Because of large scale of the vegetation and land covered data shown in **Figure 4.3-19**, the project-level data for the RMDP/SCP project, including the proposed Mission Village project, cannot be clearly shown on this figure. The reader is referred to **Figures 4.3-20-A1 through 4.3-20-D2, RMDP/SCP – Vegetation Communities and Land Covers**, for the project-level detail. **Figure 4.3-21** is also provided to reflect the vegetation community categories of **Table 4.3-22**.

Approximately 734,000 acres of the SCRW either currently exist as open space or are classified as open space under available zoning information (**Figure 4.3-22, Santa Clara River Watershed - Current Land Use Classifications**).⁵³⁴ Approximately 635,000 acres of the SCRW of this open space currently have a land use designation of federal (Bureau of Land Management, USFWS, U.S. Forest Service) and state (CDFG, Department of Parks and Recreation, State Lands Commission) public lands, as well as privately held reserves (The Nature Conservancy). The approximately 98,000 acres classified as open space under available zoning information is not currently protected as natural open space, and could be subject to several uses that are allowed under some open space designation, such as active recreation. Relatively large sub-basins with substantial existing and/or classified open space include Eastern (sub-basin 3), Hungry Valley (sub-basin 5), Topa Topa (sub-basin 12), and Upper Piru (sub-basin 13) (**Figure 4.3-22**). Most of the land within each of these sub-basins is open space: 55 percent of Eastern, 93 percent of Hungry Valley, 97 percent of Topa Topa, and 98 percent of Upper Piru. In terms of overall acreage, Eastern is the largest sub-basin. As a result, this sub-basin's approximately 160,000 acres of open space is second only to Upper Piru, which has approximately 165,000 acres of open space. Smaller sub-basins with

⁵³⁴ University of California, Davis (UCD), "General Plans" (Davis, California: UCD, distributed through the California Resources Agency, 2004).

high percentages of open space include Bouquet (sub-basin 2), Mint Canyon (sub-basin 6), Sisar (sub-basin 9), and Stauffer (sub-basin 10). Along the Santa Clara River mainstem, the NRMP upstream is conserving 4.7 miles, and the RMDP project will conserve 5 miles. An additional 13.7 miles are conserved within the County of Los Angeles, and approximately 33 miles are conserved within the County of Ventura.

Land Use Classification and Past, Present, and Reasonably Foreseeable Projects. To assess the Mission Village project's cumulative impacts on vegetation communities and land covers, **Table 4.3-8** provides a breakdown of the potential permanent loss of the different vegetation communities and land covers that would occur as a result of the proposed Mission Village project alone, and **Table 4.3-23** provides a breakdown of the potential permanent loss of vegetation communities and land covers that would occur as a result of: (1) the RMDP/SCP project, which encompasses the Newhall Ranch Specific Plan; and (2) present and reasonably foreseeable projects elsewhere in the SCRW.

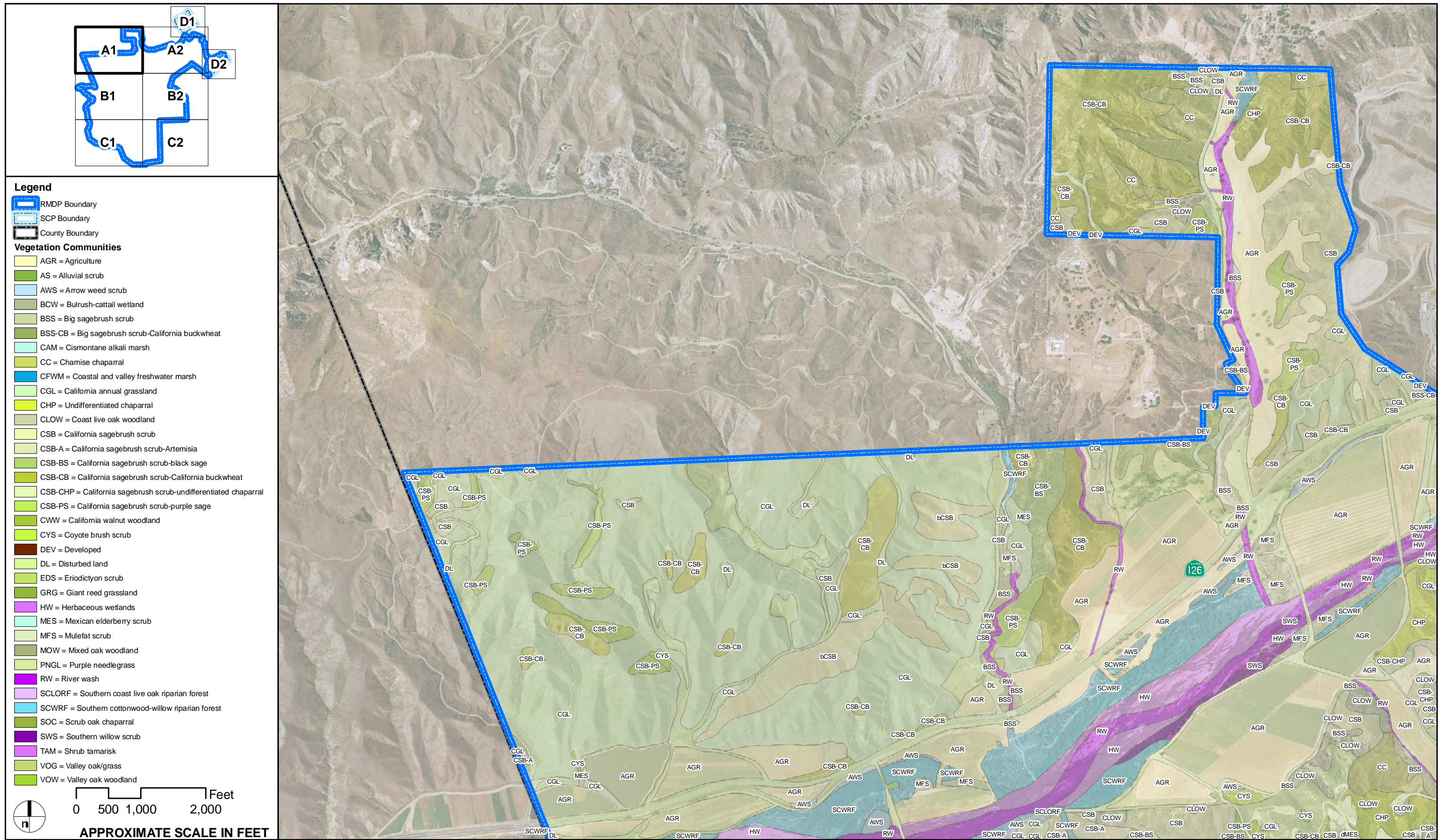


SOURCE: GAP Analysis Project, Generalized Land Cover of California 1998

FIGURE 4.3-19

Mission Village EIR

Santa Clara River Watershed - Existing Vegetation Types

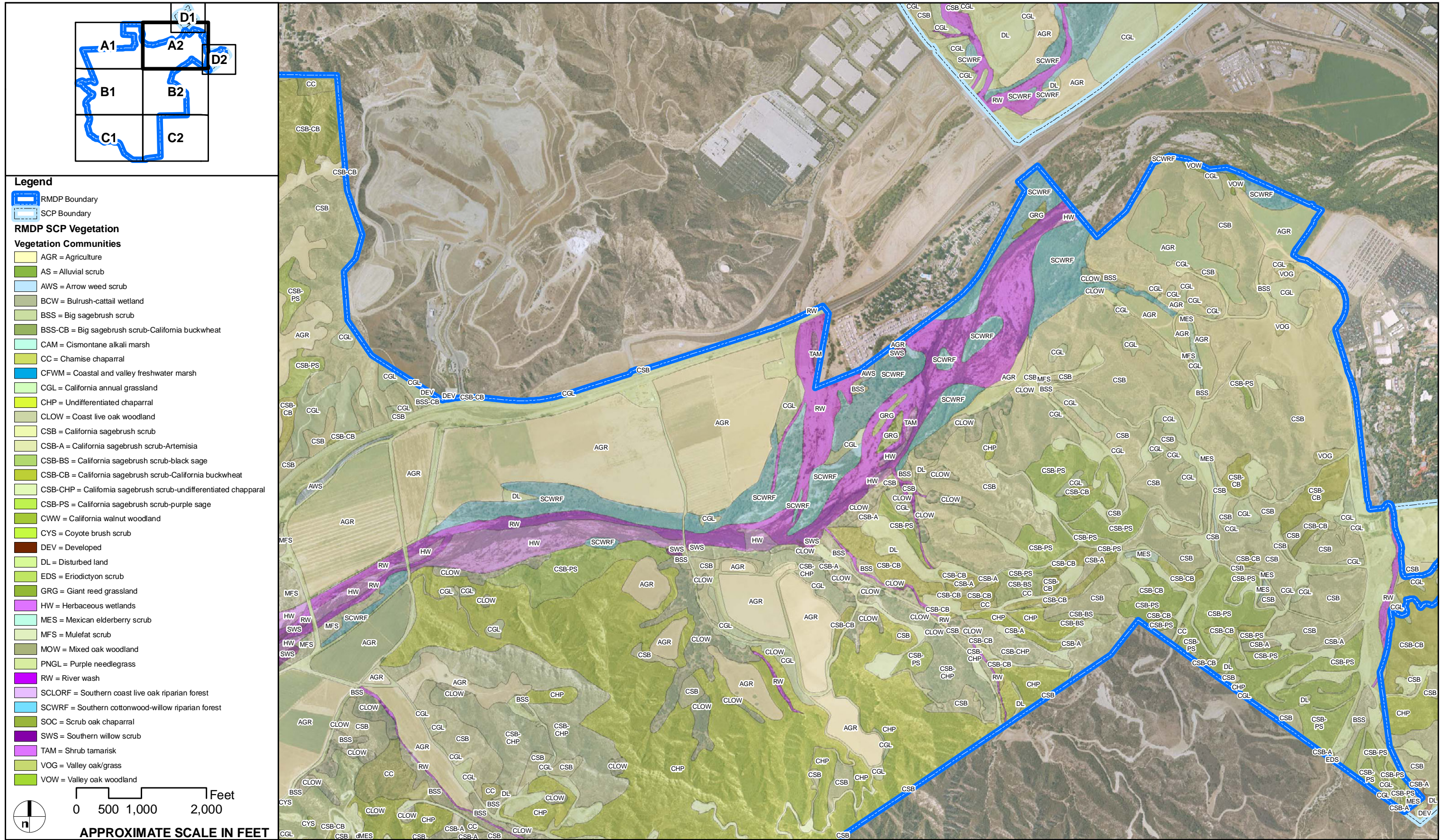


AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-20-A1

Mission Village EIR

RMDP/SCP - Vegetation Communities and Land Covers

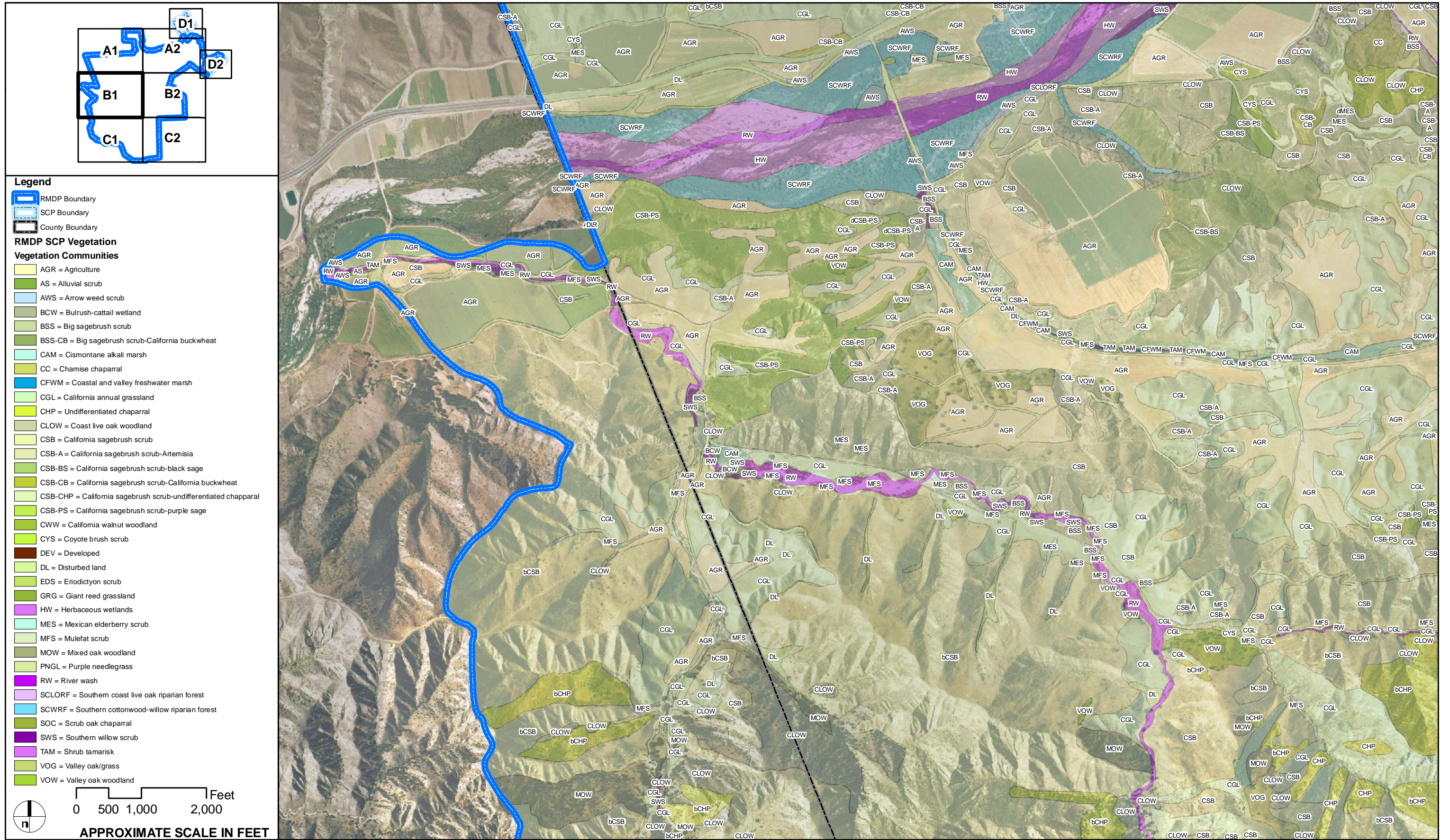


AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-20-A2

Mission Village EIR

RMDP/SCP - Vegetation Communities and Land Covers

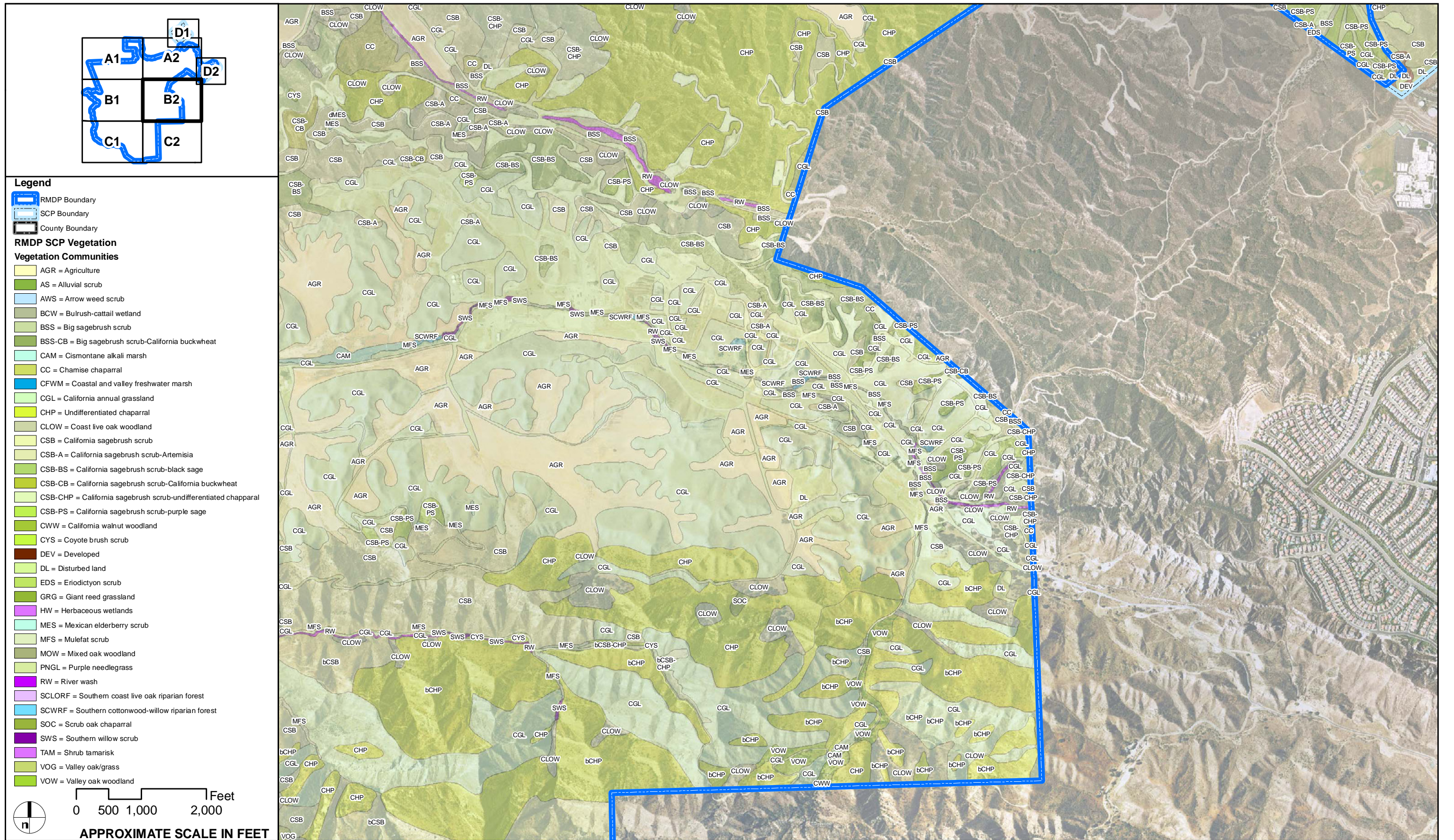


AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-20-B1

Mission Village EIR

RMDP/SCP - Vegetation Communities and Land Covers



AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-20-B2

Mission Village EIR



AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-20-C1

Mission Village EIR

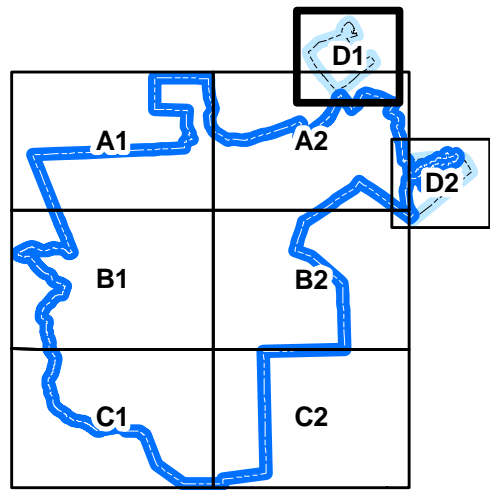
RMDP/SCP - Vegetation Communities and Land Covers



AERIAL SOURCE: DigitalGlobe, 2007

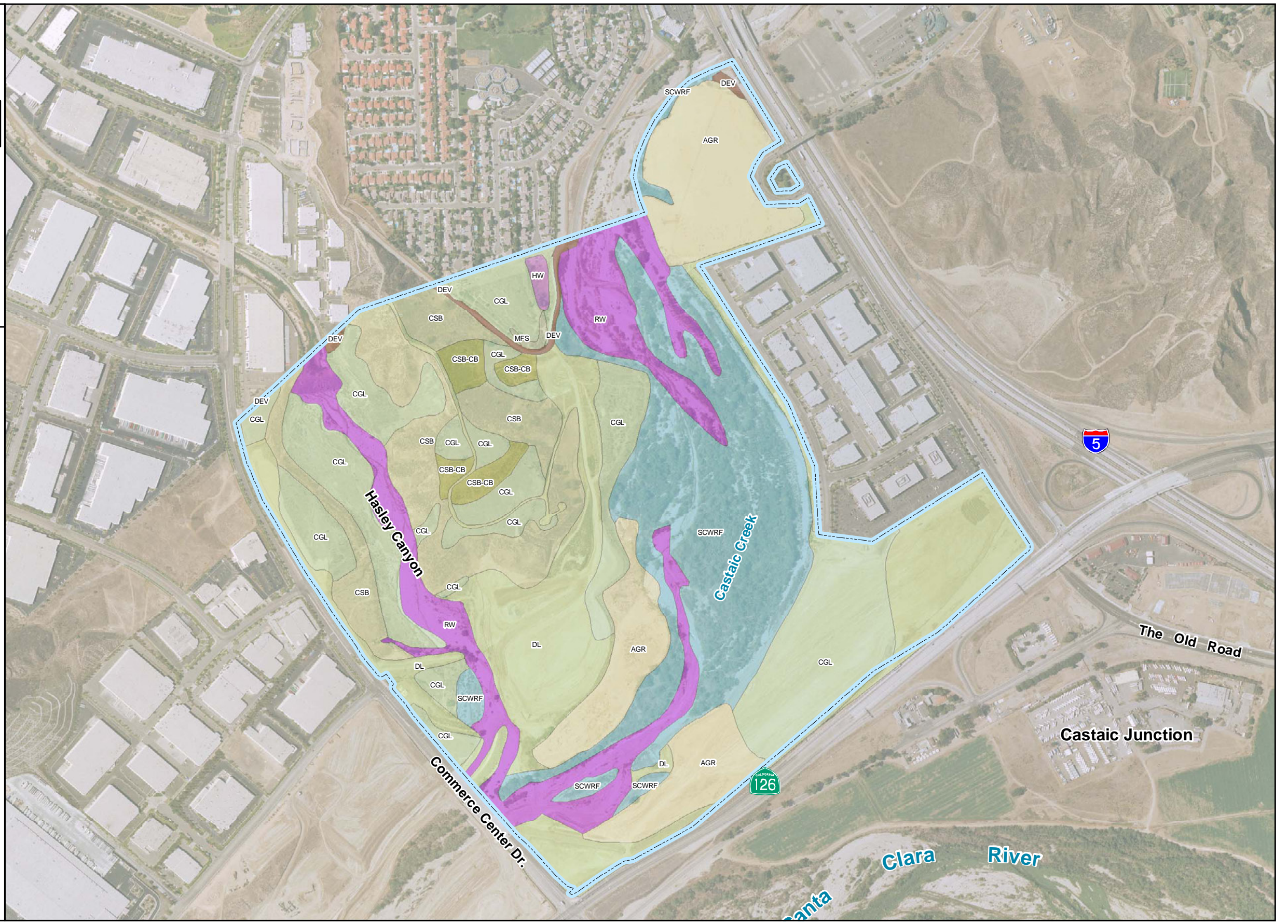
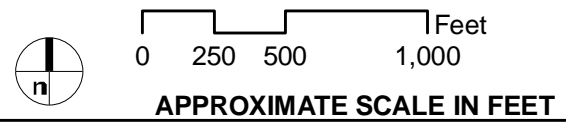
FIGURE 4.3-20-C2

Mission Village EIR



Legend

- RMDP Boundary
- SCP Boundary
- Vegetation Communities**
- AGR = Agriculture
- AS = Alluvial scrub
- BSS = Big sagebrush scrub
- CGL = California annual grassland
- CHP = Undifferentiated chaparral
- CSB = California sagebrush scrub
- CSB-A = California sagebrush scrub-Artemisia
- CSB-CB = California sagebrush scrub-California buckwheat
- DEV = Developed
- DL = Disturbed land
- HW = Herbaceous wetlands
- MFS = Mulefat scrub
- RW = River wash
- SCWRF = Southern cottonwood-willow riparian forest



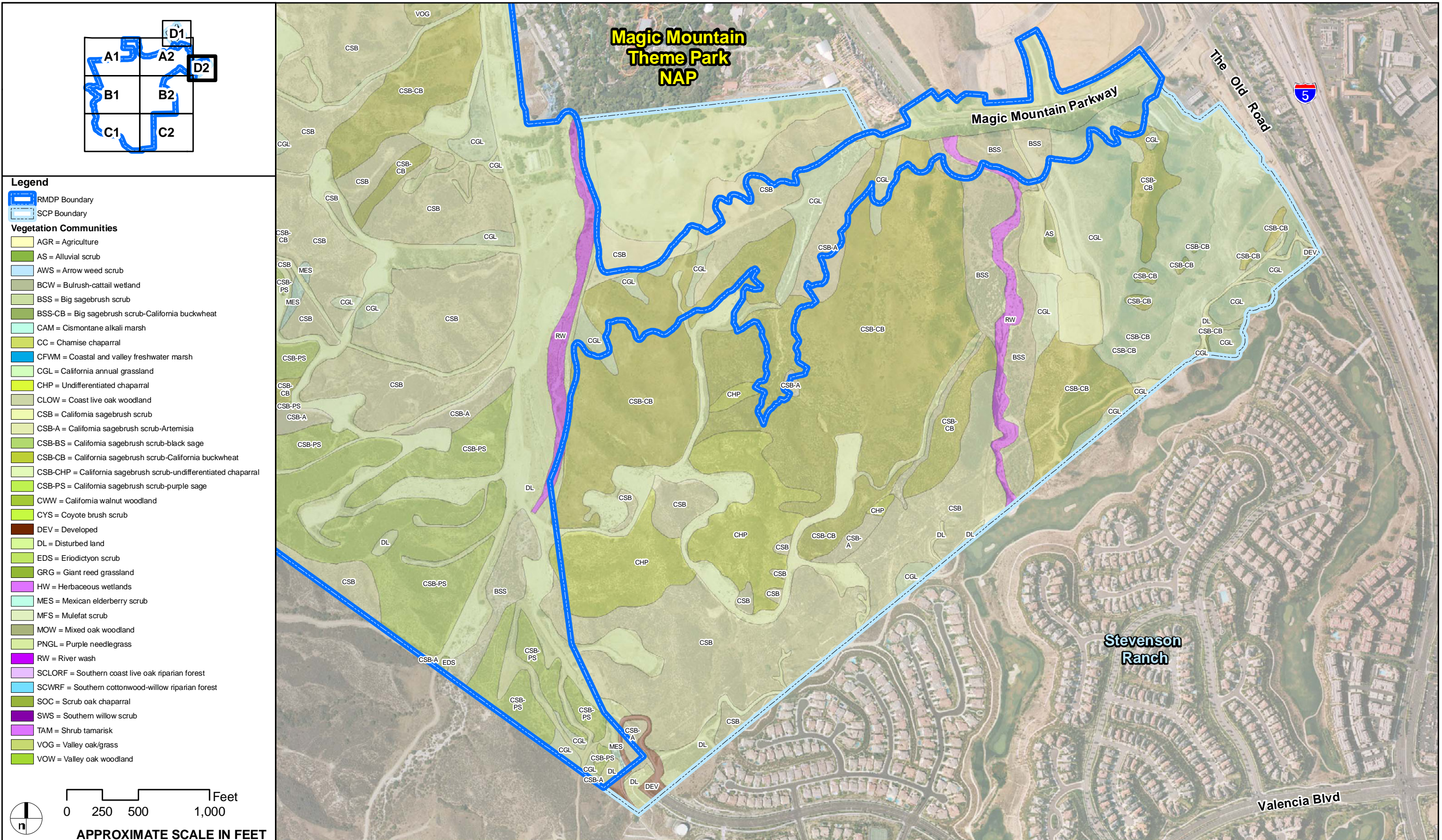
AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-20-D1

Mission Village EIR

RMDP/SCP - Vegetation Communities and Land Covers



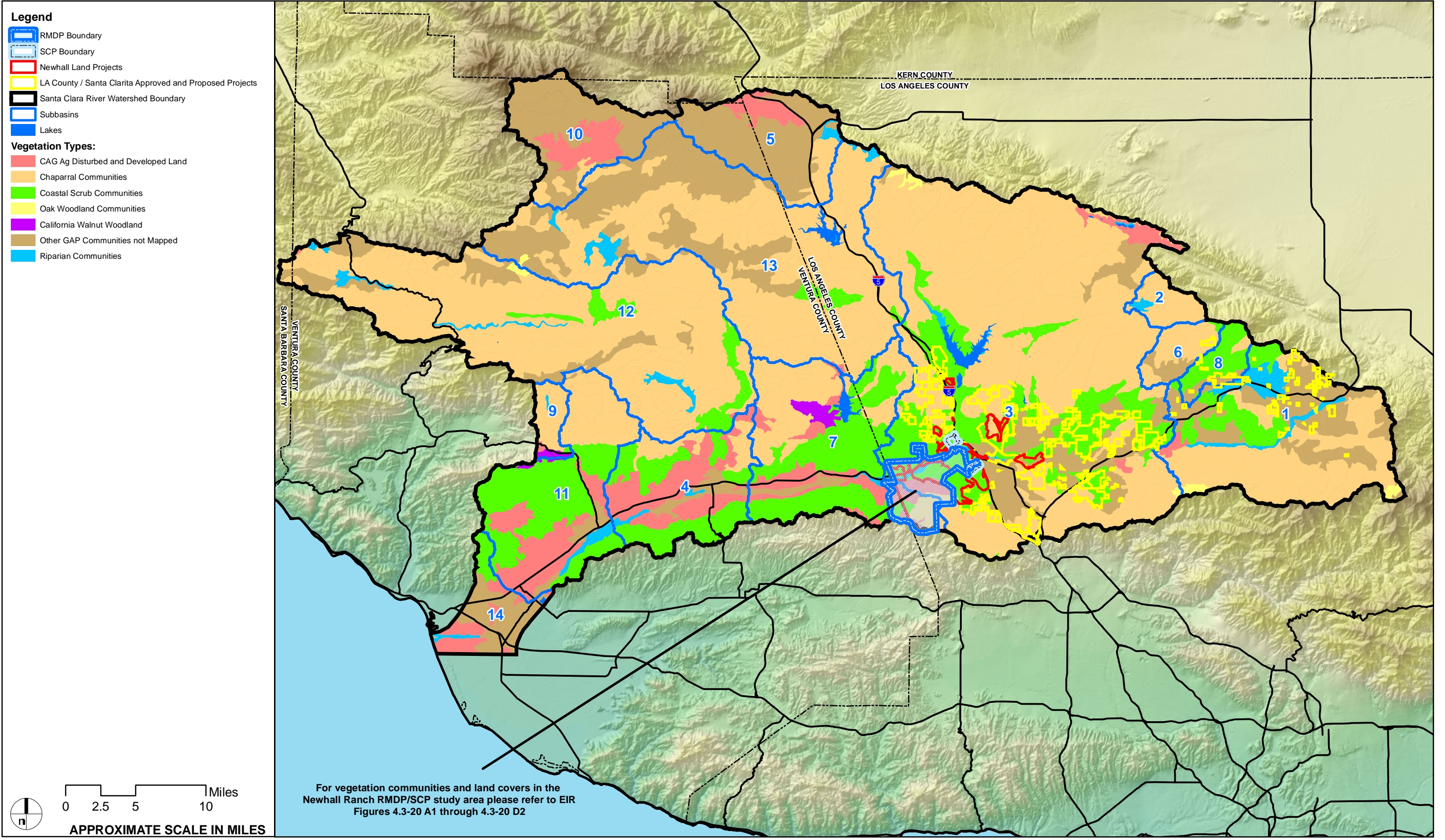


AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-20-D2

Mission Village EIR

RMDP/SCP - Vegetation Communities and Land Covers



SOURCE: GAP Analysis Project, Generalized Land Cover of California 1998

FIGURE 4.3-21

Mission Village EIR



Santa Clara River Watershed - Existing Vegetation Types by General Physiognomic Category

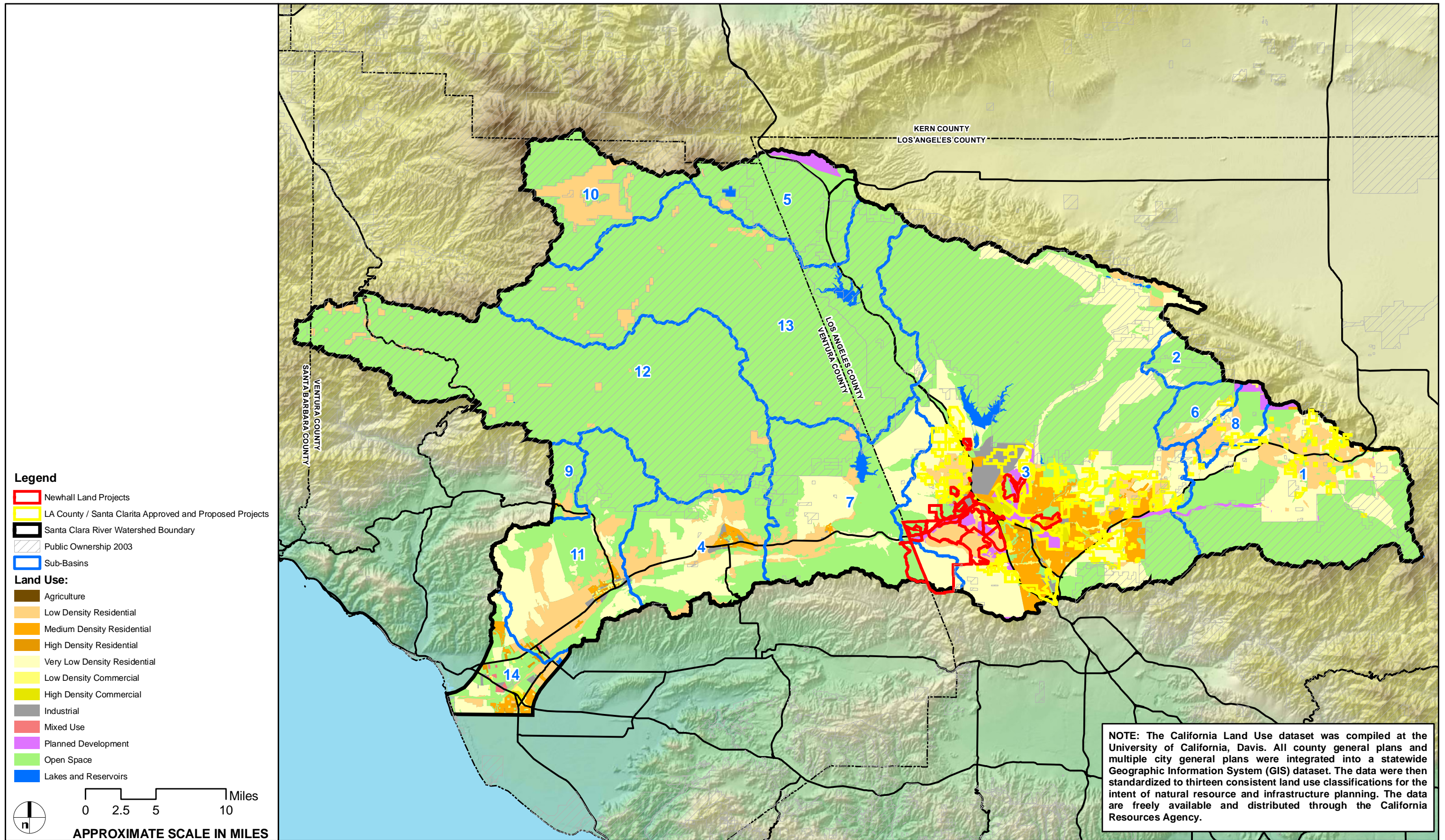


FIGURE 4.3-22

Mission Village EIR

Santa Clara River Watershed - Current Land Use Classifications

As indicated in **Table 4.3-23**, the SCRW consists of approximately 1,038,100 acres of land and supports a variety of vegetation communities and land covers. As explained above, the GAP data, although mapped at a broad, landscape level, is the best available data for vegetation communities and land covers in the SCRW outside the RMDP/SCP project area and are appropriate for the watershed-level analysis. The project-level mapping data for the RMDP/SCP project area, including Mission Village project data, were incorporated into this analysis.

According to land use information provided by Los Angeles County and Ventura County, and by the cities of Santa Clarita, Ventura, Santa Paula, and Fillmore, and the community of Piru, approximately 47,300 acres (4.6 percent) of the watershed has been developed per the GAP data.⁵³⁵ In addition, project list information from these government entities indicates that another 32,300 acres (3.1 percent) are expected to be developed in the foreseeable future, based on present and reasonably foreseeable future projects. Present and reasonably foreseeable future projects, including the RMDP/SCP project, including the Mission Village project area, would convert approximately 37,890 additional acres (3.6 percent) of the watershed to developed uses, resulting in development of approximately 85,200 acres (8.2 percent) within the watershed.

⁵³⁵ UCSB, *California Gap Analysis Project*.

Table 4.3-23
Summary of Cumulative Impacts to Vegetation and Land Covers in the Santa Clara River Watershed (GAP Data are Approximate)

| Vegetation Communities and Land Covers | California GAP Vegetation Communities | Total Acres of Vegetation Communities and Land Covers in Watershed | Permanent Direct and Indirect Impact Acres of Proposed Project (RMDP/SCP)1 | Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including RMDP/SCP Project) | Estimated Cumulative Impact Acres in Watershed, After Accounting for the RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects |
|--|--|--|--|---|--|
| Riparian Communities | Mulefat scrub Permanently flooded lacustrine habitat Southern coast live oak riparian forest Southern cottonwood/willow riparian forest Southern sycamore/alder riparian woodland Southern willow scrub Big sagebrush scrub Southern alluvial fan scrub | GAP = 23,430 RMDP/SCP = 1,190 Total = 24,620 | 225 | 800 | 1,025 |
| California Annual Grassland, Agriculture, and Disturbed Land | Non-native grassland Open pit mines, quarries, gravel pits Agriculture land Evergreen orchard Orchard or vineyard | GAP = 72,760 RMDP/SCP = 5,120 Total = 77,880 | 3,290 | 500 | 3,790 |

Table 4.3-23 (Continued)
Summary of Cumulative Impacts to Vegetation and Land Covers in the Santa Clara River Watershed (GAP Data are Approximate)

| Vegetation Communities and Land Covers | California GAP Vegetation Communities | Total Acres of Vegetation Communities and Land Covers in Watershed | Permanent Direct and Indirect Impact Acres of Proposed Project (RMDP/SCP)1 | Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including RMDP/SCP Project) | Estimated Cumulative Impact Acres in Watershed, After Accounting for the RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects |
|--|--|--|--|---|--|
| Coastal Scrub Communities | Coastal sage/chaparral scrub Riversidean sage scrub Venturan coastal sage scrub | GAP = 170,000 RMDP/SCP = 4,340 Total = 174,340 | 1,520 | 19,000 | 20,520 |
| Chaparral Communities | Buck brush chaparral Ceanothus crassifolius chaparral Chamise chaparral Interior live oak chaparral Mesic north slope chaparral Mixed montane chaparral Montane ceanothus chaparral Northern mixed chaparral Scrub oak chaparral Semi-desert chaparral Upper Sonoran manzanita chaparral | GAP = 548,150 RMDP/SCP = 2,150 Total = 550,300 | 460 | 12,000 | 12,460 |

Table 4.3-23 (Continued)
Summary of Cumulative Impacts to Vegetation and Land Covers in the Santa Clara River Watershed (GAP Data are Approximate)

| Vegetation Communities and Land Covers | California GAP Vegetation Communities | Total Acres of Vegetation Communities and Land Covers in Watershed | Permanent Direct and Indirect Impact Acres of Proposed Project (RMDP/SCP)1 | Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including RMDP/SCP Project) | Estimated Cumulative Impact Acres in Watershed, After Accounting for the RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects |
|---|--|---|---|--|---|
| Oak Woodland Communities (Coast Live Oak Woodland, Mixed Oak Woodland, Oak/Grass, Valley Oak Woodland) | Canyon live oak forest Interior live oak forest | GAP = 3,700 RMDP/SCP = 1,470 Total = 5,170 | 95 | 0 | 95 |
| California Walnut Woodland | California walnut woodland | GAP = 3,600 RMDP/SCP = 27 Total = 3,627 | <1 | 0 | <1 |
| Total – California GAP Vegetation + RMDP/SCP Project Impacts | | 835,950 | 5,590 | 32,300 | 37,890 |
| Other California GAP Vegetation Communities and Land Covers Occurring in SCRW but Not Mapped in RMDP/SCP project Area, including Mission Village project area, in GAP Data Set² | | | | | |
| Other California GAP Woodland/Forest Communities not Mapped in RMDP/SCP project Area | Bigcone spruce/canyon oak forest Black oak forest Jeffrey pine/fir forest Mojavean pinyon and juniper woodlands Sierran mixed coniferous forest Westside ponderosa pine | 145,850 | N/A | N/A | N/A |

Table 4.3-23 (Continued)
Summary of Cumulative Impacts to Vegetation and Land Covers in the Santa Clara River Watershed (GAP Data are Approximate)

| Vegetation Communities and Land Covers | California GAP Vegetation Communities | Total Acres of Vegetation Communities and Land Covers in Watershed | Permanent Direct and Indirect Impact Acres of Proposed Project (RMDP/SCP) ¹ | Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including RMDP/SCP Project) | Estimated Cumulative Impact Acres in Watershed, After Accounting for the RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects |
|---|---|--|--|---|--|
| | forest | | | | |
| Other California GAP Natural Land Covers not Mapped in RMDP/SCP project Area | Bare exposed rock Sandy areas other than beaches | 9,000 | N/A | N/A | N/A |
| Other California GAP Man-made Land Covers not Mapped in RMDP/SCP project Area | Urban or built-up land | 47,300 | N/A | N/A | N/A |
| Grand Total for SCRW | | 1,038,100 | N/A | N/A | N/A |

Notes:

¹The impacts based on the project-level mapping.

²These California GAP vegetation communities and land covers do not occur in the RMDP/SCP project area, including the proposed Mission Village project, based on the California GAP data set and, therefore, are not a part of the cumulative impact analysis. They are shown in the table to illustrate the vegetation communities and land covers within the SCRW.

From a specific vegetation community and land cover perspective, the impacts from such development (including the RMDP/SCP project, which encompasses the Mission Village project area) is estimated to affect about 4.9 percent of existing California annual grassland, agriculture, and disturbed lands; 11.8 percent of existing coastal scrub communities, 2.3 percent of existing chaparral communities, and 4.2 percent of existing riparian communities within the watershed (although it is likely that there would be some level of avoidance of these riparian areas). Purple needlegrass grassland, of which 0.6 acre is mapped in the RMDP/SCP project area outside of the Mission Village site, would not be removed as a result of grading activities, but would be at increased risk from non-native, invasive plant and animal species, litter, hydrological alterations, human disturbance, and modified fire frequency. At the broad scale and necessarily lower precision of the California GAP vegetation database,⁵³⁶ no oak woodlands or oak/grass vegetation communities were mapped outside of the RMDP/SCP project area within present and reasonably foreseeable development sites. The RMDP/SCP project, however, would result in the loss of 95 acres of oak woodlands and oak/grass, including 9.7 acres within the proposed Mission Village project site (see **Table 4.3-8**). It is anticipated that present and reasonably foreseeable development within the watershed also would result in impacts to oak woodland and oak/grass vegetation communities, but these impacts can not be quantified with existing information. Note also that, generally speaking, most of the existing and future projects in the watershed occur or would occur on slopes of 0 to 20 percent, as these lower slopes are easier to grade and build upon than are steeper slopes, and are often adjacent to areas already developed. For example, in Los Angeles County, of the 6,774 acres of coastal scrub located on land zoned for development, 6,603 acres (97 percent) occur on slopes of 0 to 20 percent.

The RMDP/SCP project area Comprises a Small Proportion (0.5 percent) of the Santa Clara River Watershed. The RMDP/SCP project area— defined as implementation of the RMDP/SCP project and buildout of the Specific Plan, VCC, and Entrada planning areas, which includes the Mission Village project site -- would affect 0.5 percent (5,590 acres of approximately 1,038,100 acres) of the vegetation communities and land covers that are in the watershed (**Table 4.3-23**). The RMDP/SCP project is confined to a substantially urbanized area of one sub-basin— the Eastern sub-basin (sub-basin 3)—which has the most existing developed uses in the watershed (**Figure 4.3-19**). Nonetheless, this sub-basin supports several federal- and/or state-listed threatened and endangered species, such as unarmored threespine stickleback, arroyo toad, least Bell’s vireo, and San Fernando Valley spineflower. Development in this sub-basin increases the potential for cumulative effects to these species. The RMDP/SCP project is downstream of, and contiguous with, urban development in the City of Santa Clarita and the community of Valencia. The RMDP/SCP project would not affect the headwaters of the Eastern and Santa Felicia sub-basins (sub-basins 3 and 7, respectively). The RMDP study area includes approximately 5 miles of the

⁵³⁶ UCSB, *California Gap Analysis Project*.

Santa Clara River mainstem (6 percent of the overall mainstem total); 1.5 of the 5 miles occurs within or adjacent to the Mission Village project site. The entire Santa Clara River mainstem is 86 miles long;⁵³⁷ approximately 48 miles within the County of Los Angeles and 38 miles within the County of Ventura.

As shown in **Table 4.3-23**, the great majority of the SCRW watershed is currently undeveloped. Approximately 4.6 percent of the SCRW has been converted to agricultural, industrial, commercial, and urban uses. Based on the project lists from the affected jurisdictions in the watershed (including the RMDP/SCP project, and encompassing the proposed Mission Village project) a total of about 3.6 percent (37,890 of 1,038,100 acres) of vegetation communities and land covers in the SCRW are expected to be developed at some point in the future. Adding this to existing development (approximately 47,300 acres) would result in a total cumulative impact of approximately 8.2 percent (85,000 acres of 1,038,100 acres) of the SCRW. Without accounting for past, present, or reasonably foreseeable mitigation, the RMDP/SCP project's individual contribution to the above impacts to vegetation communities and land covers, the estimated loss of vegetation communities and land covers in the SCRW could be a potential significant cumulative impact.

Past, present, or reasonably foreseeable mitigation, other than for the RMDP/SCP project, is difficult to estimate within the context of this cumulative analysis because of the variety of size, type, and impact of each past, present, or reasonably foreseeable project. In particular, for upland vegetation communities (e.g., coastal scrub, chaparral, and grassland), depending on whether the impact is significant, mitigation in terms of replacement acreage may or may not have been, or be, required. Without a state- and/or federally-listed species inhabiting impacted areas (e.g., coastal California gnatcatcher occupation of coastal scrub), regulation of impacts of upland vegetation communities, and requirements for mitigation are variable. Projects that have special-status vegetation communities and/or species on site often have and would require some set aside of open space. In addition, some development projects may be required to provide habitat conservation areas.

For state and federal jurisdictional wetlands (including riparian) subject to regulation under Fish and Game Code section 1600 et seq. and Clean Water Act (CWA) section 404,⁵³⁸ CDFG and Corps implement "no net loss" policies as part of their respective permitting process for impacts to wetlands. California Executive Order W-59-93 established a State Wetland Conservation Policy (SWCP) that provides for the preservation and protection of wetland communities.⁵³⁹ A central goal of the SWCP is to ensure no

⁵³⁷ The Nature Conservancy, *Santa Clara River Upper Watershed Conservation Plan* (2006).

⁵³⁸ 33 U.S.C. Sec. 1251 et seq.

⁵³⁹ State of California Executive Department, Executive Order W-59-93 (Sacramento, California: State of California, 1993).

overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetland acreages and values. Similarly, per a 1990 Memorandum of Agreement (MOA) between the EPA and the Corps to demonstrate compliance with the CWA section 404(b)(1) guidelines, it is the policy of the Corps to achieve the goal of no overall net loss of wetlands functions and values/services, although it is recognized in the MOA that no net loss of functions and values/services may not be achieved in every permit action.⁵⁴⁰ With these policies in place, it is reasonable to assume that the permanent cumulative impacts to jurisdictional wetlands would be substantially less than estimated for this analysis.

Oak woodlands also receive protection from county ordinances and CEQA itself (Pub.Res.Code Section 21083.4). As described in **subsection 4.3.7.a.2.b**, Oaks, the County of Los Angeles Oak Tree Ordinance (CLAOTO) regulates impacts to oak trees with trunks that are at least 8 inches in diameter (or that have two trunks totaling at least 12 inches in diameter) as measured 4.5 feet above natural ground.⁵⁴¹ CLAOTO requires that all potential impacts to regulated oak trees be reported in a detailed oak tree report and usually requires mitigation as a condition of an Oak Tree Permit issued by the County. Ventura County also has “Tree Protection Regulations”⁵⁴² that govern impacts to oak trees in unincorporated areas of the County that are at least 9.5 inches in circumference (or that have two or more trunks with at least one of the trunks 6.25 inches in circumference) as measured at 4.5 feet above the ground. Impacts to oak trees in Ventura County are mitigated per the Ventura County Non-Coastal Zoning Ordinance section 8107-25.10 - Offsets for Altered, Felled, or Removed Trees, which requires a minimum 1:1 ratio of mitigation.

In addition, CEQA, through Public Resources Code section 21083.4, requires that counties analyze and mitigate significant impacts to oak woodlands. Under this Section, an “oak” is defined as a “native tree species in the genus *Quercus*, not designated as Group A or Group B commercial species pursuant to regulations adopted by the State Board of Forestry and Fire Protection pursuant to Section 4526, and that is 5 inches or more in diameter at breast height.” Although, the statute does not provide a definition of “oak woodland,” Public Resources Code Section 12220(g) provides helpful guidance. It defines “forest land” – which would include oak woodland – as any “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.”

⁵⁴⁰ EPA (Environmental Protection Agency) and U.S. Army (U.S. Department of the Army), *Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines* (February 6, 1990).

⁵⁴¹ County of Los Angeles, Municipal Code, Title 22, Chapter 56, Part 16: Oak Tree Permits, Sections 2050 et seq.

⁵⁴² County of Ventura, Article 7, Section 8107-25: Tree Protection Regulations.

Using Section 12220(g) as a guide, this EIR defines “oak woodland” as an area with at least 10 percent cover by oak trees with an understory of non-grass vegetation and at least 20 percent cover by oak trees with an understory of grass vegetation. Oak/grass includes areas where oak trees comprise between 10 percent and 20 percent of the total cover with an understory of grass vegetation. As part of this EIR’s Vegetation Communities analysis, biologists surveyed the site and identified all oak woodlands meeting this definition. Note that these surveys not only captured the oak woodland habitat, but also the entire range of oak trees in terms of size and maturity, including all trees with trunk diameters of five (5) inches or more, measured at breast height, as required under Public Resources Code 21083.4(a). These surveys indicate that the project site supports 37.3 acres of oak woodland, as defined.

Based on the proposed grading plan, 7.8 acres of coast live oak woodland would be developed (including permanent and temporary impacts) and 1.9 acres of valley oak/grass would be developed (including permanent and temporary impacts), for a total of 9.7 acres of impact. This is considered a significant cumulative contribution to a significant effect, thus triggering the mitigation requirements set forth in Public Resources Code section 21083.4.

To address the Mission Village project’s impacts on oaks and oak woodlands, this EIR proposes a three-part mitigation strategy that incorporates (1) planting replacement trees, per the requirements of CLAOTO and previously incorporated measure SP-4.6-48; (2) additional replacement ratios recommended in this EIR for impacts to oak trees and oak woodlands where they occur within stream channels falling under CDFG and Corps jurisdiction, per 1600 and 404 (Mitigation Measure MV 4.3-31); and (3) additional measures recommended in this EIR for tree replacement or woodland restoration/enhancement to mitigate for oak trees and woodland occurring in uplands outside CDFG and Corps jurisdiction at a minimum ratio of 2:1 (Mitigation Measure MV 4.3-50). These mitigation measures not only ensure that the Mission Village project complies with CLAOTO and Public Resources Code section 21083.4, they ensure that the project’s contribution to cumulative impacts on oaks and oak woodlands will be less than cumulatively considerable.

Of the approximately 85,200 acres that are either developed currently or, based on the project list, expected to be developed in the foreseeable future, the RMDP/SCP project would consume 5,590 acres of the approximately 37,890 acres of impact from recent past, present, and reasonably foreseeable future projects. CEQA requires an analysis of whether this contribution to a significant impact can be rendered less than “cumulatively considerable,” as that term is defined under CEQA:⁵⁴³

⁵⁴³ 14 C.C.R. Sec. 15130.

An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable *if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.* The Lead Agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable. (*Emphasis added.*)

As to the proposed Mission Village project, the Newhall Ranch Specific Plan Program EIR and this EIR impose measures on the applicant to mitigate the loss of vegetation communities. These measures include: (1) replacing the functions and values/services of riparian vegetation communities that may be lost through construction; and (2) the dedication and maintenance of existing natural lands in the Open Area, River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, totaling approximately 9,753 acres. Mitigation also includes compliance with permits from federal and state agencies for impacts to wetlands and water quality (i.e., NPDES and section 401 water quality certifications, section 404 individual permits, and section 1602 Streambed Alteration Agreements). Mitigation for impacts to wetlands would achieve the goals of CDFG's and Corps' "no net loss" policies described above and, therefore, would result in no cumulative contribution to impacts to jurisdictional wetlands. Overall, these mitigation measures would offset the proposed Mission Village project's direct removal of most vegetation communities in the proposed project area. The measures also would offset potential secondary impacts to purple needlegrass grassland outside of the Mission Village project area.

Thus, with the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (see **subsection 4.3.10**, Project Mitigation Measures), the proposed Mission Village project would not result in a cumulatively considerable contribution to potential significant cumulative impacts on all of the vegetation communities and land covers in the SCRW, except for coastal sage scrub. (See **subsection 4.3.12.b** of this EIR.)

The California GAP vegetation⁵⁴⁴ and the project-level mapping for the RMDP/SCP project area include approximately 174,000 acres of coastal scrub in the SCRW, which includes the Mission Village project site (see **Table 4.3-8**). Without accounting for the RMDP/SCP project, other past, present, and reasonably foreseeable future projects within the SCRW result in a loss of approximately 19,000 acres of coastal scrub since the California GAP data were compiled (1998). Beginning well before 1998, coastal scrub had been extensively cleared throughout much of California for various land use changes (mainly agriculture and

⁵⁴⁴ UCSB, *California Gap Analysis Project*.

urbanization). For example, Westman⁵⁴⁵ analyzed historic losses of coastal scrub state-wide and estimated that about 15 percent of its original acreage was still extant at that time. Most coastal scrub occurs on relatively gentle slopes (0 to 20 percent) where land use conversions for agriculture and development tend to be concentrated because these lands are more developable. The SCRW has been less extensively developed than other regions in Southern California and coastal scrub loss in the watershed probably has been proportionally less than Westman's⁵⁴⁶ state-wide estimate. Still, it is likely that much of the upland agricultural land mapped by the 1998 California GAP project in the SCRW supported coastal scrub habitat prior to these land use conversions. The acreage of coastal sage scrub lost prior to 1998, however, cannot be quantified for this analysis.

Most coastal scrub alliances and associations mapped on the **RMDP/SCP project site**⁵⁴⁷ are ranked as G4S4 by CDFG,⁵⁴⁸ meaning that they are "apparently secure" both globally and within California, "but factors exist to cause some concern; i.e., there is some threat." For coastal scrub, the primary concerns are the extensive and ongoing habitat loss.⁵⁴⁹ Further, coastal scrub is used almost exclusively by the federally-listed threatened coastal California gnatcatcher,⁵⁵⁰ and many other special-status species occur regularly in coastal scrub.⁵⁵¹ In addition to land use conversions, much coastal scrub vegetation has been lost due to secondary effects of population increases and land development throughout Southern California. These effects include habitat fragmentation, invasive non-native species, livestock grazing, off-highway vehicles, altered fire regime, and perhaps air pollution.⁵⁵² Some coastal scrub vegetation occurs on National Forest lands, where land use management is generally compatible with habitat conservation,

⁵⁴⁵ W.E. Westman, "Diversity Relations and Succession in Californian Coastal Sage Scrub," *Ecology* 62 (1981), 439–455.

⁵⁴⁶ Westman, "Diversity Relations and Succession in Californian Coastal Sage Scrub," 439–455.

⁵⁴⁷ The RMDP/SCP project includes all development, including RMDP infrastructure, the Specific Plan, VCC, and Entrada.

⁵⁴⁸ California Department of Fish and Game, Vegetation Classification and Mapping Program, List of California Vegetation Alliances (October 22, 2007).

⁵⁴⁹ Westman, "Diversity Relations and Succession in Californian Coastal Sage Scrub," 439–455; J.F. O'Leary, "Californian Coastal Sage Scrub: General Characteristics and Considerations for Biological Conservation," in *Endangered Plant Communities of Southern California: Proceedings of the 15th Annual Symposium*, ed. A.A. Schoenherr (Claremont, California: Southern California Botanists, 1990), 24–41.

⁵⁵⁰ J.L. Atwood, "California Gnatcatchers and Coastal Sage Scrub: The Biological Basis for Endangered Species Listing," in *Proceedings of the Symposium: Interface between Ecology and Land Development in California*, ed. J.E. Keeley (Los Angeles, California: Southern California Academy of Sciences, 1993), 149–170.

⁵⁵¹ F.W. Davis, P.A. Stein, and D.M. Stoms, "Distribution and Conservation Status of Coastal Sage Scrub in Southwestern California," *Journal of Vegetation Science* 5 (1994), 743–756.

⁵⁵² J.F. O'Leary, "Coastal Sage Scrub: Threats and Current Status," *Fremontia* 23(4) (1995), 26–31; R.A. Minnich and R.J. Dezzani, "Historical Decline of Coastal Sage Scrub in the Riverside–Perris Plain, California," *Western Birds* 29 (1998), 366–391; P.W. Rundel, "Sage scrub," in *Terrestrial Vegetation of California*, ed. M.G. Barbour, T. Keeler-Wolf, and A.A. Schoenherr (Berkeley, California: University of California Press, 2007), 208–228.

but these areas tend to be at its upper elevational limits, where many of the special-status species associated with coastal sage scrub are less common or absent.⁵⁵³

Based on this analysis, the RMDP/SCP project and other past, present, and reasonably foreseeable future projects would result in a cumulative loss of approximately 20,500 acres of coastal scrub in the SCRW. This loss represents about 54 percent of the total 37,890 acres loss of all vegetation communities in the SCRW due to past, present, and reasonably foreseeable projects, including the RMDP/SCP project; i.e., most of this development in the watershed has or will take place on land dominated by coastal scrub. The RMDP/SCP project's direct (RMDP/SCP) and indirect (buildout of the Specific Plan, VCC, and Entrada planning areas, including Mission Village) effects would result in the permanent removal of approximately 1,520 acres of coastal scrub communities, which includes the Mission Village project area (see **Table 4.3-8**), or about 35 percent of the 4,340 acres of coastal scrub communities present in the RMDP/SCP project area; proportionally lower than the overall estimated loss, but still substantial. Also, when considered from a landscape level, the coastal scrub community on site represents a relatively large, intact tract within this portion of the SCRW. Due to coastal scrub's high habitat value for a variety of special-status plants and wildlife, the extensive coastal scrub losses in Southern California prior to 1998, and the substantial acreage lost as a result of past, present, and reasonably foreseeable projects, including the RMDP/SCP project, the loss of 20,500 acres of coastal scrub could be a potential significant cumulative effect. The proposed Mission Village project's contribution to this loss would be cumulatively considerable.

Whether the proposed Mission Village project's cumulatively considerable contribution to the potential significant cumulative effect of coastal scrub loss in the SCRW can be reduced to a level less than significant is considered in the broader context of conservation planning for the community. In some regions of Southern California, regional planning projects have been designed to limit continued losses of coastal scrub (e.g., state Natural Community Conservation Planning (NCCP) and federal Habitat Conservation Plan (HCP) programs). These programs are designed to preserve large, contiguous tracts of coastal scrub and other natural vegetation communities in permanent managed open space areas and to minimize fragmentation and other secondary impacts to these preserved areas to mitigate for the losses that do occur. There is currently no similar comprehensive, large-scale planning effort in the SCRW to ensure long-term coastal scrub conservation in large, unfragmented tracts within the watershed.

⁵⁵³ J.R. Stephenson and G.M. Calcarone, *Southern California Mountains and Foothills Assessment: Habitat and Species Conservation Issues* (Albany, California: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture, 1999).

In addition, long-term secondary (off-site) impacts to coastal scrub would occur near developed areas after project buildout. These landscape-level impacts and “edge” effects include the increased risk of non-native, invasive plant and animal species (e.g., Argentine ants), human disturbance (e.g., trampling, illegal trails), and shortened fire intervals that could result in type conversion of coastal scrub to annual grassland. These RMDP/SCP project-induced secondary impacts to coastal scrub are mitigated at the project-level to a level less than significant primarily through dedication of lands in the High Country SMA/SEA 20, River Corridor SMA/SEA 23, Salt Creek area, which include approximately 1,900 acres of coastal scrub, as well as preservation of smaller patches in Open Areas within or adjacent to the proposed development areas.

Despite implementation of the mitigation measures required by the Newhall Ranch Specific Plan Program EIR and recommended by this EIR, implementation of the RMDP/SCP project would result in a net loss of approximately 1,520 acres of coastal scrub, which includes the Mission Village project. In the (1) context of the extensive historical losses of coastal scrub in Southern California, the estimated loss of 20,500 acres in the watershed as a result of the proposed Mission Village project and other past, present, and reasonably foreseeable future projects within the SCRW; (2) the importance of this habitat to a variety of special-status plants and animals; and (3) the absence of a regional conservation effort to conserve or manage remaining coastal scrub in the watershed, the proposed Mission Village project would result in a cumulatively considerable contribution to a potential significant and unavoidable cumulative loss of coastal scrub in the SCRW.

(2) Impacts to Common Wildlife Organized by Species Guilds and Other Associations

The cumulative impact analysis for common wildlife also uses the “project list” approach for the watershed, as applied to the wildlife guilds⁵⁵⁴ shown in **Table 4.3-24**. For each wildlife guild or other association, the habitat relationships were analyzed in the same manner as the vegetation communities and land covers described above in **subsection 4.3.11.c.1**.

⁵⁵⁴Species guilds are groups of species that use or exploit similar resources or have similar life history characteristics even though they may represent different taxonomic groups.

Table 4.3-24
Summary of Cumulative Impacts to Wildlife Guilds in the Santa Clara River Watershed (GAP Data are Approximate)¹

| Wildlife Guild | Habitat Relationships² | Total Acres of Habitat in Watershed | Permanent Direct and Indirect Impact Acres of RMDP/SCP Project | Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including RMDP/SCP Project) | Estimated Cumulative Impact Acres in Watershed Including RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects |
|--|--|--|---|--|---|
| Insect Guild; Bat Guild; and Overall General Impacts | Coastal scrub Chaparral California annual grassland Riparian Oak and walnut woodland Agriculture Disturbed | 836,000 | 5,590 | 32,300 | 37,890 |
| Reptile—Low Mobility Guild Mammal—Low Mobility | Coastal scrub Chaparral California annual grassland | 747,000 | 3,050 | 31,000 | 34,050 |
| Reptile and Amphibian- -Semi-Aquatic Guild Bird-Riparian | Riparian | 25,000 | 230 | 800 | 1030 |
| Bird-Upland Scrub and Chaparral | Coastal scrub Chaparral | 725,000 | 1,980 | 31,000 | 32,890 |
| Bird-Upland Grassland | Non-native grassland | 22,000 | 1,070 | 50 | 1,120 |

| Wildlife Guild | Habitat Relationships² | Total Acres of Habitat in Watershed | Permanent Direct and Indirect Impact Acres of RMDP/SCP Project | Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including RMDP/SCP Project) | Estimated Cumulative Impact Acres in Watershed Including RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects |
|-----------------------|--|--|---|--|---|
| Bird-Upland Woodland | Oak woodland | 5,170 | 95 | 0 | 95 |
| Mammal-High Mobility | Coastal scrub Chaparral Riparian Oak woodland | 755,000 | 2,300 | 32,000 | 34,300 |

¹Acres were not quantified for the Mollusk guild (including aquatic and terrestrial species) because impacts are site-specific or limited to scattered microhabitat areas; for the Fish guild because the distribution of the species in the guild is limited to the Santa Clara River; and for the Bird -- Raptor and Mammal -- Moderate Mobility guilds because habitat used by the species in these guilds is too diverse to generate a broad, watershed-scale estimate.

²Acres based on California GAP Vegetation Communities (UCSB, California Gap Analysis Project) for areas outside of the RMDP/SCP project boundaries and on the project-level data for areas within the SCP project area boundaries. Acres are based on the totals reported in Table 4.3-23 and are rounded to nearest 1,000 acres for totals greater than 20,000 acres at watershed level and to nearest 10 acres for project-level impacts.

The Santa Clara River Watershed is Relatively Undeveloped and Has Substantial Existing and Designated Open Space Providing Habitat For Wildlife. As shown in **Table 4.3-23**, approximately 991,000 acres of the SCRW are currently undeveloped and capable of providing habitat for wildlife.⁵⁵⁵ With regard to vegetation communities and land covers mapped in the RMDP/SCP project area that also occur elsewhere in the watershed, the watershed includes approximately 836,000 acres. The amount of undeveloped habitat for the different wildlife guilds in the SCRW ranges from approximately 5,200 acres of oak woodlands for the Bird—Upland Woodland guild to approximately 836,000 acres for the Insect and Bat guilds.⁵⁵⁶ This latter figure reflects the fact that insects and bats can use virtually all the undeveloped habitat in the SCRW. Of the approximately 991,000 acres of undeveloped land in the SCRW, approximately 734,000 acres are existing or classified open space (**Figure 4.3-22**), including 635,000 acres of lands designated for public use. Of the 734,000 acres of existing or classified open space, approximately 593,000 are comprised of the types of vegetation communities and land covers occurring on the RMDP/SCP project.

Cumulative Net Increase in Jurisdictional Waters and Wetlands Providing Wildlife Habitat. Waters and wetlands are critical resources for several of the wildlife guilds. The guilds most reliant on waters/wetlands throughout the SCRW include the Reptile and Amphibian—Semi-Aquatic guild, the Fish guild, the Bird—Riparian guild, and the Bird—Raptor guild (primarily for raptor nesting habitat). As shown in **Table 4.3-24, Summary of Cumulative Impacts to Wildlife Guilds in the Santa Clarita River Watershed**, a small proportion of the habitat used by these guilds have been or would be affected by development in the SCRW. Also, according to the Santa Clara River Watershed Study,⁵⁵⁷ mitigation measures for activities permitted by CDFG and Corps between 1988 and 2006 in Los Angeles and Ventura counties have resulted in a cumulative net increase in jurisdictional waters/wetlands area in the SCRW. These estimated net increases are consistent with CDFG's and Corps' "no net loss" policies for wetlands discussed above. Although the Watershed Study acreages assume 100 percent mitigation success, and although it is likely that some of the mitigated acreage has not been successful for various reasons (e.g., poor design, inappropriate soils or hydrology, poor maintenance), it is reasonable to conclude that there has been no net cumulative loss of waters/wetland acreage from agency-permitted activities in the watershed since 1988 because of the estimated net increases. However, as concluded by

⁵⁵⁵ This approximately 991,000 acres figure is derived by subtracting the number of existing development acres (47,270) from the total size of the entire SCRW (1,038,100 acres).

⁵⁵⁶ This does not mean, however, that species in each guild actually use all of the available habitat; nor does it mean that species in each guild have been observed on each acre of available habitat. For example, agricultural and disturbed lands are considered habitat for the Insect and Bat guilds and, therefore, are included in the total acreage of habitat for these guilds; however, both insects and bats tend to concentrate activities in microhabitats within the larger landscape and, therefore, are not uniformly distributed through the 836,000 acres.

⁵⁵⁷ Dudek, *Santa Clara River Watershed Study*.

Ambrose et al.,⁵⁵⁸ acreage losses and gains resulting from agency-permitted activities do not always reflect wetland functions and values/services, and hence, wildlife habitat value. Based on Ambrose et al.'s⁵⁵⁹ review of 143 section 401 permits across 12 regional Water Boards and subregions in California, approximately 27 percent of mitigation acreage consisted of drier riparian and upland habitats that were outside of jurisdictional areas. Wildlife species that rely on wetter habitats, such as semi-aquatic amphibians and reptiles, may not use the drier riparian and wetland habitats to the same extent or for certain phases of their life cycle (e.g., reproduction).

Although the success of past permitted activities likely has been mixed with regard to mitigation for impacts to waters and wetland functions and values/services, new projects are approved and constructed with updated technologies for protecting and restoring waters/wetlands. These new technologies are expected to enhance the functions and values/services of the waters and wetlands within the SCRW. To this end, the Mission Village project applicant would implement conservation measures that are designed to permanently preserve the Santa Clara River corridor and portions of tributary drainages through the proposed Mission Village project reach and to protect and manage the waters/wetlands on the proposed Mission Village project site. These conservation measures include previously incorporated mitigation measures from the Newhall Ranch Specific Plan Program EIR and additional mitigation measures recommended by this EIR. The River Corridor SMA/SEA 23 is approximately 977 acres and includes approximately 332 acres of combined southern cottonwood-willow riparian forest and southern willow scrub. The River Corridor SMA/SEA 23 provides restoration and enhancement opportunities for riparian vegetation; and all riparian vegetation permanently removed from the proposed Mission Village project would be replaced in kind at a minimum 1:1 ratio for Low Reach Value vegetation (e.g., arrow weed scrub) up to a 4:1 ratio for High Reach Value southern cottonwood-willow riparian forest (e.g., see Mitigation Measure **4.3-31** (wetlands mitigation plan and riparian restoration activities on the project site) and **Table 4.3-11** in **subsection 4.3.10**, Project Mitigation Measures). Implementation of these mitigation measures would result in a net increase of wetland/riparian habitat and are expected to improve the overall value of the River corridor and associated aquatic, semi-aquatic, and riparian wildlife guilds. In addition, conservation measures include protection and enhancement of riparian and wetland habitat in the High Country SMA/SEA 20 and Salt Creek area, as well as in the Open Area, with associated wetland mitigation plans subject to the approval of the Corps and CDFG that ensure no net loss of similar functions and values/services (see Mitigation Measures **MV 4.3-1** (restriction of construction activities in the riverbed to specified areas), **MV 4.3-23** (development of a conceptual wetlands mitigation plan), and

⁵⁵⁸ R.F. Ambrose, J.C. Callaway, and S.F. Lee, *An Evaluation of Compensatory Mitigation Projects Permitted Under Clean Water Act Section 401 by the California State Water Quality Control Board, 1991–2002* (August 2006).

⁵⁵⁹ Ambrose, Callaway, and Lee, *Evaluation of Compensatory Mitigation Projects*.

MV 4.3-31 through 4.3-43 (wetlands mitigation plan and riparian restoration activities on the project site) in **subsection 4.3.10**, Project Mitigation Measures).

Land Use Classification and Present and Reasonably Foreseeable Projects. Similar to **Table 4.3-23** for vegetation communities and land covers, **Table 4.3-24** provides a breakdown of the estimated cumulative loss of wildlife habitat (by guild) that would result from (1) the RMDP/SCP project, and (2) present and reasonably foreseeable development as set forth in the “project lists” provided by the various land use jurisdictions within the SCRW.

Present and reasonably foreseeable projects, including the RMDP/SCP project, would result in habitat losses ranging from approximately 980 acres for the Reptile and Amphibian, Semi-aquatic and Bird, and Riparian guilds, to approximately 38,000 acres for the Insect and Bat guilds. Cumulative impacts to oak woodlands could not be quantified due to the coarseness of the vegetative mapping. Based on the GAP data⁵⁶⁰ alone, there would be 0 acres of impacts to habitat for the Bird—Upland Woodland outside of the RMDP/SCP project boundaries. However, based on project-level mapping, there would be 95 acres of habitat loss for this guild in the RMDP/SCP project area. There are almost certainly oak woodlands on the sites of other present and reasonably foreseeable projects and, consequently, it is expected that there would be impacts to oak woodlands resulting from these projects, even though the lack of refined mapping prevents quantification of those impacts. As discussed above, mitigation for loss of upland habitats such as coastal scrub, chaparral, and grassland due to present and reasonably foreseeable projects is uncertain. While CDFG and Corps “no net loss” policies for wetlands, as well as the oak mitigation required by Los Angeles and Ventura counties, are intended to offset impacts to these resources, some net loss of function and value for wildlife, such as semi-aquatic amphibians and reptiles, could occur even if there is no net loss of acreage. Due to the likely permanent net loss of several tens of thousands acres of upland habitats (e.g., coastal scrub, chaparral, and grassland) and the potential loss of some functions and values/services of riparian, wetland, and oak woodland habitats for wildlife, the cumulative impact on wildlife guild habitats could be potentially significant.

The RMDP/SCP Project’s Contribution to the Potential Cumulative Impact. The RMDP/SCP project’s contribution to this potential cumulative impact, broken down by wildlife guild, ranges from 95 acres for the Bird—Upland Woodland guild to 5,590 acres for the Insect and Bat guilds. By proportion, the RMDP/SCP project’s largest contribution to the potential cumulative impact on habitat is 1,070 acres of the total 1,120 acres for the Bird—Upland Grassland guild. Without accounting for mitigation, the RMDP/SCP project’s contribution to the potential cumulative impact on wildlife guilds could be cumulatively considerable. However, the mitigation measures recommended in this EIR, when added to

⁵⁶⁰ UCSB, *California Gap Analysis Project*.

those imposed by the Newhall Ranch Specific Plan Program EIR, render the RMDP/SCP project's contribution "less than cumulatively considerable," as that term is used in the State CEQA Guidelines.⁵⁶¹ These mitigation measures include replacing the functions and values/services of riparian vegetation communities that may be lost through construction, as well as the dedication and maintenance of existing natural lands in the Open Area, River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, totaling approximately 9,753 acres. Mitigation also includes compliance with permits from federal and state agencies for impacts to wetlands and water quality (i.e., NPDES and section 401 water quality certifications, section 404 individual permits, and section 1602 Streambed Alteration Agreements). These mitigation measures would reduce the impacts of the direct removal of wildlife habitats in the RMDP/SCP project area. Thus, with the mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR, the RMDP/SCP project area, including the proposed Mission Village project, would not result in a cumulatively considerable contribution to potential significant cumulative impacts to wildlife guilds in the SCRW.

(3) Impacts to Wildlife Habitat Linkages, Wildlife Corridors, and Wildlife Crossings

This subsection evaluates, on a guild-by-guild basis, the RMDP/SCP project's contribution to potential cumulative impacts on wildlife habitat linkages, wildlife corridors, and wildlife crossings. Note that the analysis primarily focuses on watershed-level habitat linkages rather than on a project-level movement corridors and connectivity. Because project-level data from off-site projects are not available, it is speculative to state whether and to what extent project-specific movement corridors and crossings on those properties would be affected by present and future projects. However, it can be assumed that other projects with broad impacts over a landscape would be expected to constrain wildlife use and distribution on site, and have a potential to block movement through certain areas, including through established wildlife corridors and crossings.

As described in **subsection 4.3.9.b.1.e**, Wildlife Habitat Linkages, landscape habitat linkages in the SCRW consist of relatively large open space areas that (1) contain natural habitat, and (2) provide connection between at least two larger adjacent open spaces that can provide for both diffusion and dispersal of many species. Linkages can form contiguous tracts of habitat when adjacent to other open space areas. Large open space networks can be formed in this way to connect and conserve habitat throughout entire regions.⁵⁶²

⁵⁶¹ California Code of Regulations, title 14, section 15130, subdivision (a)(3).

⁵⁶² A.F. Bennett, *Linkages in the Landscape: The Role of Corridors and Connectivity in Wildlife Conservation* (World Conservation Union, 2003).

Figure 4.3-9 shows the conceptual regional open space connectivity identified by Penrod et al.⁵⁶³ that would provide for landscape-scale habitat connectivity between the Santa Susana Mountains to the south and the Los Padres National Forest to the north. These conceptual linkages encompass the High Country SMA/SEA 20 and the Salt Creek area within the RMDP/SCP project area and the Santa Clara River west of the RMDP/SCP project area. Penrod et al.⁵⁶⁴ developed this connectivity concept using a “least cost analysis.”⁵⁶⁵ According to Penrod et al.,⁵⁶⁶ the High Country SMA/SEA 20 and Salt Creek area, along with regional open space conservation areas and the limitations on development imposed by initiatives such as “SOAR,”⁵⁶⁷ constitute important components of a regional linkage design—one that would connect the Santa Monica Mountains, the San Gabriel Mountains, and the Sierra Madre Mountains.

The High Country SMA/SEA 20 and Salt Creek area within the RMDP/SCP project area provide a key component of the east-west linkage that crosses Interstate 5 and connects to the Angeles National Forest in the San Gabriel Mountains to the east and to Ventura County SOAR open space to the southwest. They also provide a key component of the north-south linkage between the Santa Susana Mountains and the “Fillmore Greenbelt” to the northwest that further links to the Los Padres National Forest and the Angeles National Forest to the north. Most of the upland wildlife species probably use the High Country SMA/SEA 20 and Salt Creek area extensively.

North-south movement between the Santa Susana Mountains and the “Fillmore Greenbelt”⁵⁶⁸ requires wildlife to cross SR-126. **Figure 4.3-23, Wildlife Connectivity Crossings**, shows the three existing crossings in Ventura County west of the RMDP/SCP project area (including the Mission Village project site) that can be accessed by wildlife moving along the Santa Clara River. These crossings, which would not be affected by the RMDP/SCP project, are arched culverts large enough for vehicles and wildlife to pass through. These crossings measure about 4.4 meters (14 feet, 7 inches) in height, 7.5 meters (25 feet) in

⁵⁶³K. Penrod et al., *South Coast Missing Linkages Project: A Linkage Design for the Santa Monica-Sierra Madre Connection* (Idyllwild, California: South Coast Wildlands, in cooperation with the National Park Service, Santa Monica Mountains Conservancy, California State Parks, and The Nature Conservancy, 2006).

⁵⁶⁴Penrod et al., *South Coast Missing Linkages Project*.

⁵⁶⁵A “least cost analysis” refers to the calculation of the movement path that has the lowest net impact on a species in relation the factors such as metabolic costs, available shelter and food, and risk factors such as roads; the path that results in the lowest risk of mortality.

⁵⁶⁶Penrod et. al., *South Coast Missing Linkages Project*.

⁵⁶⁷Save Open-Space and Agricultural Resources (SOAR) initiative passed by Ventura County voters in 1998 that amended the County’s General Plan to limit development on agricultural, open space, and rural lands within Ventura County. See Ventura County, “Goals, Policies, and Programs,” *General Plan* (2008), 6–8.

⁵⁶⁸The Fillmore Greenbelt is a voluntary agreement between the Ventura County Board of Supervisors and Fillmore regarding development of agricultural and/or open space areas beyond City limits. The Greenbelt is designed to protect open space and agricultural lands and reassure property owners located within these areas that lands will not be prematurely converted to agriculturally incompatible uses.

width, and 51.8 meters (170 feet) in length, resulting in an openness factor of 0.65, which well exceeds the openness factor of 0.25 found by Donaldson to be adequate for white-tailed deer.⁵⁶⁹ The easternmost of these crossings would serve wildlife movement within and through the RMDP/SCP project area via the Salt Creek corridors, as well as Tapo Canyon in Ventura County.

The Mission Village project site includes potential north-south local wildlife corridors between Santa Clara River and the Santa Susana Mountains to the south. Under current conditions, the function of these potential wildlife corridors to facilitate north-south wildlife movement and access to and from the Santa Clara River is somewhat limited because a large portion of the Mission Village tract map area is currently used for agriculture and frequently devoid of vegetative cover. Wildlife movement through the project site probably occurs mostly along the wooded canyons and through native habitat areas.

In addition to the High County SMA/SEA 20 and Salt Creek area, the Santa Clara River corridor, including the reach through the Mission Village project site, is a regionally important riparian and wetland resource, in part due to its role as a functioning wildlife corridor and habitat linkage for east-west wildlife movement. The 100-year floodplain of the River corridor that lies within the RMDP/SCP project area would be approximately 700 to 2,000 feet wide after development and thus would remain sufficiently wide to accommodate flood events while maintaining the existing mosaic of habitat types currently present along the river.⁵⁷⁰ Combined with upland natural open space adjacent to the River corridor, wildlife habitat along the corridor would be a minimum of 1,000 feet wide.

Specifically within the Mission Village project site, the River would be maintained as open space with a minimum width of about 1,000 feet. The RMDP⁵⁷¹ provides for minimum 100-foot-wide “transition” areas between development and the River Corridor SMA/SEA 23, restricts recreational uses of the River Corridor SMA/SEA 23, and provides for long-term management to ensure that it continues to function as a habitat linkage and movement corridor. With the transition zones along the River, the overall width of natural habitat will be a minimum of approximately 1,200 feet wide. The River corridor will therefore maintain sufficient dimensions to convey a variety of larger, mobile wildlife species, such as mule deer,

⁵⁶⁹ B.M. Donaldson, *The Use of Highway Underpasses by Large Mammals in Virginia and Factors Influencing Their Effectiveness* (Charlottesville, Virginia: Virginia Transportation Research Council, 2005).

⁵⁷⁰ Pacific Advanced Civil Engineering, Inc (PACE), *Newhall Ranch Resource Management Development Plan Floodplain Hydraulics Impacts Assessment - Santa Clara River* (Fountain Valley, California: PACE, 2009).

⁵⁷¹ The RMDP is incorporated by reference, as permitted in section 15150 of the *State CEQA Guidelines*. All referenced documents are available for public inspection and review upon request to: County of Los Angeles, Department of Regional Planning, 320 West Temple Street Los Angeles, California 90012 (Samuel Dea; (213) 974-6461) or Impact Sciences, Inc., 803 Camarillo Springs Road, Suite A-1, Camarillo, California 93012 (Susan Tebo; (805) 437-1900). Additionally, this document can also be obtained from the California Department of Fish and Game’s website at <http://www.dfg.ca.gov/regions/5/newhall/docs/>.

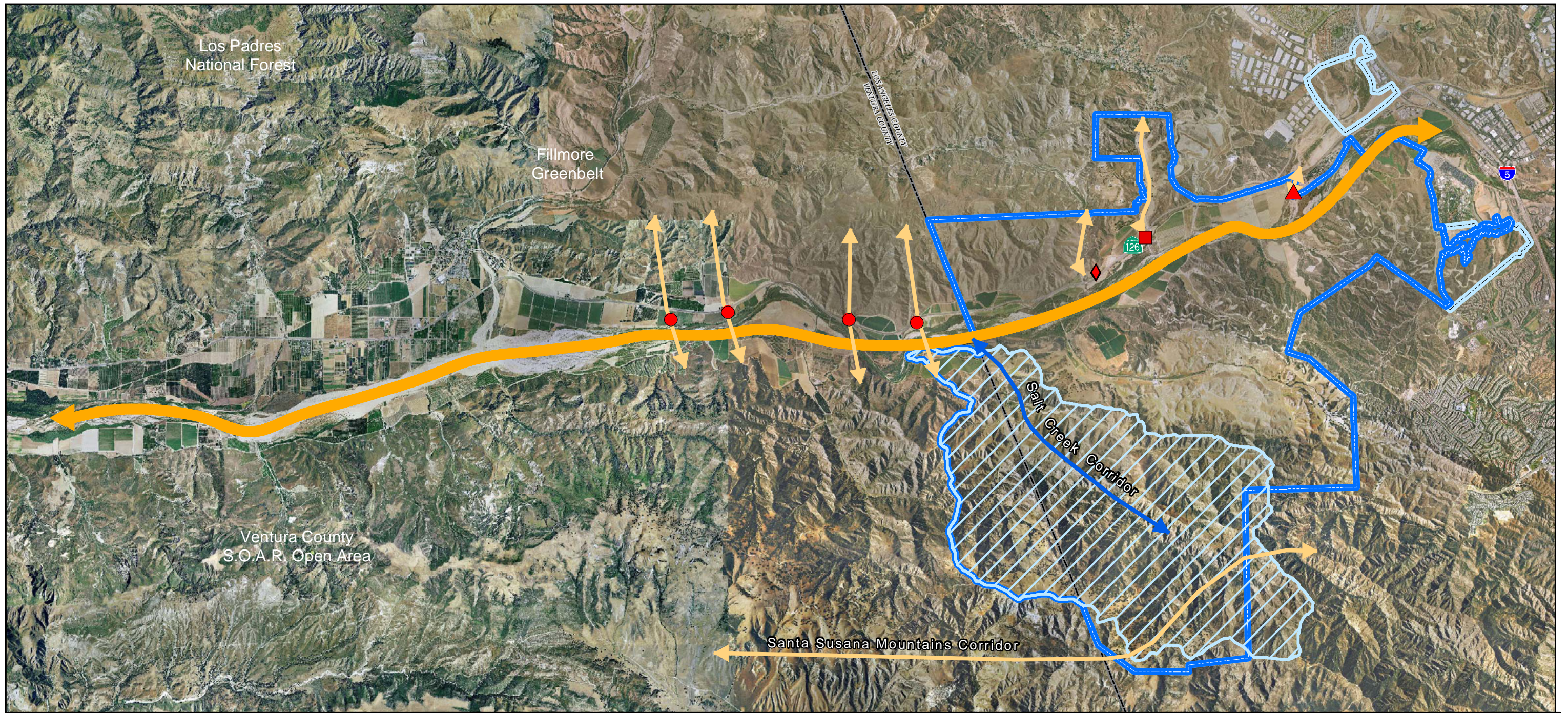
coyote, gray fox, bobcat, and mountain lion. It will also allow for dispersal of many smaller and less mobile species, including birds, small mammals, reptiles, and amphibians that live in the River Corridor. The Commerce Center Drive Bridge will somewhat constrict the Santa Clara River and corridor but for a rather short distance, about 100 feet. Commerce Center Drive Bridge would be approximately 1,250 feet long, 117 feet wide, and have a vertical clearance of 11 to 22 feet, which is more than adequate to allow for unconstrained movement of wildlife beneath the bridge. This is discussed in **subsection 4.3.9.b.1.e**.

The Castaic/Hasley corridor (**Figure 4.3-24, Alternative 2 Impacts to RMDP/SCP Regional Wildlife Connectivity Corridors**), which is not located on the Mission Village project site, would also remain intact as Open Space/Open Area following implementation of the RMDP/SCP and buildout of the Specific Plan, VCC, and Entrada planning areas, including the proposed Mission Village project.

This corridor would allow for movement of many Mammal – High Mobility species (e.g., coyote, mule deer, and possibly mountain lion and bobcat), and would function as live-in habitat and movement habitat for the other species guilds. The Castaic/Hasley corridor would continue to have connectivity value between the Santa Clara River and upland habitats to the northeast of the RMDP/SCP project area extending to Castaic Lake and the Angeles National Forest.

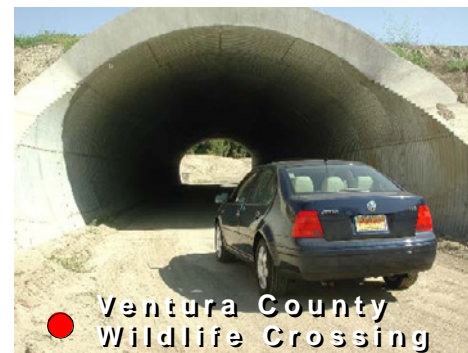
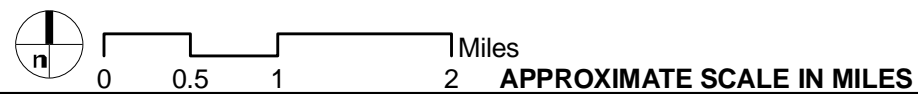
Other existing habitat areas currently function as linkage habitat in the undeveloped landscape and may be used by wildlife for movement between the Santa Susana Mountains to the south and the Los Padres National Forest to the north. Some of these linkages would be somewhat constrained by buildout of the Specific Plan area, including Potrero Canyon and Long Canyon south of the River corridor and Chiquito Canyon and San Martinez Grande Canyon north of the River (**Figure 4.3-24**). These wildlife corridors are located west of the Mission Village project site.

The project's potential to cause cumulative impacts to wildlife landscape habitat linkages is assessed against the following significance criterion, as previously identified in **subsection 4.3.9.a**: Will the proposed project, in combination with present and reasonably foreseeable development, interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors?



Legend

- RMDP Boundary
- SCP Boundary
- County Boundary
- Salt Creek Watershed
- Castaic Creek
- Chiquito Canyon
- San Martinez
- Ventura County
- Wildlife Corridor
- River Corridor



AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-23

Mission Village EIR



Legend

- RMDP Boundary
- SCP Boundary

Regional Habitat Linkages

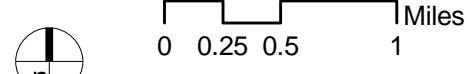
- 1 - Santa Clara River Corridor
- 2 - Salt Creek Confluence
- 3 - Salt Creek High Country
- 4 - East Fork Salt Creek
- 5 - Potrero Canyon Salt Creek
- 6 - Potrero Canyon
- 7 - Long Canyon
- 8a - Humble Canyon
- 8b - Lion Canyon
- 8c - Exxon Canyon
- 8d - Dead End Canyon
- 8e - Middle Canyon
- 8f - Magic Mountain Canyon
- 9 - Chiquito Canyon
- 10 - San Martinez Grande Canyon
- 11 - Off-Haul Canyon
- 12 - Homestead Canyon
- 13- Castaic/Hasley Corridor

Impacts

- Direct Permanent
- Indirect Permanent

Slope

- Less than 25 Percent Slope
- 25 Percent Slope or Greater



APPROXIMATE SCALE IN MILES

IMAGE SOURCE: USGS 24K Quad

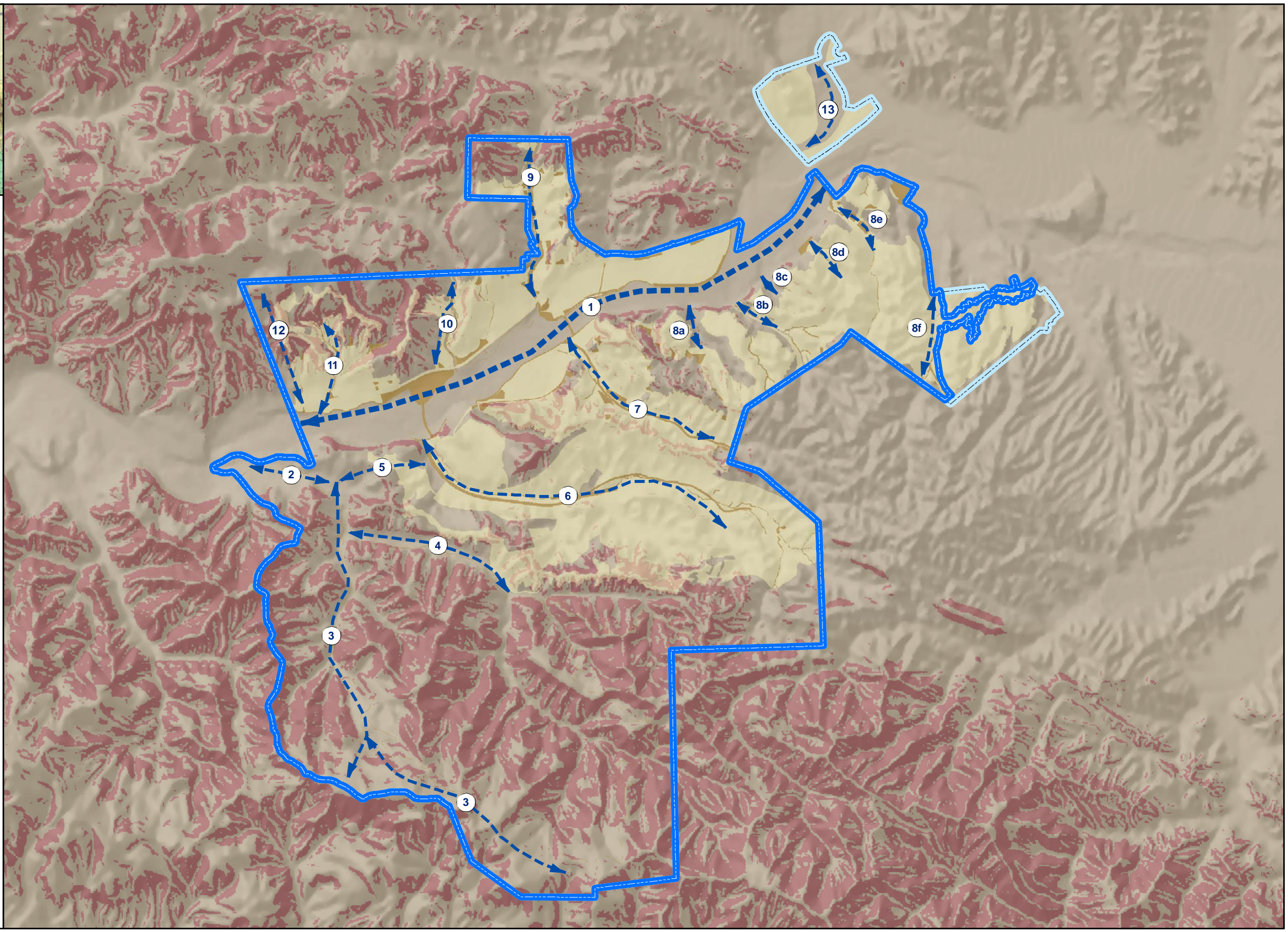


FIGURE 4.3-24

Mission Village EIR

Alternative 2 Impacts to RMDP/SCP Regional Wildlife Connectivity Corridors



As discussed above, the Santa Clara River is an important regional habitat linkage in the SCRW. The combined High Country SMA/SEA 20 and Salt Creek area provide the most direct connections between the River corridor habitat and large upland habitat areas south of the River, and are those identified by Penrod et al.⁵⁷² as important components of regional habitat connectivity. Notwithstanding the preservation of these key areas, the loss of approximately 5,590 acres associated with the RMDP/SCP project, including 1,854.5 acres associated with the Mission Village project area, and the approximately 32,300 acres of impacts from present and reasonably foreseeable projects, would reduce both the size and availability of linkages and corridors in the SCRW. This is particularly true for areas adjacent to the Santa Clara River where both agricultural practices and the development of commercial and residential developments have focused.

Open space, public land, and wildlife compatible uses within the SCRW include National Forest Service lands (both the Los Padres and Angeles National Forests), other designated public ownerships (e.g., BLM, State Parks), utility corridors, agricultural and pasture lands, and undeveloped private areas. The SCRW also includes commercial, industrial, and residential development. Water infrastructure including dams associated with Bouquet, Piru, and Castaic Creeks and diversion structures such as the Freeman diversion dam on the Santa Clara River are also present. The rapid expansion of population centers and urban growth in this region (particularly the Santa Clara Valley) has resulted in the continued loss of undeveloped lands, and the degradation of riparian and upland habitats that support populations of unique or rare species. Natural and wilderness areas in the SCRW, particularly near the Santa Clara River, are gradually being displaced by development, and wildlife movement corridors in the region have been modified to the extent that the movement of wildlife is curtailed or limited in some areas,⁵⁷³ and expanding urban population centers are degrading the habitat values in urban/wilderness edge areas.

As indicated in **Table 4.3-23**, the SCRW consists of approximately 1,038,100 acres of land and supports a variety of vegetation communities and land covers. According to the California GAP data,⁵⁷⁴ approximately 47,300 acres of the watershed had been developed as of 1998. In addition, project list information for the watershed within Ventura and Los Angeles counties indicates that another 37,890 acres are expected to be developed in the foreseeable future, based on past, present, and reasonably foreseeable projects, including the RMDP/SCP project (which includes the Mission Village project area), resulting in a total of approximately 85,200 acres of watershed being developed.

⁵⁷² Penrod et al., *South Coast Missing Linkages Project*.

⁵⁷³ Penrod et al., *South Coast Missing Linkages Project*.

⁵⁷⁴ UCSB, *California Gap Analysis Project*.

Figure 4.3-19 shows that most of the approximately 99,000 acres of land converted to development land uses in the SCRW (i.e., agriculture, and residential, commercial, industrial, infrastructure development) has occurred (1) in the southern portion of the watershed along the Santa Clara River, where agricultural uses dominate, and (2) in the cities of Ventura, Santa Paula, Santa Clarita, and the communities of Valencia and Acton, where urban development dominates. In these portions of the SCRW, urbanization has resulted in alterations to the natural landscape and the fragmentation of natural vegetation communities, isolation of wildlife habitat, and the creation of discontinuous movement corridors. This is demonstrated in portions of the Santa Clara River Valley where development along the Interstate 5 corridor has narrowed the existing landscape features and now inhibits movement along much of the Valley floor. However, a large amount of relatively unobstructed and natural land still exists within this region, including large contiguous areas within the Angeles and the Los Padres National Forests and within private lands including the Forest Service lands. Development within Forest Service lands in this area is primarily limited to small residential communities on private holdings or recreational cabins, OHV use, reservoirs and aqueducts, ranger stations, recreational areas and campgrounds, utility corridors, access roads, hiking trails, and fuel breaks.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project (which encompasses the Mission Village project area), could constrain the use of habitat linkages, wildlife corridors, and wildlife crossings in developing regions of the SCRW, especially where north-south wildlife movement occurs along several canyons between the Santa Clara River and the Santa Susanna Mountains to the south, and east-west movement occurs along the Santa Clara River itself. The RMDP/SCP project would constrain the use of some regional landscape-level linkages, local wildlife corridors (i.e., within the RMDP/SCP project development area), and wildlife crossings within the developed portions of the RMDP/SCP project area and large areas of habitat loss would occur. The Mission Village project's contribution to impacts to local and regional wildlife movement would not be cumulatively considerable, and therefore would be less than significant (see **subsection 4.3.9.b.1.e**). Wildlife movement through the project site along Magic Mountain Canyon, Middle Canyon, and Dead-End Canyon would be eliminated because these canyons would be developed. Wildlife movement along Exxon Canyon and Lion Canyon also would be precluded because these canyons would become dead-ends. The Santa Clara River corridor will maintain its function for east-west regional wildlife movement and connects directly to Castaic Creek, which provides for north-south wildlife movement. The open space in the River corridor within the Mission Village project site will be a minimum of 1,000 feet wide, and, with the minimum 100-foot transition areas between development and the River corridor, the minimum functional width of the corridor will be about 1,200 feet. As noted above, the Commerce Center Drive Bridge will somewhat constrict the Santa Clara River and corridor but for a short distance, about 100 feet, with a height of approximately 11 to 22 feet to allow for unconstrained movement of wildlife beneath the bridge.

Although impacts to regional and local wildlife movement are less than significant, a variety of mitigation measures are recommended by Newhall Ranch Specific Plan Program EIR and this EIR that would further reduce impacts to wildlife corridors, including dedication of the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, controls on public access to dedicated open space areas, controls on lighting at the urban-open space interface, controls on pet, stray, and feral cats and dogs, and homeowner education about sensitive biological resources.

While much of the SCRW likely would remain undeveloped or designated as public lands, including the National Forests, urbanization of the Santa Clara River corridor as a whole is where most development is expected to occur in the future. This would result in the expansion of barriers to wildlife movement in and around the River Valley. However, based on existing information for present and reasonably foreseeable projects and the RMDP/SCP project, which are the scope of this cumulative analysis, movement through the Santa Clarita Valley would be maintained between both National Forests and private lands such as the Simi Hills, as shown in **Figure 4.3-9, South Coast Wildlands Open Space Connectivity and Linkage**, and **Figure 4.3-24**. It was concluded in the Newhall Ranch Specific Plan that combined High Country SMA/SEA 20 and Salt Creek area provide the most direct connections between the River corridor habitat and large upland habitat areas south of the River, and that these habitat linkages would remain intact and functional after implementation of build out of the RMDP/SCP project area, including the proposed Mission Village project, under Alternative 2. It was for these reasons that at the project-level, it was determined that impacts to landscape habitat linkages would be adverse, but not significant. It follows, therefore, that if regional wildlife movement via the large habitat linkages identified by Penrod et al.,⁵⁷⁵ including the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, are maintained on site, the contribution of the RMDP/SCP project (which includes the Mission Village project area) to constraints on regional wildlife movement in the SCRW would not be cumulatively considerable. Thus, with the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended by this EIR, the proposed Mission Village project would not result in a cumulatively considerable contribution to potential significant cumulative impacts to regional wildlife habitat landscape linkages and local wildlife movement corridors in the SCRW.

(4) Impacts to Special-Status Species

The cumulative impact analysis for special-status species also uses the “project list” approach for the watershed. This analysis is organized into five separate special-status categories:

1. State and/or Federally Listed and California Fully Protected Wildlife Species

⁵⁷⁵ Penrod et al., *South Coast Missing Linkages Project*.

2. California Species of Special Concern (CSC)
3. California Special Animals, California Watch List Species, Specially Protected Mammals, and CDFG Trust Resource Species
4. State and/or Federally Listed Plant Species
5. California Native Plant Society (CNPS) and Locally Regulated Plant Species

The listed and California Fully Protected Species are analyzed in the greatest detail because they have the greatest sensitivity and generally would be expected to be most affected by cumulative impacts. For each species, the habitat relationships were analyzed in the same manner as the vegetation communities and land covers described above in **subsection 4.3.11.c.1**. Except where noted, the combined California GAP data⁵⁷⁶ and project-level data were used for the cumulative impact analyses because the analysis is within the context of the entire watershed.

Because of the numerous wildlife species in the two categories: (1) California Species of Special Concern (CSC); and (2) Special Animals, Watch List, Specially Protected Mammals, and Trust Resources, the analyses for the two categories are generalized to the guild level (e.g., Bird—Raptor, Reptile and Amphibian—Semi-aquatic). The detail of the analysis is scaled to the sensitivity of the species group. For example, CSC Bird—Riparian species are analyzed in more detail than Special Animal Bird—Riparian. Where the detailed analyses for the Listed and California Fully Protected Species are applicable to species in the lower sensitivity categories (e.g., least Bell’s vireo analysis to the CSC Bird—Riparian guild), cumulative impacts are incorporated and summarized.

(a) Listed and California Fully Protected Wildlife Species

This section addresses cumulative impacts to the following federally and state-listed and/or California Fully Protected Species:

- arroyo toad (FE)
- American peregrine falcon (CE, CFP)
- California condor (FE, CE, CFP)
- coastal California gnatcatcher (FT)
- California red-legged frog (FT)
- golden eagle (CFP)

⁵⁷⁶ UCSB, *California Gap Analysis Project*.

- least Bell's vireo (FE, CE)
- ringtail cat (CFP)
- southern steelhead (FE)
- southwestern willow flycatcher (FE, CE)
- unarmored threespine stickleback (FE, CE, CFP)
- western yellow-billed cuckoo (CE)
- white-tailed kite (CFP).

The cumulative impact analysis of listed and California Fully Protected Species is summarized below. See **subsection 4.3.9.b.1.h** for the full detail of impacts and mitigation measures as they relate to each of the species and to **subsection 4.3.10**, Project Mitigation Measures, for full descriptions of all mitigation measures.

Arroyo Toad (FE). Within the RMDP/SCP portion of the Santa Clara River adjacent to the Mission Village project site, the arroyo toad (tadpoles only) has been documented upstream and downstream of the proposed Commerce Center Drive Bridge site and near the Valencia Water Treatment Plant (**Figure 4.3-25, RMDP/SCP Arroyo Toad Species Occurrences**). Arroyo toad has also been documented in the following areas outside the RMDP/SCP project boundaries: (1), the Santa Clara River just east of I-5; (2) Castaic Creek, including above the reservoir (Castaic Lake); (3) Upper San Francisquito Creek; (4) the Santa Clara River adjacent to Castaic Junction; (5) the Santa Clara River near the confluence of San Francisquito Creek; and (6) the Soledad Canyon area. The arroyo toad also occurs elsewhere in the SCRW, in Sespe Creek and Piru Creek. The Sespe Creek population is located in the Los Padres National Forest, primarily within the Sespe Wilderness, and is one of the largest populations in the Los Padres National Forest, with thousands of juveniles observed during years of successful reproduction.⁵⁷⁷ The Piru Creek population occurs both upstream and downstream of the Pyramid Reservoir in the Los Padres National Forest.⁵⁷⁸ The upper Piru Creek population has been expanding, likely in part due to seasonal campground closures and the elimination of suction-dredge mining.⁵⁷⁹ The lower Piru Creek population below Pyramid Reservoir has experienced habitat degradation due to perennial water releases, excessive flows, and invasive predators; but future releases are intended to mimic natural flows and this should benefit the arroyo toad.⁵⁸⁰

In 2005, USFWS designated 11,695 acres of critical habitat for arroyo toad (substantially downsizing the 95,655 acres proposed in February 2004). In that Final Rule, effective May 13, 2005, the USFWS deleted the

⁵⁷⁷ 70 FR 19584.

⁵⁷⁸ 70 FR 19584.

⁵⁷⁹ 70 FR 19584.

⁵⁸⁰ 70 FR 19584.

entire Newhall Ranch Specific Plan area from the designated critical habitat for the arroyo toad. Note, however, that USFWS is currently reassessing the 2005 Final Rule to determine whether the critical habitat designation should be adjusted. The USFWS has proposed changes to the 2005 Final Rule, published in the Federal Register on October 13, 2009. In 1999, USFWS published the Arroyo Southwestern Toad Recovery Plan,⁵⁸¹ but the Santa Clara River was not specifically identified in the Recovery Plan as having a conservation role in the recovery strategy for the species. In the Santa Clara River watershed, six federal biological opinions were issued for the arroyo toad between 1993 and 2006 (**Table 4.3-19**), including one for the Natural River Management Plan upstream of the RMDP/SCP project.

The California GAP data are not refined enough to portray suitable arroyo toad habitat. Implementation of the RMDP and buildout of the Specific Plan, VCC, and Entrada planning areas would result in the permanent loss of 59 acres (7.4 percent) of modeled Category 1 habitat on the RMDP/SCP project site, defined as habitat containing all the primary constituent elements used to designate critical habitat for the species.⁵⁸² However, 25 acres (32.6 percent) of Category 2 habitat (habitat containing most of the primary constituent elements) and 705 acres (66.6 percent) of Category 3 habitat (primarily uplands adjacent to the Santa Clara River corridor that could be used for aestivation and hibernation, but which lack hydrology to support breeding) would also be permanently lost. Upland portions of the Mission Village project site slated for development include RMDP/SCP Category 3 habitat, and a small area of river wash within the Santa Clara River that would be impacted is Category 1 arroyo toad habitat (see **Figure 4.3-4-A3**). Without accounting for past, present, or reasonably foreseeable mitigation, impacts to arroyo toad habitat in the SCRW resulting from present and reasonably foreseeable projects, including the RMDP/SCP project, could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential significant cumulative impact could be cumulatively considerable, absent mitigation.

⁵⁸¹ USFWS, *Arroyo Southwestern Toad (Bufo microscaphus californicus) Recovery Plan* (Portland, Oregon: USFWS, 1999).

⁵⁸² 70 FR 19562.

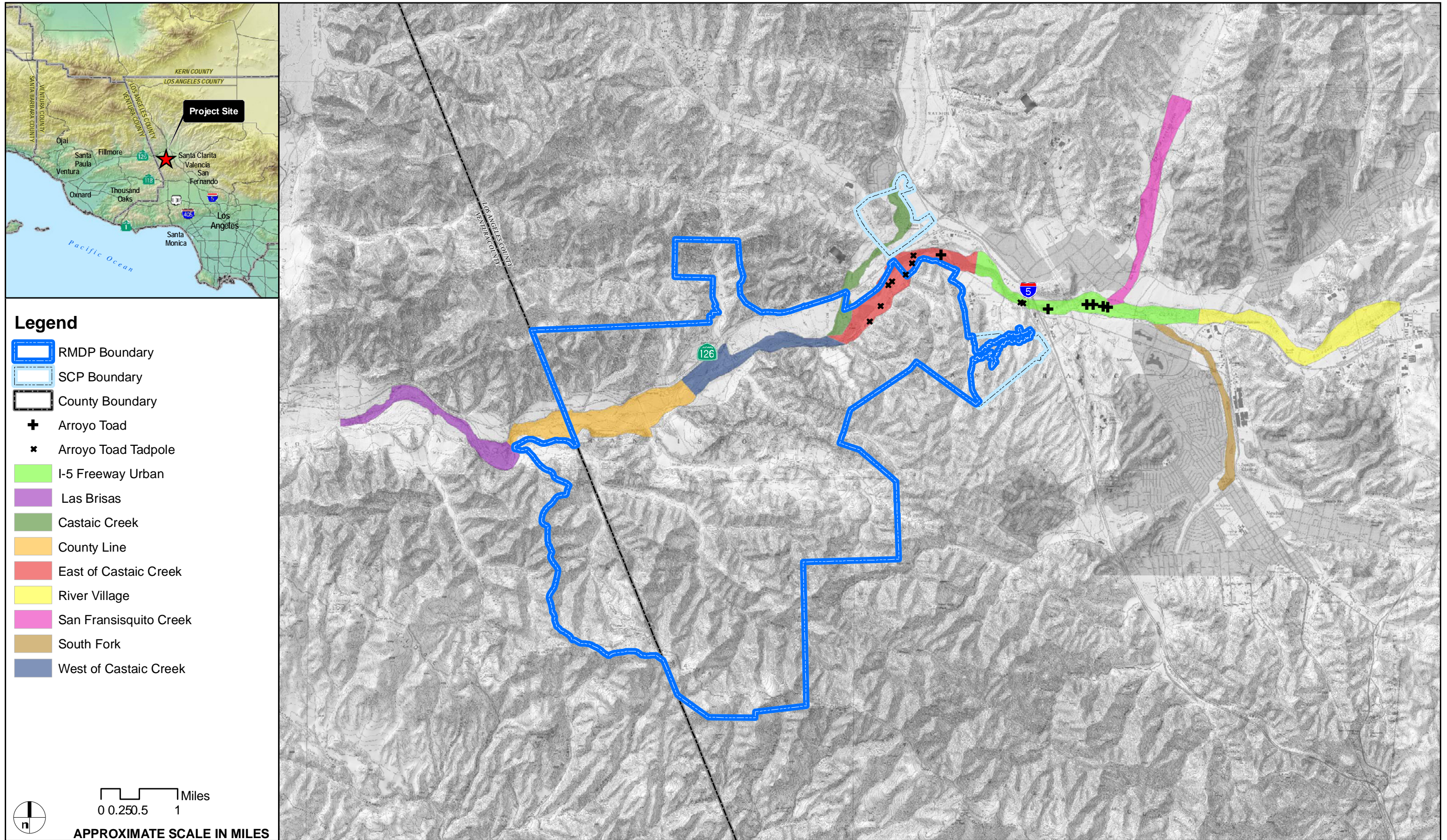


FIGURE 4.3-25

Mission Village EIR

RMDP/SCP Arroyo Toad Species Occurrences

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, in close proximity to occupied arroyo toad habitat also could result in long-term secondary effects, including disruption of nocturnal activities and greater vulnerability to predation by nocturnal predators (such as owls and coyotes) as a result of nighttime lighting; greater vulnerability to predation by pet, stray, and feral cats and dogs as well as other mesopredators;⁵⁸³ collecting by children; degradation of habitat from increased human use (e.g., trampling, trash, and off-road vehicles) and altered fire regimes (likely too frequent fire); invasion by exotic plant (e.g., giant reed, tamarisk, and pampas grass) and wildlife species (e.g., Argentine ants, bullfrogs, African clawed frogs, exotic fish, and crayfish); use of pesticides; and increased risk of roadkill on roads adjacent to occupied areas. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential significant cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR to offset project-level significant impacts to arroyo toad habitat would result in a large, managed open space system (see **subsection 4.3.10**, Project Mitigation Measures). This open space system would also reduce long-term secondary impacts on arroyo toad habitat. These mitigation measures include preservation, restoration, and enhancement of riparian and wetland habitat, controls on public access, invasive species controls, conformance with permits from federal and state agencies for impacts to wetlands and water quality (i.e., NPDES and section 401 permits), and lighting controls. Large areas of suitable habitat for this species would be protected in the River Corridor SMA/SEA 23. The Floodplain Hydraulics Impacts Assessment⁵⁸⁴ found that neither the Mission Village project nor the broader RMDP/SCP project would cause long-term significant impacts in water flows, velocities, depth, sedimentation, or floodplain and channel conditions downstream of the proposed Mission Village project area. This same impact assessment also determined that such hydrologic effects would be insufficient to alter the amount, location, and nature of aquatic and riparian habitats within the Santa Clara River adjacent to the Mission Village project site and downstream into Ventura County. The technical analysis further determined that the River would retain sufficient width to allow natural fluvial processes to continue. Following buildout, the River Corridor floodplain within the RMDP/SCP project area would remain 700 to 2,000 feet wide and retain the mosaic of habitats, including the relatively narrow wetted channel, benches, and dry terraces that support various special-status species and meet their life history needs. These habitats and the populations of the species within and immediately

⁵⁸³ See K.R. Crooks and M.E. Soulé, "Mesopredator Release and Avifaunal Extinctions in a Fragmented System," *Nature* 400 (1999), 563–566.

⁵⁸⁴ PACE, *Floodplain Hydraulics Impacts Assessment - Santa Clara River*.

adjacent to the River Corridor would not be substantially affected. A total of 738 acres (92.6 percent) of existing Category 1 habitat for the arroyo toad on the RMDP/SCP project site would be maintained within the River Corridor SMA/SEA 23.

A variety of specific mitigation measures also would be implemented by the proposed Mission Village project to avoid and reduce potential long-term secondary impacts to arroyo toad. Such measures would control human activities in the River Corridor SMA/SEA 23, educate homeowners and restrict recreational activities. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting along the open space-urban interface would be downcast. Pesticides would be controlled through an integrated pest management (IPM) plan. Argentine ant invasions of upland habitats in the open space system would be monitored and controlled to extent feasible. Implementation of these measures would allow this species to persist after development in the River Corridor SMA/SEA 23 adjacent to the Mission Village project site.

In conclusion, the vast majority of existing Category 1 habitat (92.6 percent) for the arroyo toad would be protected and managed in the River Corridor SMA/SEA 23 adjacent to the Mission Village project site, and lands outside the 100-year floodplain would be conserved. This preservation and management would also reduce potential long-term secondary impacts to a level that is adverse but not significant. The arroyo toad has not been documented to breed on the Mission Village site, as indicated by no observations of adult toads during focused surveys. The flow regime from the wastewater treatment plant upstream of the Mission Village project site fluctuates daily and does not support hydrologic regimes consistent with breeding habitat (i.e., semi-permanent breeding pools). It is not expected that there would be a loss of an extant breeding population and no substantial loss of Category 1 habitat for this species on site. The largest populations in the SCRW occur in the Los Padres National Forest in Sespe and Piru creeks. These populations are not at risk from urban development and, with proper management, they are expected to expand in the future.

For the reasons set forth above, the proposed the Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

American Peregrine Falcon (CE, CFP). The American peregrine falcon occurs occasionally in the proposed Mission Village project area and immediate vicinity. One American peregrine falcon was observed

hunting along the Santa Clara River corridor near Grapevine Mesa by Guthrie in July 2000,⁵⁸⁵ and an adult male was observed hunting over the Wolcott agricultural field by Bloom Biological, Inc. in late December 2007.⁵⁸⁶ No other occurrences of this species have been documented in the project vicinity during annual bird surveys between 1988 and 2008. American peregrine falcons have never been documented nesting in the proposed Mission Village project area or larger RMDP/SCP project area. This species is sensitive to human disturbance and usually nests in areas that are remote from human activities, such as cliffs, although tall buildings, bridges, or other tall man-made structures are also suitable for nesting if they are protected from human disturbance. Such features that would be suitable for nesting by the peregrine falcon are absent from the Mission Village project site; therefore, it is not expected to nest on site.

The California breeding range for the American peregrine falcon has been expanding and now includes the Channel Islands, the coast of southern and Northern California, inland north coastal mountains, the Klamath Mountains, Cascade Range and the Sierra Nevada.⁵⁸⁷ In California, the American peregrine falcon is an uncommon breeder or winter migrant throughout much of the state.⁵⁸⁸ Active nests have been documented along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of Northern California. As a transient species, the American peregrine falcon may occur almost anywhere that suitable habitat and prey are present.⁵⁸⁹ For example, one pair occurs within the Angeles National Forest,⁵⁹⁰ and another occurs on the Vincent Thomas Bridge at the Port of Los Angeles in Los Angeles County. Wintering migrants can be seen inland throughout the Central Valley, in the western Sierra Nevada, along the coast, and occasionally on the Channel Islands.⁵⁹¹

Based on the California GAP data,⁵⁹² there are approximately 103,000 acres of potentially suitable foraging habitat for the peregrine falcon within the SCRW (riparian, California annual grassland, agriculture, and disturbed land). However, this species is not expected to forage in all 103,000 acres in the SCRW. Foraging sites are often located near rivers or lakes, as well as in coastal and inland wetlands.⁵⁹³

⁵⁸⁵ Guthrie, *Bird Surveys along the Santa Clara River, 2000*.

⁵⁸⁶ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

⁵⁸⁷ CDFG, *The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004* (2005).

⁵⁸⁸ Zeiner et al., *California's Wildlife: Volume II*.

⁵⁸⁹ Garrett and Dunn, *The Birds of Southern California*.

⁵⁹⁰ Stephenson and Calcarone, *Southern California Mountains and Foothills Assessment*.

⁵⁹¹ Zeiner et al., *California's Wildlife: Volume II*.

⁵⁹² UCSB, *California Gap Analysis Project*.

⁵⁹³ American Ornithologists' Union (AOU), *Checklist of North American Birds* (Washington, D.C.: American Ornithologists' Union, 1998); N.L. Brown, California State University Stanislaus, "Endangered Species Recovery Program," <http://esrp.csustan.edu/speciesprofiles/profile.php?sp=fape>; S.A. Snyder, Fire Effects Information System, U.S. Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, "*Falco peregrinus*,"

It is expected that foraging by this species in the SCRW would be concentrated along the Santa Clara River and adjacent upland habitats and agricultural areas. Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP area (which encompasses the Mission Village project site), would cause the loss of 4,815 acres of 103,000 acres of foraging habitat. Without accounting for past, present, or reasonably foreseeable mitigation, this could be a significant cumulative impact because several thousand acres of potential foraging habitat would be permanently lost and loss of habitat along the Santa Clara River would also affect the abundance and distribution of important prey such as waterfowl. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 3,515 acres, including approximately 680 acres of permanent and temporary disturbance to potential foraging habitat on the Mission Village project site. This contribution by the proposed Mission Village project to the overall potential significant impact in the SCRW could be cumulatively considerable, absent mitigation.

However, the American peregrine falcon only uses the proposed Mission Village project site and the larger RMDP/SCP project area for occasional foraging. It does not nest on site. Further, despite existing and anticipated projects in the watershed, approximately 98,000 acres of potentially suitable foraging habitat would remain in the SCRW, although most of its foraging in the watershed is expected to be concentrated within and adjacent to the Santa Clara River floodplain.

Without accounting for past, present, or reasonably foreseeable mitigation, secondary cumulative impacts from present and reasonably foreseeable projects in the SCRW, including the Mission Village project, could be significant. Such secondary impacts include increased human activity in developed areas and adjacent open space which could disrupt foraging activities, and use of pesticides which could cause poisoning. At the watershed level these secondary effects could be a potential significant cumulative effect. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR to offset project-level significant impacts to American peregrine falcon foraging habitat would result in a large, managed open space system (see **subsection 4.3.10**, Project Mitigation Measures). These mitigation measures include habitat preservation, restoration, enhancement, and management of the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area—areas that would form a large, contiguous open space system totaling approximately 6,300 acres comprised of riparian and upland habitats that provide foraging habitat for American peregrine falcon. This set-aside also would reduce potential long-term secondary effects, such as increased human activity,

<http://www.fs.fed.us/database/feis>.

because birds would have substantial alternative habitat in which to forage. Potential secondary poisoning from pesticides would be controlled through an integrated pest management (IPM) plan.

In addition to these mitigation measures which would reduce impacts at the project-level, this species is an occasional visitor and only expected to forage on the Mission Village project site and within the larger RMDP/SCP project area. This species is known to forage throughout the suitable habitat within the watershed and California. Its nesting is usually limited to areas with limited human disturbance. American peregrine falcon is known to forage within National Forest system lands within the watershed in association with rivers and lakes.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

California Condor (FE, CE, CFP). California condor populations exist in Arizona, Southern California, Utah, and northern Baja California.⁵⁹⁴ California condors are known to exist and nest in the Sespe Condor Sanctuary within the SCRW approximately 30 miles northwest of the proposed Mission Village project site. This species is extremely mobile with an extensive foraging range. The Sespe population of California condor has been known to forage over the Mission Village project site and larger RMDP/SCP project area. Surveys for the California condor were included as part of other raptor and avian species surveys that were conducted along the Santa Clara River and throughout upland areas of the RMDP/SCP project area.⁵⁹⁵ While California condor foraging flights have been known to take individuals over the Santa Clarita Valley, these flights are generally at high altitudes. Until April 2008, California condors had not been known to nest or land within the RMDP/SCP project area within the last 25 years.⁵⁹⁶ In April 2008, a California condor was observed feeding on a dead calf in a Potrero side canyon by Bloom Biological, Inc, wildlife biologist Chris Niemela⁵⁹⁷ (**Figure 4.3-26, RMDP/SCP – Listed and California Fully Protected Wildlife Species Occurrences**). The USFWS also provided information to Bloom

⁵⁹⁴ CDFG, *The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004*.

⁵⁹⁵ Bloom Biological, Inc., *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor*; Bloom Biological, Inc., *Interim Report of Winter Surveys*.

⁵⁹⁶ Bloom Biological, Inc., *Late Winter and Spring Avian Survey*; Bloom Biological, Inc., *Interim Report of Winter Surveys*.

⁵⁹⁷ M. Carpenter, Personal communication by M. Carpenter (Newhall Land and Farming Company) reporting that a California condor was observed feeding on a dead calf in a Potrero side canyon by wildlife biologist Chris Niemela in a Potrero side canyon (2008).

Biological, Inc. that California condors fitted with GPS transmitters had landed on Newhall Ranch on several days from April through July 2008.⁵⁹⁸ In January 2009, up to five California condors were detected feeding on a dead calf in the middle section of Potrero Canyon south of Potrero Mesa between January 27 and 30.⁵⁹⁹ A follow-up visit by Chris Niemela was conducted at the request of the USFWS to photodocument the calf carcass and site where the feeding occurred.

A review of the updated 2009 condor flight data provided by the USFWS shows that the Mission Village project site and the proposed mitigation lands in the High Country SMA, Salt Creek area, and River Corridor SMA are located under a commonly used California condor flight path between the Sespe Wilderness area to the northwest and the San Gabriel Mountains National Forest to the southeast of the Mission Village project site. In addition, California condors routinely overfly the project vicinity and are known to feed in portions of the larger RMDP/SCP area where grazing currently occurs and cattle carcasses are sometimes available. The data also suggest that condors will likely opportunistically feed on cattle carcasses or other large mammal carcasses (*e.g.*, mule deer) in the Mission Village project vicinity and proposed mitigation lands in the future. The review of the 2009 USFWS flight data, in addition to coordination with USFWS staff, also suggests that the condor is expanding its use of the region and can be expected to continue overflights of the Santa Clarita Valley and adjacent National Forests to the north and southwest of the Mission Village project site.

Specifically, the condor telemetry/GPS data flight data from the USFWS are available in three data ranges: April 20, 2002, to January 29, 2009; January 1, 2009, to July 30, 2009; and August 1, 2009, to August 31, 2009. There is minor overlap in the data during the month of January 2009. Between April 20, 2002, and January 29, 2009 (80,402 total points), 161 points (0.2 percent of the overall recorded points) representing 16 unique birds were recorded within the Newhall Ranch Specific Plan area, Salt Creek area, Entrada, Valencia Commerce Center, and Legacy. Between January 1, 2009, and July 30, 2009 (36,377 total points), 300 points (0.8 percent of the overall recorded points) representing 13 unique birds were recorded within the Newhall Ranch Specific Plan area, Salt Creek area, Entrada, Valencia Commerce Center, and Legacy. Between August 1, 2009, and August 31, 2009 (6,800 total points), no points were recorded within the Newhall Ranch Specific Plan area, Salt Creek area, Entrada, Valencia Commerce Center, and Legacy.

⁵⁹⁸ R.P. Root, "Acknowledgement of Request for Formal Consultation on the Proposed Newhall Ranch Specific Plan, Santa Clarita, Los Angeles County, California," letter from R.P. Root (USFWS) to A.O. Allen (USACE) (November 12, 2008).

⁵⁹⁹ C. Niemela, Memo from C. Niemela (Bloom Biological) to Jesse Grantham (USFWS) regarding observations of California condor in Potrero Canyon in January 2009 (March 11, 2009).

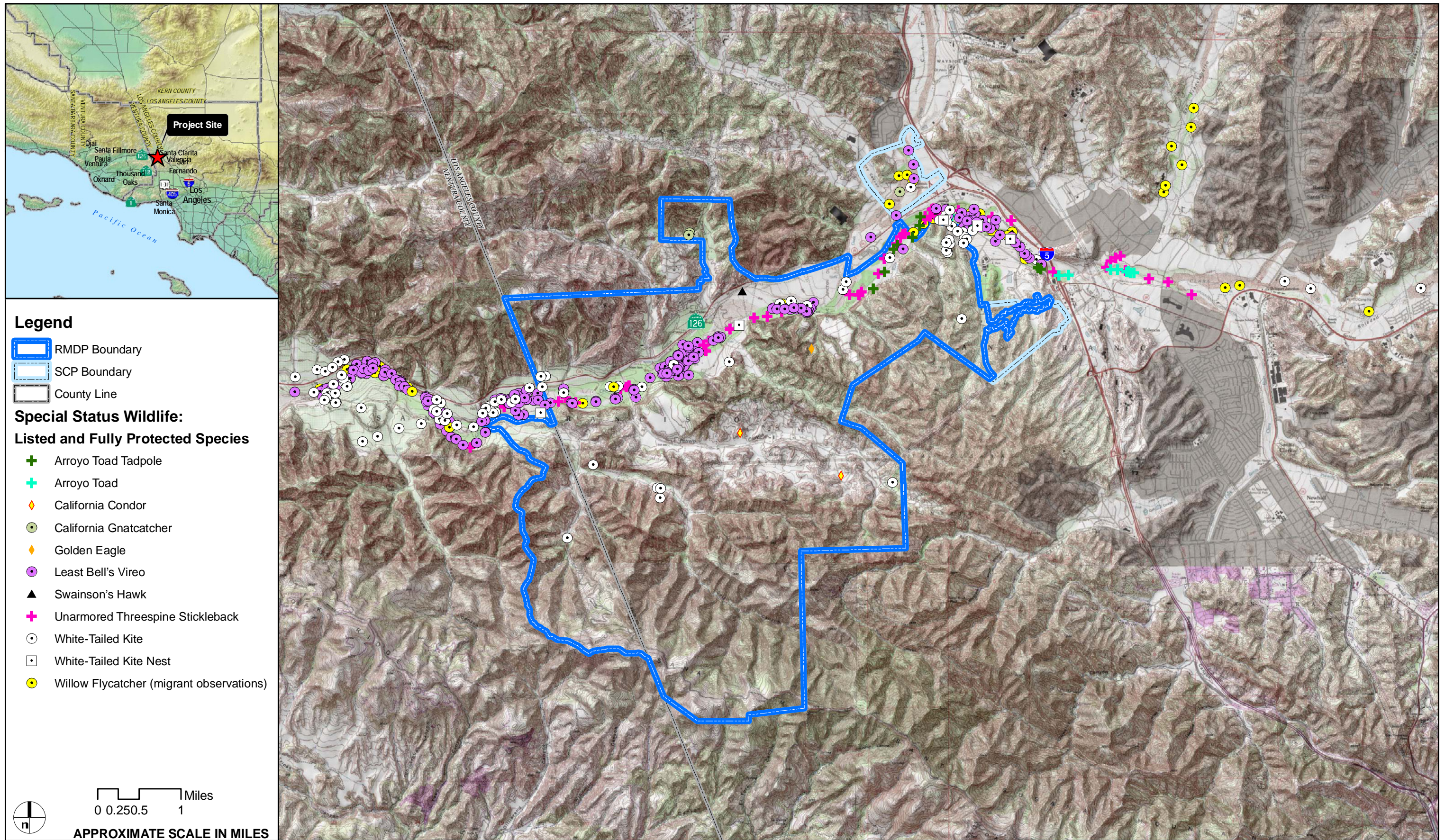


FIGURE 4.3-26

Mission Village EIR

RMDP/SCP - Listed and California Fully Protected Wildlife Species Occurrences

Critical habitat for the California condor was designated by the USFWS on September 22, 1977;⁶⁰⁰ however, no critical habitat was designated on the RMDP/SCP project area, which includes the Mission Village project site. The nearest critical habitat area is the Sespe-Piru Condor Area, 6 to 7 miles north of the RMDP/SCP project area. The California Condor Recovery Plan was published by the USFWS on February 26, 1980;⁶⁰¹ however, no recovery activities were identified for the RMDP/SCP project area or nearby vicinity.

The California condor requires habitat that contains an adequate food supply (carrion), open space areas, and reliable winds and air movement to allow for long-duration soaring during foraging. Nest habitat typically includes cliff faces and, occasionally, large tree snags with cavities. Condors are not expected to nest in the Mission Village project site or larger RMDP/SCP project area due to the general lack of adequate nesting habitat. They likely forage on the Mission Village project site only when an opportunity presents itself. To the extent condors use the other present and foreseeable future project sites analyzed here, such use is probably limited to occasional foraging. In general, these areas probably do not support large populations of large mammals (e.g., mule deer) across the broad landscape area or suitable nesting sites.

For these reasons, the proposed Mission Village, in combination with other present and foreseeable future projects, is not expected to result in a potential significant cumulative impact to this species due to the loss of foraging habitat.

The risk of direct injury or mortality of individual California condors due to construction activities associated with present and reasonably foreseeable projects, including the proposed Mission Village project, is low. However, construction debris, litter, leaking equipment, or road kill can attract this species to construction sites. This could subject condors to strikes by construction vehicles. Condors are curious birds and have been documented in close association with oil pumps and human activity on the Los Padres National Forest. During cleanup activities at trash sites, for example, condors have been observed sitting on guard rails adjacent to the cleanup activities. If individuals were injured or killed during construction activities, this could be a significant cumulative impact because the loss of any individuals of this species may reduce its chance for long-term survival in the wild. The contribution of the proposed Mission Village project to this potential significant cumulative impact could be cumulatively considerable, absent mitigation.

⁶⁰⁰ 42 FR 47840-47845.

⁶⁰¹ USFWS, *California Condor Recovery Plan* (Prepared by the USFWS in cooperation with the Recovery Team (S.R. Wilbur, D. Esplin, R.D. Mallette, J.C. Borneman, and W.H. Radtkey), 1980).

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed Mission Village project, also could result in secondary effects to the California condor. Adverse secondary effects to condors may occur as a result of the animal's collection of microtrash (i.e., broken glass, paper and plastic waste, small pieces of metal). This waste is often brought back to nest sites where young birds ingest the material. This can possibly lead to mortality of young birds. Ethylene glycol, a component in antifreeze and petroleum products can also be ingested by condors, which could possibly result in injury or mortality. Secondary impacts related to phone towers, power lines, and utility poles, could increase the potential for collisions; increased microtrash within residential and commercial areas, which has been known to attract and be ingested by California condors, causing sickness or possibly mortality; and the presence of various contaminants, such as radiator fluid, which have been known to be ingested by California condors, causing sickness or possibly mortality. At the watershed level these secondary effects could be a potential significant cumulative effect. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The California condor sporadically forages in the RMDF/SCP project area, potentially including the Mission Village project site, and possibly in other present and foreseeable future project sites, but nesting is not expected to occur. Nest habitat typically includes cliff faces and, occasionally, large tree snags with cavities. Condors are not expected to nest on the Mission Village project site or in the larger RMDF/SCP project area due to the general lack of adequate nesting habitat. Other past, present, and reasonably foreseeable projects also tend to be located in the lower elevations of the watershed that lack these necessary microhabitat features. It was determined above that the loss of habitat resulting from present and foreseeable future projects, including the proposed Mission Village project, would not be a significant cumulative impact. Potential foraging habitat is present in the upper regions of the High Country SMA/SEA 20 and Salt Creek area but would not be affected by the proposed Mission Village project or broader buildout of the Specific Plan, VCC, or Entrada planning areas. The mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR would result in a large, managed open space system (**subsection 4.3.10, Project Mitigation Measures**). Generally, protection, restoration and enhancement, and management habitat in the High Country SMA/SEA 20 and Salt Creek area would provide California condors with a large tract (5,720 acres) of relatively undisturbed habitat suitable for foraging. Although the number of cattle would be reduced in the project vicinity ongoing resource management using cattle would occur and deer herds would continue to use the High Country SMA/SEA 20 and Salt Creek area, providing foraging opportunities for condors.

To reduce or avoid potential construction-related injury or mortality of individuals, the Applicant would implement measures during construction to monitor for the presence of birds, and collect all litter, small items, vehicle fluids, and food waste from the Mission Village project site on a daily basis. Workers would be trained on the issue of microtrash; what it is, its potential effects to California condors, and how to avoid the deposition of microtrash. In the event California condors are observed landing in the construction area, all work activities shall be suspended until the bird has left the area.

To reduce long-term secondary impacts, limited recreational usage and access restrictions within the High Country SMA/SEA 20, control of pets in or near open space areas, trail signage, and homeowner education regarding special-status resources in preserved natural habitat areas would help protect California condors foraging in the High Country SMA/SEA 20 and Salt Creek area. Installation of new or relocation of existing phone and cell towers, power lines, and utility poles in the High Country SMA/SEA 20 and Salt Creek area would be coordinated with CDFG and structures would be designed in accordance with Avian Power Line Interaction Committee guidelines⁶⁰² and operated with anti-perching devices to help reduce collisions and electrocutions of California condors.

In addition to these mitigation measures which would reduce project-related construction and long-term impacts to California condor and provide foraging opportunities in the project vicinity (although on a more limited scale than currently exists), this species has an extremely large foraging range that spans the SCRW and beyond. California condors are frequently observed in National Forest system lands, but individuals opportunistically forage on dead cattle on large cattle ranches within the SCRW, including Newhall Ranch.⁶⁰³

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Coastal California Gnatcatcher (FT). Resident breeding populations of the coastal California gnatcatcher on the Mission Village project site or within the larger RMDP/SCP project area have not been documented during USFWS protocol-level focused surveys conducted between 1995 and 2007; however, individual

⁶⁰² Avian Power Line Interaction Committee (APLIC), *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (Washington, D.C. and Sacramento, California: Edison Electric Institute, APLIC, and the California Energy Commission, 2006).

⁶⁰³ J. Grantham, personal communication regarding foraging activities of condor in the Santa Clara River watershed, from J. Grantham (USFWS) to C. Huntley (Aspen) (March 25, 2009).

birds have been observed twice in the RMDP/SCP project area during the course of biological monitoring. One observation was in October 2007 in the VCC planning area and the other in August 2008 east of the Del Valle Training Center (which is just outside the RMDP/SCP project boundary, north of SR-126 and west of Chiquito Canyon). In both cases, the observed birds were considered dispersing individuals because no breeding gnatcatchers have been observed in the RMDP/SCP project area and the observations were made when dispersal would be expected to occur. Generally, there are few documented coastal California gnatcatcher populations in the SCRW. In addition to the two individuals reported in the RMDP/SCP project area, there were occurrences of individuals approximately 6 miles to the east in Plum Canyon in 1999, Golden Valley Road in 2001, and Golden Valley Ranch in 1997 (**Figure 4.3-27, California Gnatcatcher Observations and Habitat within the Greater Newhall Ranch Region**). The nearest observation of a coastal California gnatcatcher pair (assumed breeding pair observed in 1999) is in Chivas Canyon 3.6 miles to the south, but that location is outside the SCRW boundary and on the southern side of the Santa Susanna Mountains. The nearest relatively large breeding population is in Moorpark (15 occurrences) outside the SCRW, about 12 miles to the southwest of the RMDP/SCP project area and south of the Santa Susana Mountains

Based on these observations, the coastal California gnatcatcher is considered to be an irregular visitor to the Mission Village project area and larger RMDP/SCP project area in association with dispersal. Although the Mission Village project site appears to provide habitat for dispersal and nesting has not been documented during protocol-level surveys, it is unknown whether the site could support nesting populations of coastal California gnatcatcher in the future (e.g., whether there could be colonization of the site by breeding individuals).

On December 19, 2007, the USFWS published the Revised Designation of Critical Habitat for the coastal California gnatcatcher.⁶⁰⁴ The Revised Designation reduced the final critical habitat designation by 298,492 acres compared to the 2003 Proposed Rule. The Revised Designation included a re-evaluation of Unit 13 (which included the RMDP/SCP project area, and the USFWS determined that the portions of the Santa Clarita Valley including the RMDP/SCP project area, are “not essential to the conservation of the coastal California gnatcatcher.”⁶⁰⁵ The USFWS determined that the excluded area does not have the spatial configuration and primary constituent elements essential to the conservation of the species. Designated critical habitat (Unit 13) extends north to the southern boundary of Newhall Land that includes the High Country SMA/SEA 20, but the nearest proposed development zone in Potrero Canyon is approximately 2.2 miles north of the critical habitat boundary. No recovery plan for the coastal California gnatcatcher has been published.

⁶⁰⁴ 72 FR 72009–72213.

⁶⁰⁵ 72 FR 72013.



AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-27

Mission Village EIR

California Gnatcatcher Observations and Habitat within the Greater Newhall Ranch Region

Based on the California GAP data,⁶⁰⁶ there are approximately 174,000 acres of coastal scrub habitat that support, or have the potential to support, the coastal California gnatcatcher, at least during dispersal. Because of the few and scattered observations of the species in the SCRW, however, it is likely that the vast majority of coastal scrub habitat in the watershed is not used by the coastal California gnatcatcher. This vocal species is highly detectable within its breeding range, so most important breeding locations probably have been documented. In addition, especially in the higher elevations of the watershed, temperatures are, on average, much colder and conditions are wetter. Even in the main portion of this species' range in Southern California, 99 percent of occurrences are below 2,500 feet.⁶⁰⁷

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 20,000 acres of coastal scrub, although it is not expected that the coastal California gnatcatcher uses all of this habitat. Without accounting for past, present, or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of suitable habitat (including the proposed Mission Village project), this could be a significant cumulative impact on habitat that is suitable for the species. Because this federally-listed species occurs sporadically in the watershed and its selection of habitat for dispersal and potentially breeding in the SCRW is not understood, the relative value of coastal scrub habitat in the watershed for this species also is not known. Even a small loss of habitat in the SCRW, if located in a strategic area for dispersal or breeding, could have a substantial adverse effect on the coastal California gnatcatcher if it disrupted dispersal or breeding activities. The RMDP/SCP project's contribution to this potentially significant cumulative impact is 1,520 acres of coastal scrub, including approximately 667 acres of coastal scrub on the Mission Village project site, which would be permanently or temporarily disturbed. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed Mission Village project, could also result in long-term secondary impacts, including habitat fragmentation; wildfire; increased human activity; lighting; pesticides, which may cause secondary poisoning and loss of food resources; harassment by pet, stray, and feral cats and dogs and other mesopredators; and Argentine ants that may prey on nestlings. At the watershed level these secondary effects could be a significant cumulative effect. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

⁶⁰⁶ UCSB, *California Gap Analysis Project*.

⁶⁰⁷ 65 FR 63680.

Based on existing survey information, two dispersing coastal California gnatcatcher individuals have been documented in the RMDP/SCP project vicinity and nesting has not been observed. Approximately 154,000 acres of coastal scrub habitat would remain in the watershed, although how much of this habitat is suitable for dispersal or breeding is unknown. There is at least one breeding occurrence in the SCRW in Plum Canyon. In addition, mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR would result in a large, managed open space system (**subsection 4.3.10**, Project Mitigation Measures). The RMDP/SCP project also includes large mitigation areas in the High Country SMA/SEA 20 and Salt Creek area that would conserve approximately 1,940 acres of coastal scrub and would allow for dispersal by coastal California gnatcatchers.

Long-term secondary impacts would be minimized through several mitigation measures in addition to the preservation of 1,940 acres of suitable habitat in the High Country SMA/SEA 20 and Salt Creek area. Lighting restrictions along the perimeter of natural areas would help reduce predation of nest sites by predators and reduce behavioral disturbances and physiological stress. Limited recreational usage and access restrictions within the High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect coastal California gnatcatchers by allowing them to nest and forage without disturbance. Controls on pesticides would reduce the chance of direct and secondary poisoning and loss of food sources.

The coastal California gnatcatcher has not been observed nesting in the RMDP/SCP project area and only one breeding occurrence has been documented in the SCRW. Although suitable habitat is present in the RMDP/SCP project area, it is unknown why this species does not breed on site. Dispersal through the RMDP/SCP project area would not be precluded and this species is still relatively common in the main portion of its range, south of the RMDP/SCP project area.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

California Red-Legged Frog (FT). The California red-legged frog has not been observed on the proposed Mission Village project site or larger RMDP/SCP project area during the numerous wildlife surveys conducted since 1992. The species is believed to be absent from the Mission Village project region. The

San Marino Environmental Associates report⁶⁰⁸ states that Thomas Haglund observed red-legged frogs in the mid-1970s in the Santa Clara River at Fillmore and that “this may represent the last sighting of this species in the Santa Clara River.”⁶⁰⁹ The Museum of Vertebrate Zoology⁶¹⁰ lists 17 specimens from Soledad Canyon (Santa Clara River channel) in its collection from as recently as 1953 (more precise locality data are unavailable). The California Academy of Sciences⁶¹¹ also lists a Soledad Canyon specimen, from 1950. The nearest specific locality upstream of the Mission Village project area is approximately 15 miles away, near the confluence with Agua Dulce Creek. Jennings and Hayes⁶¹² and the CNDDDB indicate that this species still occurs in the SCRW in sites along San Francisquito Creek 5 to 10 miles northeast of the RMDP/SCP project area, and in tributaries to the Santa Clara River in Ventura County. The closest documented Ventura County occurrence is in Piru Creek 4.5 miles north of the community of Piru,⁶¹³ about 7 miles northwest of the RMDP/SCP project area. San Marino Environmental Associates⁶¹⁴ also cite a personal communication from Sam Sweet reporting sighting of red-legged frogs in Piru Creek, but no date for the observation(s) is provided. San Marino Environmental Associates⁶¹⁵ suggested that it probably has a low probability of colonizing the RMDP/SCP area because of the relatively long distances to extant occurrences within tributaries upstream and downstream of the RMDP/SCP area. No designated critical habitat units for the California red-legged frog include any portion of the proposed Mission Village project site or larger RMDP/SCP project area. The nearest critical habitat unit is upstream in the San Francisquito Creek (LOS-1) Unit, which is located approximately 5 miles northeast of the RMDP/SCP area. This distance, coupled with the existing stream conditions in San Francisquito Creek (i.e., dry gaps, absence of flowing water during most of the year), likely limit the potential for this species to disperse through RMDP/SCP area, including the Mission Village project site. Furthermore, existing hydrologic conditions in the Santa Clara River probably limit its potential to establish breeding sites in the River adjacent to the Mission Village project site. California red-legged frogs generally avoid large river channels with widely fluctuating flows, because such habitat usually

⁶⁰⁸ SMEA, *Sensitive Aquatic Species Survey*.

⁶⁰⁹ SMEA, *Sensitive Aquatic Species Survey*, 37.

⁶¹⁰ University of California, Berkeley, Online Data Access. Museum of Vertebrate Biology, <http://mvz.berkeley.edu/>. 2003.

⁶¹¹ California Academy of Sciences (CAS), California Academy of Sciences Department of Herpetology Collections Catalogue, 2003.

⁶¹² M.R. Jennings and M.P. Hayes, *Amphibian and Reptile Species of Special Concern in California* (Rancho Cordova, California, 1994).

⁶¹³ USFWS, *Biological Opinion for the Natural River Management Plan, Santa Clarita, Los Angeles County, California* (2002).

⁶¹⁴ SMEA, *Sensitive Aquatic Species Survey*.

⁶¹⁵ SMEA, *Sensitive Aquatic Species Survey*.

does not permit reproductive activity.⁶¹⁶ For example, episodic winter flooding typical of the Santa Clara River may dislodge egg masses. Further, fluctuating water levels before summer typical of the Santa Clara River could kill tadpoles before they could metamorphose. Given these characteristics, other portions of the Santa Clara River within the larger RMDP/SCP project area are also not expected to provide breeding habitat for the species.

Critical habitat was originally designated for the California red-legged frog in 2006,⁶¹⁷ but revised critical habitat was proposed in September 2008 to better characterize those areas containing essential features for the species.⁶¹⁸ Based on the proposed revised critical habitat designation, two critical habitat units are in the SCRW: the 4,231-acre San Francisquito Creek (LOS-1) Unit located approximately 5 miles northeast of the RMDP/SCP project area, and the 8,837-acre Piru Creek (VEN-2) Unit located 7 miles northwest of the RMDP/SCP project area. These two critical habitat units were not changed in the 2008 proposed revision. Three other critical habitat units were designated in Ventura County in the proposed revision: the 2,915-acre San Antonio Creek (VEN-1) Unit; the 5,000-acre Upper Las Virgenes Canyon (VEN-3) Unit; and the eastern portion of the 145,121-acre Upper Santa Ynez River and Matilija Creek, which overlaps with the western portion of Ventura County. These three other critical habitat areas are outside the SCRW. No designated critical habitat units for the California red-legged frog include any portion of the RMDP/SCP project site. The Recovery Plan for the Red-legged Frog was published by the USFWS on May 28, 2002.⁶¹⁹ In Recovery Unit 7, a core area is identified as the Ventura River-Santa Clara River. However, the portion of the Santa Clara River within the RMDP/SCP project area is not in this core area and is not included in the Recovery Plan.⁶²⁰

Although the SCRW, including the Mission Village project site, is within the potential distribution of the California red-legged frog, the species is not likely to colonize the project site because it has limited long-distance dispersal capabilities, the distances to extant upstream and downstream locations are relatively long, and existing hydrologic conditions are not conducive to breeding. However, for the purpose of this cumulative analysis, it is assumed that there is some potential for the species to use the Mission Village project site and larger RMDP/SCP project area for dispersal and breeding.

⁶¹⁶ M.P. Hayes and M.R. Jennings, "Habitat Correlates of Distribution of the California Red-Legged Frog (*Rana aurora draytonii*) and the Foothill Yellow-Legged Frog (*Rana boylei*): Implications for Management," in *Proceedings of the Symposium on the Management of Amphibians, Reptiles, and Small Mammals in North America*, technical coordinators R. Sarzo, K.E. Severson, and D.R. Patton (1988), 144–158.

⁶¹⁷ 71 FR 19244–19346.

⁶¹⁸ 73 FR 53492–53680.

⁶¹⁹ USFWS, *Recovery Plan for the California Red-Legged Frog (Rana aurora draytonii)* (Portland, Oregon: USFWS, Region 1, 2002).

⁶²⁰ USFWS, *Recovery Plan for the California Red-Legged Frog*.

Based on the California GAP data,⁶²¹ there are approximately 25,000 acres of riparian habitat in the SCRW. However, not all 24,000 acres support California red-legged frogs or could be reasonably expected to support them. As noted above, the documented distribution of the California red-legged frog in the SCRW is very scattered and confined to a few locations.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (which encompasses the Mission Village project site), would cause the loss of 1,030 acres of 25,000 acres of riparian habitat. Without accounting for past, present, or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of riparian habitat in the SCRW could result in a potential significant impact on potential habitat for the California red-legged frog. However, as described above, the permanent loss of riparian habitat from present and reasonably foreseeable projects would be reduced by CDFG and Corps mitigation requirements consistent with their policies for no net loss of wetlands (although net functions and values/services of wetland habitats may be reduced⁶²²). The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 230 acres, including approximately 89 acres of riparian habitat on the Mission Village project site that would be permanently or temporarily disturbed. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed Mission Village project, could also result in potential long-term secondary effects, including increased human activity; habitat degradation and collection; lighting invasive species, including Argentine ant and invasive plants such as giant reed; pet, stray, and cats and feral dogs; vehicle collisions; and use of pesticides. At the watershed level these secondary effects could be a significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

Both the Newhall Ranch Specific Plan Program EIR and this EIR recommend extensive mitigation measures that protect riparian habitat and establish a large, managed open space system (**subsection 4.3.10, Project Mitigation Measures**). These measures would reduce impacts to the California red-legged frog, if it were to colonize the Mission Village project area in the future. These mitigation measures include preservation, restoration, and enhancement of riparian and wetland habitat. Large areas of

⁶²¹ UCSB, *California Gap Analysis Project*.

⁶²² Ambrose, Callaway, and Lee, *An Evaluation of Compensatory Mitigation Projects Permitted Under Clean Water Act Section 401 by the California State Water Quality Control Board, 1991–2002*.

suitable habitat for this species would be protected in the River Corridor SMA/SEA 23. The Floodplain Hydraulics Impacts Assessment⁶²³ found that there would be no significant impacts in water flows, velocities, depth, sedimentation, or floodplain and channel conditions downstream of the Mission Village project area over the long term as a result of the proposed project improvements (although, as noted above, existing hydrologic conditions probably are not conducive to breeding by this species).

The River Corridor SMA/SEA 23 would provide a large, protected open space area that would help also offset long-term secondary impacts. Several specific mitigation measures would also be implemented to control human activities in the River Corridor SMA/SEA 23, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting along the open space-urban interface would be downcast. Pesticides would be controlled through an integrated pest management (IPM) plan. Argentine ant invasions of upland habitats in the open space system would be monitored and controlled to the extent feasible. Implementation of these measures would allow this species to persist on site after development in the River Corridor SMA/SEA 23 if it were to colonize the site in the future.

In addition to these measures, which would reduce project-related impacts to this species, California red-legged frog has not been documented within the Mission Village project site or larger RMDP/SCP area and the nearest known occurrences are 5 and 7 miles away from the RMDP/SCP project area, respectively.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Golden Eagle (CFP). The golden eagle has been occasionally observed during the annual bird surveys conducted from 1988 through 2008 along the Santa Clara River within the riparian scrub and woodland habitat in the RMDP/SCP project area. Off site, this species was observed along the Santa Clara River east and west of the RMDP/SCP area. No nesting has been observed on the Mission Village project site or within the RMDP/SCP project area. In winter 2008, one juvenile and one pair was seen in upper Potrero Canyon west of the Mission Village project site, and it is believed that this is likely a resident pair, but no nest site has been identified to date.⁶²⁴ In addition, in March 2008 a helicopter survey was conducted

⁶²³ PACE, *Floodplain Hydraulics Impacts Assessment - Santa Clara River*.

⁶²⁴ Bloom Biological, Inc., *Interim Report of Winter Surveys*.

over Newhall Land property to search for raptor nests on cliffs and in steep canyons, with the focus on upland areas of the ranch. One active golden eagle nest was located off Newhall Land property on a north-facing cliff at the top of Dewitt Canyon, which is a drainage off Pico Canyon. In fall 2008 two golden eagles were observed resting on a rugged outcrop in the upper portion of the Salt Creek area in Ventura County.⁶²⁵ The CNDDDB contains three records for past nest sites for the golden eagle in Los Angeles County and two records for Ventura County, but none of the occurrences are in the SCRW—four of the five are in the Santa Monica Mountains and one is in the Tehachapi Mountains. The SCRW supports a large amount of potential nesting and foraging habitat for the golden eagle, especially in the Los Padres National Forest, and in the RMDP/SCP area, within the preserved areas of the High Country SMA/SEA 20 and Salt Creek area.

Based on the California GAP data,⁶²⁶ within the SCRW there are approximately 257,000 acres of suitable nesting and foraging habitat (California annual grassland, agriculture, disturbed land, coastal scrub, and oak woodland) for the golden eagle, although it cannot be assumed that golden eagles actually use all 257,000 acres. Foraging territories are related to nest locations, prey density and availability, and the openness of terrain. Even though home ranges, which probably reflect an individual's total foraging territory, can be large, individuals focus their activity in a smaller core area that provide these resources.⁶²⁷ Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP area (which encompasses the Mission Village project site), would cause the loss of approximately 24,000 acres of 257,000 acres of suitable nesting and foraging habitat. It is assumed for this analysis that some of this habitat could occur in core activity areas, the loss of which could alter the individual's use of its territory and potentially cause nest abandonment. Without accounting for past, present or reasonably foreseeable mitigation (particularly for upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of habitat in the SCRW potentially would result in a potential significant cumulative impact on suitable habitat for the golden eagle. The RMDP/SCP project's contribution to this potentially significant cumulative impact is 4,905 acres, including approximately 1,356 acres on the Mission Village project site that would be permanently or temporarily disturbed. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

⁶²⁵ D. Bedford, "Eagle Sightings in High Country," email from D. Bedford (CDFG) to C. Huntley (Aspen), P. Behrends (Dudek), and Matt Carpenter (Newhall Land) (March 5, 2009).

⁶²⁶ UCSB, *California Gap Analysis Project*.

⁶²⁷ J.M. Marzluff et al., "Spatial Use and Habitat Selection of Golden Eagles in Southwestern Idaho," *Auk* 114 (1997), 673–687.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed Mission Village project, also could result in potential long-term secondary effects, including an increased potential for collisions with phone towers, power lines, and utility poles, resulting in physical injury or death as a result of the collision or from electrocution. Reproductive success also could be affected by increased noise; lighting; pesticides that may cause secondary poisoning and loss of prey; human disturbances of nest sites; and pet, stray, and feral cats and dogs. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would result in a large, managed open space system comprised of the High Country SMA/SEA 20, Salt Creek area, and River Corridor SMA/SEA 23 that provides approximately 4,070 acres of suitable foraging and nesting habitat for the golden eagle. This open space system would also help protect the golden eagle from long-term secondary impacts, such as collisions with phone towers, power lines, and utility poles, and “edge effects” caused by human activity. Several specific mitigation measures for long-term secondary effects would also be implemented. Lighting restrictions along the perimeter of natural areas would help reduce impacts to potential nest sites. Limited recreational usage and access restrictions within the High Country SMA/SEA 20, control of pet, stray, and feral cats and dogs in or near open space areas, trail signage, and homeowner education regarding special-status resources in preserved natural habitat areas would help protect golden eagles during foraging activities and potential nest sites. Controls on pesticides (including rodenticides) would reduce the chance of accidental poisoning and potential loss of prey. Installation of new or relocation of existing phone and cell towers, power lines, and utility poles in the High Country SMA/SEA 20 and Salt Creek area would be coordinated with CDFG and structures would be designed in accordance with Avian Power Line Interaction Committee guidelines⁶²⁸ and operated with anti-perching devices to help reduce collisions and electrocutions of golden eagles.

In addition to these measures, which would reduce project-related impacts to this species, golden eagle is known to occur within much of the watershed, including National Forest system lands. While this species has not been documented to nest within the RMDP/SCP project area, the RMDP/SCP project would not impede use of the High Country SMA/SEA 20 and Salt Creek area or other open space within the watershed for foraging or nesting.

⁶²⁸ APLIC, *Avian Protection on Power Lines*.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Least Bell's Vireo (FE, CE). The least Bell vireo's breeding distribution extends to eight California counties: Imperial, Kern, Los Angeles, Riverside, Santa Barbara, San Bernardino, San Diego and Ventura.⁶²⁹ About half of the least Bell vireo in California occur at Camp Pendleton in San Diego County.⁶³⁰ The least Bell's vireo nests in moderate numbers in the SCRW. The USFWS⁶³¹ conducted a 5-year status review of the least Bell's vireo that compiled comprehensive survey data for 5-year increments from 1977 to 2005, and from which the USFWS estimated least Bell's vireo territories.⁶³² An estimated 173 territories occurred in Los Angeles and Ventura counties as of 2006, which accounted for about 6 percent of the estimated total of 2,968 territories in California (**Table 4.3-25**).⁶³³ Of the 173 territories in Los Angeles and Ventura counties, 119 (69 percent) occur in the Santa Clara River population unit identified in the Draft Recovery Plan.⁶³⁴ Annual survey data have been collected for the least Bell's vireo along the Santa Clara adjacent to and in the vicinity of the Mission Village project site between 1988 and 2007. Regularly surveyed areas include the Specific Plan and VCC planning areas and a portion of the Entrada planning area, as well as adjacent areas of Newhall Land property from the Las Brisas Bridge crossing on the west in Ventura County to I-5 on the east. Least Bell's vireo, including breeding pairs, territorial males, and/or nests, have been observed almost every year along the Santa Clara River within the Specific Plan area, and over multiple years within the VCC planning area and adjacent to the RMDP/SCP project area in Castaic Junction in riparian scrub habitat (**Figure 4.3-28, Least Bell's Vireo Critical Habitat in Santa Clara River Critical Habitat Unit**). While consistently observed between 1988 and 2007, vireos exhibit annual fluctuations in levels of occupancy and breeding activity in the Santa Clara River. There is one least Bell's vireo occurrence in the Santa Clara River between Middle Canyon and Dead-End Canyon from the 2004-

⁶²⁹ CDFG, *The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004*.

⁶³⁰ CDFG, *The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004*.

⁶³¹ USFWS, *Least Bell's Vireo (Vireo bellii pusillus), 5-Year Review Summary and Evaluation* (Carlsbad, California: USFWS, Carlsbad Fish and Wildlife Office, 2006).

⁶³² It should be noted that these data represent a minimum estimate of least Bell's vireo territories because they are a composite of multiple surveys covering different reaches and may exclude large stretches of suitable habitat that were not surveyed ("*USFWS, Least Bell's Vireo, 5-Year Review Summary and Evaluation*"); in other words, these data do not represent a single snapshot of the entire occupied vireo range.

⁶³³ USFWS, *Least Bell's Vireo, 5-Year Review Summary and Evaluation*.

⁶³⁴ USFWS, *Draft Recovery Plan for the Least Bell's Vireo (Vireo bellii pusillus)* (Portland, Oregon: USFWS, Region 1, 1998).

2007 survey period and several occurrences in the River northeast of Airport Mesa to I-5. While the Mission Village project site supports potential riparian nesting habitat for least Bell's vireo, the large majority of this potential habitat, primarily southern cottonwood-willow riparian, is within the Santa Clara River portion of the site and would not be developed or directly disturbed. The riparian vegetation within the tributaries on the project site subject to development is less suitable as nesting habitat for this species because the riparian zones tend to be narrower (i.e., smaller patch sizes). This is illustrated in **Figure 4.3-4-A3** where a narrow, linear patch of southern cottonwood-willow riparian extends into the lower portions of Middle Canyon, compared to the wide swaths of the riparian in the Santa Clara River.

Table 4.3-25
Estimate of Least Bell's Vireo Territories by County¹

| Estimate of Least Bell's Vireo Territories (and Percentage of the Total Population) for a Given Range of Years² | | | | | |
|---|------------------------------|------------------|------------------|------------------|------------------|
| County | 1977–1985³ | 1986–1990 | 1991–1995 | 1996–2000 | 2001–2005 |
| San Diego ⁴ | 223 (77%) | 401 (76%) | 1,118 (78%) | 1,899 (76%) | 1,609 (54%) |
| Riverside ⁵ | 29 (10%) | 50 (9%) | 223 (16%) | 395 (16%) | 898 (30%) |
| Orange | 1 (<1%) | 3 (1%) | 16 (1%) | 68 (3%) | 177 (6%) |
| San Bernardino | 0 (0%) | 2 (<1%) | 5 (<1%) | 20 (1%) | 87 (3%) |
| Los Angeles | 6 (2%) | 1 (<1%) | 4 (<1%) | 13 (1%) | 56 (2%) |
| Ventura ⁶ | 5 (2%) | 8 (2%) | 35 (2%) | 86 (3%) | 117 (4%) |
| Santa Barbara ⁷ | 26 (9%) | 57 (11%) | 32 (2%) | 12 (<1%) | 12 (<1%) |
| Inyo | 0 (0%) | 4 (1%) | 5 (<1%) | 0 (0%) | 11 (<1%) |
| Kern | 0 (0%) | 0 (0%) | 1 (<1%) | 0 (0%) | 0 (0%) |
| Monterey | 0 (0%) | 3 (1%) | 0 (0%) | 0 (0%) | 0 (0%) |
| San Benito | 1 (<1%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Stanislaus | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (<1%) |
| Total | 291 | 529 | 1,439 | 2,493 | 2,968 |
| <i>Percent Increase from Previous Period</i> | — | 82% | 172% | 73% | 20% |
| <i>Percent Increase since Listing</i> | — | 82% | 394% | 753% | 920% |

¹ Reproduced from USFWS, *Least Bell's Vireo, 5-Year Review Summary and Evaluation*.

² Estimates based on composite of surveys across the specified range of years.

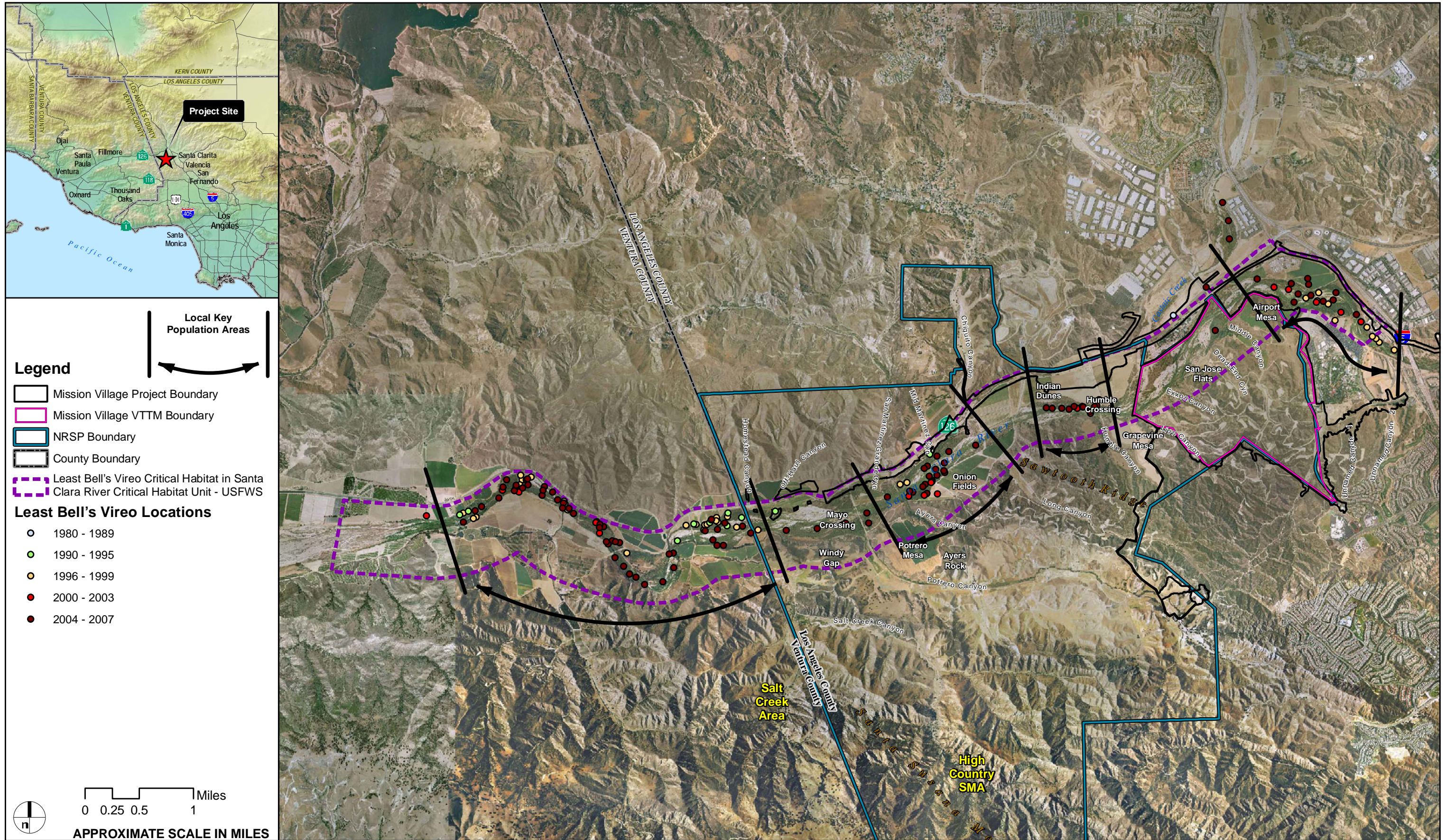
³ From the original listing (51 FR 16474).

⁴ Approximately 50 percent or greater from Camp Pendleton.

⁵ Approximately 90 percent or greater from the Santa Ana River and its tributaries.

⁶ Approximately 90 percent or greater from the Santa Clara River.

⁷ Approximately 90 percent or greater from the Santa Ynez River.



AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-28

Mission Village EIR

Least Bell's Vireo Critical Habitat in Santa Clara River Critical Habitat Unit

The USFWS made a final critical habitat designation for the least Bell's vireo on February 2, 1994.⁶³⁵ The USFWS vireo critical habitat designation covers approximately 38,000 acres at 10 different locations in six counties in Southern California: Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego. The RMDP/SCP project site includes a portion of the Santa Clara River critical habitat unit located in Ventura and Los Angeles counties (**Figure 4.3-28**). The Santa Clara River unit includes all land within a 3,500-foot-wide zone along the Santa Clara River south of State Route 126 (SR-126) from a point approximately 2.3 miles east of the intersection of Main Street and SR-126 in Piru on the west to the intersection of SR-126 and The Old Road and eastward and southward along The Old Road to its intersection with Rye Canyon Road. The Santa Clara River critical habitat unit comprises approximately 4,410 acres (approximately 12 percent) of the total 38,000 acres of least Bell's vireo critical habitat. Of this, least Bell's vireo critical habitat within the RMDP/SCP project area totals 2,252 acres (**Figure 4.3-28**). However, 405 acres of the 2,252-acre least Bell's vireo critical habitat designation within the RMDP/SCP project area consists of primary constituent elements of vireo critical habitat.

A Draft Recovery Plan for the Least Bell's Vireo (*Vireo bellii pusillus*) was published by the USFWS in 1998.⁶³⁶ The recovery strategy focuses on two major causes of decline of the species: (1) habitat loss and degradation, and (2) brown-headed cowbird parasitism. The Draft Recovery Plan identified 14 vireo "population/metapopulation units," including the Santa Clara River population unit. The Draft Recovery Plan does not identify the geographic limits of the Santa Clara population unit, simply stating that "habitat for the [vireo] occurs in patches along much of the river, with location and quality varying from year to year as conditions in the river change following winter storm events."⁶³⁷

Fourteen federal biological opinions were issued for the least Bell's vireo between 1993 and 2006 in the SCRW (**Table 4.3-19**). CDFG has recently issued four take authorizations for least Bell's vireo in the general regional vicinity of the RMDP/SCP project (**Table 4.3-20**).

Based on the California GAP data,⁶³⁸ there are approximately 25,000 acres of riparian habitat in the SCRW. However, not all 25,000 acres support least Bell's vireos or could be reasonably expected to support them. Because the vireo primarily is limited to the Santa Clara River within the watershed, it is likely that a relatively large proportion of riparian habitat in the SCRW is not occupied because it does not support the primary constituent elements of vireo habitat. As described above, the reach of the Santa

⁶³⁵ 59 FR 4845.

⁶³⁶ USFWS, *Draft Recovery Plan for the Least Bell's Vireo*.

⁶³⁷ USFWS, *Draft Recovery Plan for the Least Bell's Vireo*, 58.

⁶³⁸ UCSB, *California Gap Analysis Project*.

Clara River within the RMDP/SCP area consistently has supported a breeding population since surveys began in 1988 and is designated critical habitat for this species.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, (encompassing the Mission Village project site) would cause the loss of 1,030 acres of the 25,000 acres of riparian habitat within the watershed; however, the proportion of occupied least Bell's vireo habitat that could be impacted by development is probably substantially higher because most occupied habitat is probably in the Santa Clara River and the larger tributaries where development pressure is higher. Smaller and more remote drainages that support riparian habitat, but which is less likely to be occupied by the vireo, probably are under less development pressure. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be a significant cumulative impact on potential habitat for the least Bell's vireo. However, as described above, the permanent loss of riparian habitat from past, present, and reasonably foreseeable cumulative development would be reduced by CDFG and Corps mitigation requirements consistent with their policies for no net loss of wetlands (although net functions and values/services of wetland habitats may be reduced⁶³⁹). The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 230 acres, including approximately 5 acres of permanent disturbance and 25 acres of temporary disturbance of southern willow scrub and southern cottonwood-willow riparian on the Mission Village project site. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed Mission Village project, also could result in potential long-term secondary effects, including nest parasitism by cowbirds; traffic noise; nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. Habitat quality for the least Bell's vireo could be reduced by diminished water quality and invasion by exotic plant species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

⁶³⁹ Ambrose, Callaway, and Lee, *An Evaluation of Compensatory Mitigation Projects Permitted Under Clean Water Act Section 401 by the California State Water Quality Control Board, 1991–2002.*

The mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures) would protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to the least Bell's vireo. This mitigation would result in the preservation and management of at least 332 acres of suitable habitat, primarily in the River Corridor SMA/SEA 23, that would be available for future breeding populations of least Bell's vireo. These mitigation measures also include restoration and enhancement of riparian and wetland habitat. Specific measures to reduce secondary impacts include controls on public access; invasive species controls; conformance with permits from federal and state agencies for impacts to wetlands and water quality (i.e., NPDES and section 401 Permits); lighting controls; pesticides controls; and cowbird trapping.

In addition to site-specific mitigation measures, and mitigation anticipated for other present and reasonably foreseeable project impacts to achieve the no net loss of riparian acreage, recent population estimates for the vireo indicate that the breeding populations are expanding both in range and size as a result of restoration and enhancement of riparian habitat and management of brown-headed cowbirds.⁶⁴⁰ Within the watershed breeding vireo occur both upstream and downstream of the Mission Village project site and larger RMDP/SCP area in areas that would not be subject to disturbance of present and reasonably foreseeable projects.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Ringtail Cat (CFP). The ringtail cat was not observed on the Mission Village site or larger RMDP/SCP area during track/scent station monitoring for mammals or during numerous wildlife surveys conducted in the Specific Plan area. The nearest recent documented occurrence of ringtail cat is a 2007 observation in Elderberry Canyon approximately 0.5 mile above Castaic Dam in a narrow, rocky canyon.⁶⁴¹ There are also two recorded occurrences of ringtail cat in Los Angeles County: in the Santa Monica Mountains and on the southern flank of the San Gabriel Mountains.⁶⁴² If this species occurs in the SCRW, it is most likely to occur in canyons and ravines associated with water sources and riparian and woodland habitats,

⁶⁴⁰ USFWS, *Least Bell's Vireo, 5-Year Review Summary and Evaluation*.

⁶⁴¹ C. Huntley, "Re: Rare plant locations for *Juncus* and ringtail," email from C. Huntley (Aspen) to M. Carpenter (Newhall Land) (January 19, 2009).

⁶⁴² L. Belluomini, "Status of Ringtail in California," (California Department of Fish and Game, 1980).

including lower elevation oak woodlands, higher elevation coniferous forests, and juniper and pinyon woodlands.

Based on the California GAP data,⁶⁴³ habitat within the SCRW considered suitable for ringtail cats consists of approximately 25,000 acres of riparian habitat. However, habitat used by ringtail cats is strongly associated with microhabitats that include perennial water sources, rocky outcrops in canyons, tree cavities, etc. Although there have been few observations of ringtail cats in the region, this species could occur within suitable habitat within the watershed. It is likely that most of this potentially suitable habitat is not occupied, probably due to a lack of the microhabitat elements necessary for occupation, such as permanent water sources.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of 1,030 acres of 25,000 acres of riparian habitat. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be a significant cumulative impact on potential habitat for the ringtail cat. The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 230 acres, including approximately 89 acres of riparian habitat on the Mission Village project site that would be permanently or temporarily disturbed. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects including increased human activity; habitat fragmentation; increased vehicle collisions; nighttime lighting; increased predation; and pesticides. If the ringtail were present, at the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would reduce these impacts to a less than significant level. Specifically, approximately 1,170 acres of potentially suitable habitat for this species would be preserved and managed in a large open space system composed of the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area. Not all 1,170 acres of potentially suitable habitat would contain the microhabitats typically used by the ringtail, but if the

⁶⁴³ UCSB, *California Gap Analysis Project*.

species is present on site, it would be within the 1,170 acres. Several specific mitigation measures would also be implemented to reduce potential long-term secondary effects, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. Pesticides, including rodenticides, would be controlled through an integrated pest management (IPM) plan.

In addition to these measures, which reduce project-related impacts, this species has not been identified on the Mission Village project site or within the larger RMDP/SCP area and is not expected to occur on the project site. Ringtail cat is expected to occur within the SCRW, but only in association with its required microhabitats. Where this species has been observed within the SCRW, it occurs within National Forest system lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Southern Steelhead (FE). The range of the southern steelhead is from the Santa Maria River along the San Luis Obispo-Santa Barbara County line in the north to the Tijuana River just north of the U.S.-Mexico border in the south. Its historic range within many of these coastal streams was limited by natural barriers, above which no known Southern California populations of native rainbow trout or steelhead previously existed. Definitive records of southern steelhead are not available for many of the small coastal streams within the Southern ESU; however, it is believed that most of the streams were inhabited by the species. The distribution of southern steelhead within the ocean is not well known, but some evidence indicates that they remain relatively close to the coast and even near the mouths of their natal streams which contrasts with other Pacific salmonid species that range widely in the ocean.⁶⁴⁴

The southern steelhead has been recorded within the last decade in Ventura County in the Santa Clara River and the Ventura River. Within the Santa Clara River drainage, southern steelhead historically inhabited Piru Creek, Sespe Creek, Santa Paula Creek, Hopper Creek, and possible Pole Creek.⁶⁴⁵ Presently, southern steelhead occur in the Santa Clara River watershed in Piru Creek between the confluence with the Santa Clara River and Santa Felicia Dam; in Sespe Creek; in Santa Paula Creek; and

⁶⁴⁴ National Marine Fisheries Service (NMFS), *Federal Recovery Outline for the Distinct Population Segment of Southern California Coast Steelhead* (NMFS, Southwest Regional Office, 2007).

⁶⁴⁵ Titus, Erman, and Snider, *History and Status of Steelhead*.

possibly Hopper and Pole Creeks.⁶⁴⁶ There is no historic record of steelhead use of the Santa Clara River or tributaries upstream of Piru Creek and the Dry Gap approximately 5 miles downstream of the RMDP/SCP area.

The southern steelhead was listed as federally endangered in 1997 in the Southern Evolutionarily Significant Unit (ESU) that extends from the Santa Maria River in the north southward to Malibu Creek without Critical Habitat.⁶⁴⁷ In 2002 the range of the Southern California ESU was extended south to the United States-Mexico Border.⁶⁴⁸ In 2005, USFWS issued a Final Rule designating Critical Habitat Designation for the Southern California Coast ESU.⁶⁴⁹ In 2006 the endangered status of the southern steelhead was re-affirmed for 10 Distinct Population Segment (DPS) of West Coast Steelhead.⁶⁵⁰

In the Santa Clara River watershed, designated critical habitat includes the Santa Clara River and its tributaries from Piru Creek (below Santa Felicia Dam) to the Santa Clara River confluence and downstream to the Pacific Ocean. The upstream extent of designated critical habitat is approximately 5 miles downstream of the RMDP/SCP area in Ventura County, California.

A Recovery Plan for southern steelhead, as required by the FESA, has not been published to date. However, a Southern California ESU recovery team has been formed and is currently working on a draft Recovery Plan for southern steelhead within the Santa Clara River and the Southern California ESU. In September 2007, a Federal Recovery Outline for the DPS of southern steelhead was released.⁶⁵¹

The project-level impacts analysis includes a characterization of existing habitat suitability along the Santa Clara River within the RMDP/SCP area. ENTRIX⁶⁵² conducted quantitative fish habitat surveys of the Santa Clara River and concluded that the channel in the RMDP/SCP reach of the River (including the portion of the River adjacent to the Mission Village project site) has very low gradient runs and riffles and is dominated by sandy substrate with little or no riparian canopy along the flowing stream. The southern steelhead is not expected to successfully spawn in this reach due to inadequate substrate material (e.g., lack of gravel for redd development) and sub-optimum water quality conditions related to wastewater outflows from upstream of the RMDP/SCP area reach. The habitat for southern steelhead in this reach of the River also lacks requisite channel structure and pool habitat necessary to support rearing. If the

⁶⁴⁶ Stoeker and Kelly, *Santa Clara River Steelhead Trout*.

⁶⁴⁷ 62 FR 43937-43954.

⁶⁴⁸ 67 FR 21586-21598.

⁶⁴⁹ 70 FR 37159-37204.

⁶⁵⁰ 71 FR 834.

⁶⁵¹ NMFS, *Federal Recovery Outline for Southern California Coast Steelhead*.

⁶⁵² ENTRIX, Inc., *Focused Special-Status Fish Species Habitat Assessment*.

southern steelhead could migrate into the RMDP/SCP area reach, requiring passage through the Dry Gap area (an area downstream of the Los Angeles County/Ventura County line where surface flows in the river are lost to the Piru groundwater basin), it would face significant challenges in successfully completing its life history cycle due to unsuitable River and tributary spawning and rearing habitat. For these reasons, the Mission Village project-level analysis was conducted under the assumption that southern steelhead and its habitat for spawning and rearing are not present in the larger RMDP/SCP area that encompasses the Mission Village project site, and thus concluded that impacts to southern steelhead spawning and rearing habitat would be less than significant for the Mission Village project. It was also concluded that no impacts to habitat would occur as a result of buildout of the Specific Plan, VCC, and Entrada areas. For these reasons, the proposed Mission Village project is not expected to contribute to a potential significant cumulative impact on habitat for steelhead in the SCRW that may occur as a result of downstream projects.

With respect to potential impacts on individuals, the project-level analysis assumed that vagrant southern steelhead could be found in the River adjacent to the Mission Village project site during surveys or fish exclusion activities prior to construction, although this event is considered to be very unlikely due to the lack of historical records for this species upstream of Piru and the Dry Gap. As noted above, these individuals would not be expected to spawn in the larger RMDP/SCP area. The impact to southern steelhead individuals resulting from the proposed Mission Village project, therefore, was determined to be less than significant. For these reasons, the RMDP/SCP project is not expected to contribute to a potential significant cumulative impact to individual steelhead that may occur as a result of downstream projects.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, could result in potential long-term secondary effects such as hydrologic, geomorphic, and water quality impacts. It was determined that the proposed Mission Village project has the potential to affect southern steelhead individuals and habitat downstream of the RMDP/SCP area through short- or long-term hydrologic, geomorphic, or water quality alterations of the River. These potential impacts include long-term effects associated with operation of RMDP facilities and buildout of the RMDP/SCP project area such as physical changes in the River and increased discharges. Specific impacts include alterations in base flows, timing and duration of flood flows, biochemical changes, condition and composition of the substrate, aquatic and riparian vegetation (including exotic species), and water temperatures, as well as increased pollutants from irrigation runoff and increased runoff from roadways. Additional secondary impacts associated with increased human presence include incidental litter and trash from recreation activity; impacts such as fecal material from pet, stray, and feral cats and dogs entering the aquatic system; and increased

predation by exotic predators, such as bullfrogs and non-native fish. However, due to the approximately 5-mile distance from documented occurrences of southern steelhead at Piru Creek and the intervening Dry Gap, these potential secondary effects would be substantially attenuated before they could affect any downstream habitat and individuals. Therefore, the proposed the Mission Village project is not expected have a considerably cumulatively contribution to potential significant secondary cumulative impacts in the SCRW.

Although the Mission Village project would not contribute to potential significant secondary impacts to the steelhead in the SCRW, and, therefore, no mitigation for secondary cumulative impacts is required, the combined mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would additionally reduce the potential for secondary impacts to southern steelhead and its habitat downstream of the Mission Village project site. Impacts such as increased chemical pollutants, sedimentation, and increased human activity would be mitigated by measures such as the protection and management of the River Corridor SMA/SEA 23, creation of buffer areas between the River Corridor SMA/SEA 23 and development, water quality requirements, and restrictions on public access. PACE⁶⁵³ found that there would be no significant impacts to water flows, velocities, depth, sedimentation, or floodplain and channel conditions downstream of the RMDP/SCP area over the long term as a result of RMDP/SCP project improvements. Furthermore, the Newhall Ranch Wastewater Reclamation Plant (WRP) would be a near-zero discharge facility, and only limited discharge from the WRP to the Santa Clara River would occur during the winter months. Based on an analysis of post-development conditions within the Dry Gap,⁶⁵⁴ it was determined that the future WRP discharge would not affect the seasonality (i.e., ephemeral nature) of flows through the Dry Gap.

Impacts to southern steelhead habitat and vagrant individuals and downstream secondary effects would be less than significant. Potential impacts would be further reduced by a set of mitigation measures for other special-status fish that occur in Santa Clara River adjacent to the Mission Village project site (arroyo chub, Santa Ana sucker, unarmored threespine stickleback) required by the Newhall Ranch Specific Plan Program EIR and recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures). Therefore, the proposed Mission Village project would not contribute to potential significant cumulative impacts to southern steelhead in the SCRW.

⁶⁵³ PACE, *Floodplain Hydraulics Impacts Assessment - Santa Clara River*.

⁶⁵⁴ GSI Water Solutions, Inc., *Assessment of Future Surface Water Conditions in the Dry Gap of the Santa Clara River* (2008).

Southwestern Willow Flycatcher/Willow Flycatcher (FE, CE). Breeding populations of the willow flycatcher exist in isolated meadows of the Sierra Nevada and along the Kern, Santa Margarita, San Luis Rey and Santa Ynez Rivers in Southern California.⁶⁵⁵ Breeding populations of the southwestern willow flycatcher exist in Kern, Santa Barbara and San Diego counties and several other locations in Southern California.⁶⁵⁶ Outside of California, breeding populations of the southwestern willow flycatcher exist in Arizona, Colorado, Nevada, New Mexico and Utah.⁶⁵⁷ The willow flycatcher has a sporadic breeding distribution throughout California, where three of the subspecies occur, including little willow flycatcher (*E. t. brewsteri*), *E. t. adastus* (which has no common name other than “willow flycatcher”), and southwestern willow flycatcher (*E. t. extimus*).⁶⁵⁸ The different subspecies of willow flycatcher each occupy distinct breeding ranges and have subtle differences in color and morphology.⁶⁵⁹ The southwestern willow flycatcher was formerly a common summer resident throughout California, but has been extirpated from most of its historical breeding range in the state. The smallest of the breeding populations consists of approximately five pairs and the largest is approximately 50 pairs. The number of southwestern willow flycatchers in California has been estimated at approximately 200, recorded at 22 locations within 13 drainages.⁶⁶⁰

The full species willow flycatcher has been detected almost every year within the River corridor in the RMDP/SCP project area during the focused bird surveys conducted from 1988 to 2007, but no nesting southwestern willow flycatchers have been confirmed on site. All of the observations of willow flycatchers within the region were determined to be migrants because they were only detected once and/or early in the breeding season and not during the June-July period when the southwestern willow flycatcher would be expected if nesting on site. The most recent nearby documented breeding locations for the southwestern willow flycatcher are from the Santa Clara River near Fillmore, downstream of the RMDP/SCP area. Two breeding pairs were observed in 2006 by J. Gallo, with one nest producing two successful fledglings and the other nest failing.⁶⁶¹ Currently, the RMDP/SCP project area, including the portion of the Santa Clara River adjacent to the Mission Village project site, appears to be a migratory

⁶⁵⁵ CDFG, *The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004*.

⁶⁵⁶ CDFG, *The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004*.

⁶⁵⁷ CDFG, *The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004*.

⁶⁵⁸ D. Craig and P.L. Williams, “Willow Flycatcher (*Empidonax traillii*),” California Partners in Flight Riparian Bird Conservation Plan, http://www.prbo.org/calpip/htmldocs/riparian_v-2.html; J.A. Sedgwick, “Willow Flycatcher (*Empidonax traillii*),” in *The Birds of North America*, ed. A. Poole and F. Gill (Philadelphia, Pennsylvania: The Birds of North America, Inc., 2000).

⁶⁵⁹ M.K. Sogge et al., *A Southwestern Willow Flycatcher Natural History Summary and Survey Protocol* (National Park Service, U.S. Department of the Interior, 1997).

⁶⁶⁰ D.M. Finch, J.F. Kelly, and J-L.E. Cartron, “Migration and Winter Ecology,” in *Status, Ecology, and Conservation of the Southwestern Willow Flycatcher*, ed. D.M. Finch (2000).

⁶⁶¹ Root, “Acknowledgement of Request for Formal Consultation.”

stop for one or more of the subspecies of willow flycatcher, but breeding populations of the southwestern willow flycatcher could expand to the RMDP/SCP project area in the future. While the Mission Village project site supports potential riparian nesting habitat for southwestern willow flycatcher, the large majority of this potential habitat, primarily southern cottonwood-willow riparian is within the Santa Clara River portion of the site and would not be developed or directly disturbed. The riparian vegetation within the tributaries on the project site subject to development is less suitable as nesting habitat for this species because the riparian zones tend to be narrower (i.e., smaller patch sizes). This is illustrated in **Figure 4.3-4-A3** where a narrow, linear patch of southern cottonwood-willow riparian extends into the lower portions of Middle Canyon, compared to the wide swaths of the riparian in the Santa Clara River.

On October 19, 2005, critical habitat was designated for the southwestern willow flycatcher.⁶⁶² Critical habitat in California is designated in Kern, Santa Barbara, San Bernardino, and San Diego counties, but there is no designated critical habitat in the SCRW. The Final Recovery Plan for the Southwestern Willow Flycatcher was published by the USFWS on August 30, 2002.⁶⁶³ The RMDP/SCP project area is located within the Coastal California Recovery Unit of the Final Recovery Plan, and establishment of new territories is part of the recovery criteria for the subspecies. Within the Santa Clara River, the reach from Bouquet Canyon Road to the Pacific Ocean, which crosses through the RMDP/SCP project area, has been identified as a Management Unit where recovery actions should be focused.⁶⁶⁴

Six federal biological opinions were issued for the southwestern willow flycatcher between 1993 and 2006 in the SCRW (**Table 4.3-19**). The CDFG has recently issued four take authorizations for southwestern willow flycatchers in the general regional vicinity of the RMDP/SCP project area (**Table 4.3-20**).

Based on the California GAP data,⁶⁶⁵ there are approximately 25,000 acres of riparian habitat in the SCRW that provide potential habitat for migrating and nesting willow flycatchers. However, not all 25,000 acres support willow flycatchers or southwestern willow flycatchers or could be reasonably expected to support them. Based on the few documented nesting locations in the SCRW, only a small proportion of this habitat would be expected to support nesting, probably due to a lack of constituent habitat elements necessary for this species. As noted above, within the vicinity of the RMDP/SCP area, breeding has been documented only in the Fillmore area, located approximately 13 miles to the west of the RMDP/SCP area. A larger proportion of this habitat is expected to support temporarily migrating birds based on the regular observation of migrating individuals in the RMDP/SCP area.

⁶⁶² 70 FR 60886-61009.

⁶⁶³ USFWS, *Southwestern Willow Flycatcher Recovery Plan* (Albuquerque, New Mexico: USFWS, 2002).

⁶⁶⁴ USFWS, *Southwestern Willow Flycatcher Recovery Plan*.

⁶⁶⁵ UCSB, *California Gap Analysis Project*.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (which encompasses the Mission Village project site), would cause the loss of 1,030 acres of 25,000 acres of riparian habitat within the watershed; however, the proportion of habitat potentially used for migration and nesting that could be impacted by development is probably substantially higher because most of this potential habitat is probably in the Santa Clara River and the larger tributaries where development pressure is higher. Smaller and more remote drainages that support riparian habitat, but which is less likely to be used by the southwestern willow flycatcher/willow flycatcher, probably are under less development pressure. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be a potential significant impact on potential habitat for the southwestern willow flycatcher/willow flycatcher. The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 230 acres, including approximately 5 acres of permanent disturbance and 25 acres of temporary disturbance of southern willow scrub and southern cottonwood-willow riparian on the Mission Village project site. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, include nest parasitism by cowbirds; traffic noise (southwestern willow flycatcher is unlikely to nest in close proximity to the bridge crossing of the Santa Clara River due to traffic noise); nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. Habitat quality for the southwestern willow flycatcher/willow flycatcher could be reduced by diminished water quality and invasion by exotic plant species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The Newhall Ranch Specific Plan Program EIR and this EIR recommend extensive mitigation measures that would protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to the southwestern willow flycatcher/willow flycatcher (**subsection 4.3.10**, Project Mitigation Measures). This mitigation would result in the preservation and management of at least 332 acres of suitable habitat, primarily in the River Corridor SMA/SEA 23, that would be available for migrating individuals and a breeding population of the southwestern willow flycatcher. These mitigation measures also include restoration, and enhancement of riparian and wetland habitat. Species measures to

reduce potential long-term secondary impacts include controls on public access, invasive species controls, conformance with permits from federal and state agencies for impacts to wetlands and water quality (i.e., NPDES and section 401 permits), lighting controls, pesticides controls, and cowbird trapping.

In addition to the measures described above, which reduce project-related impacts; this species has not been observed to breed in the RMDP/SCP area but is known to use the area as a migratory stop-over. Most of the recorded breeding populations of this species occur well outside of the watershed. While typical nesting habitat (structure of riparian canopy, separation from disturbance, etc.) associated with this species does not occur on the Mission Village project site or within the RMDP/SCP area, the documented occurrence of the breeding population downstream in the Fillmore area suggests that expansion of the breeding population to the Santa Clara River within the RMDP/SCP area, including the portion of the River adjacent to the Mission Village project site, could occur. Because of the extensive proposed riparian habitat mitigation, the proposed Mission Village project would not preclude the expansion of the breeding population onto the RMDP/SCP area.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.







Unarmored Threespine Stickleback (FE, CE, CFP). Unarmored threespine stickleback populations exist in five California counties: Los Angeles, San Bernardino, San Diego, San Luis Obispo, and Ventura.⁶⁶⁶ Surveys for the unarmored threespine stickleback over several years have documented the species within the Santa Clara River portion of the RMDP/SCP area. The unarmored threespine stickleback is confined to perennial aquatic habitat in the Santa Clara River, which comprises a small portion of the wetland/riparian habitat in the River and has high temporal variability. The RMDP/SCP project area is within the Del Valle Zone of the designated essential habitat for this species (**Figure 4.3-29, Habitat in RMDP/SCP for Unarmored Threespine Stickleback**).⁶⁶⁷ The species is known in two other areas of the SCRW that are also designated as essential habitat: San Francisquito Creek and Soledad Canyon.

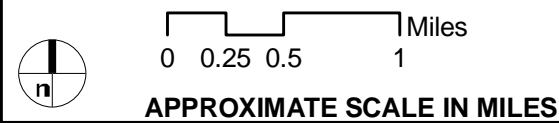
⁶⁶⁶ CDFG, *The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004*.

⁶⁶⁷ USFWS, *Unarmored Threespine Stickleback Recovery Plan*; “essential habitat” is a term that appears in the USFWS’ 1985 Unarmored Threespine Stickleback Recovery Plan (Revised). It coincides with the area proposed in 1980 as unarmored threespine stickleback critical habitat (USFWS, *Unarmored Threespine Stickleback Recovery Plan*, 7). In 2002, USFWS determined that the 1980 proposed designation of unarmored threespine stickleback critical habitat should not be made final (67 FR 58580). As a result, the term “essential habitat” lacks any regulatory significance.



Legend

-  RMDP Boundary
-  SCP Boundary
-  County Boundary
-  River Corridor SMA
-  Unarmored Threespine Stickleback Locations
-  Current USFWS Del Valle Stickleback Essential Habitat From Draft Recovery Plan



AERIAL SOURCE: DigitalGlobe, 2007

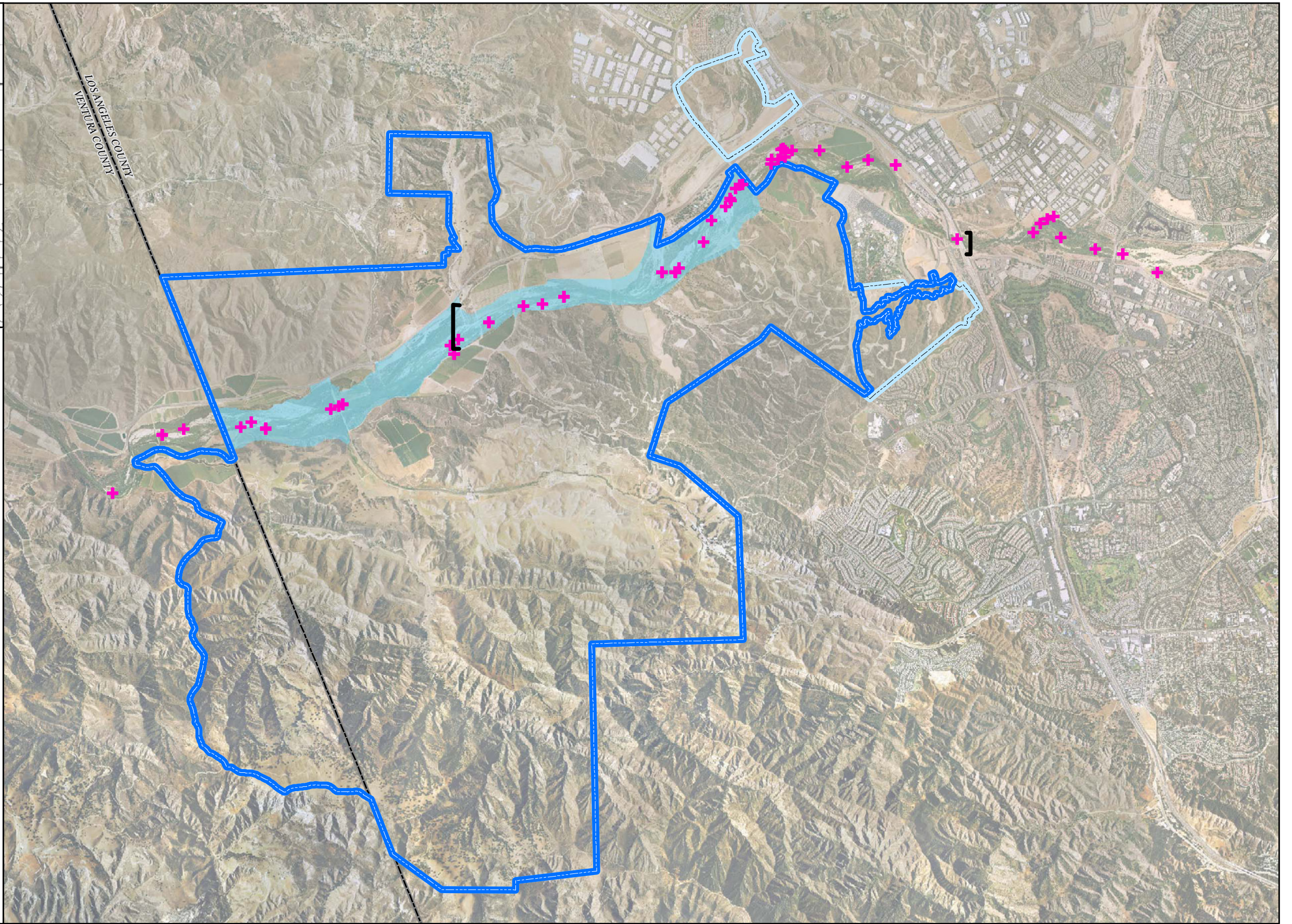


FIGURE 4.3-29

Mission Village EIR

Habitat in RMDP/SCP for Unarmored Threespine Stickleback

On November 17, 1980, the USFWS proposed designating approximately 51 kilometers (31.7 miles) of streams in Los Angeles and Santa Barbara counties as critical habitat for the unarmored threespine stickleback).⁶⁶⁸ However, on September 17, 2002, the USFWS determined that a designation of critical habitat for unarmored threespine stickleback should not be made,⁶⁶⁹ a determination that was upheld by the Ninth Circuit Court of Appeals in 2006.⁶⁷⁰

The Unarmored Threespine Stickleback Recovery Plan (Revised) was published by the USFWS on December 26, 1985.⁶⁷¹ The Recovery Plan designated three areas as very important for the survival and recovery of the species: (1) two disjunct reaches of the Santa Clara River in Los Angeles County; (2) a short reach of San Francisquito Canyon; and (3) and the lowermost 8.4 miles in San Antonio Creek in Santa Barbara County. One of the reaches in the Santa Clara River is the area from San Martinez Grande Canyon upstream to the I-5 bridge, which runs through the RMDP/SCP project area and is the same area proposed but later rejected as critical habitat.⁶⁷²

Thirteen federal biological opinions were issued for the unarmored threespine stickleback between 1993 and 2006 in the SCRW (**Table 4.3-19**). The CDFG has recently issued three take authorizations for other species in the general regional vicinity of the RMDP/SCP project, which authorizations also discussed, but did not authorize take of, unarmored threespine stickleback (**Table 4.3-20**).

Because the unarmored threespine stickleback is confined to perennial aquatic habitat in the Santa Clara River that is subject to high temporal variability, suitable aquatic habitat was not quantified for the purpose of the impact analysis in this EIR. ENTRIX⁶⁷³ concluded that no long-term, permanent significant effects on unarmored threespine stickleback habitat would occur as a result of implementation of the RMDP and buildout of the Specific Plan (including the Mission Village project site), VCC, and Entrada planning areas, because the general morphology of the Santa Clara River, adjacent rearing habitat, and high-flow riparian refugia would not be substantially altered. Further, there would be no impacts to unarmored threespine stickleback habitat resulting from impacts to tributaries to the Santa Clara River, due to the absence of unarmored threespine stickleback, perennial flows, and poor aquatic habitat quality. None of the tributaries have surface water connectivity with the Santa Clara River, except

⁶⁶⁸ 45 FR 76012.

⁶⁶⁹ 67 FR 58850–58582.

⁶⁷⁰ *Ctr. for Biological Diversity v. U.S. Fish & Wildlife Serv.*, 450 F.3d 930 (9th Cir. 2006).

⁶⁷¹ USFWS, *Unarmored Threespine Stickleback Recovery Plan*.

⁶⁷² 45 FR 76012; 67 FR 58850–58582.

⁶⁷³ ENTRIX, *Focused Special-Status Fish Species Habitat Assessment*.

for Middle and Potrero canyons, which have substantial blockages (bedrock headcuts or cascades) that are impassable to fish.⁶⁷⁴

Some temporary impacts to habitat would occur when construction occurs directly in aquatic habitat, such as the active stream channel. Bridge construction in particular could directly affect aquatic habitat occupied by unarmored threespine stickleback through direct impacts to the flowing stream, stream diversion, and dewatering when construction is occurring within the River corridor. However, such temporary impacts would not contribute to a potential significant cumulative effect of projects in the SCRW.

Construction-related impacts on individuals (including adults and juveniles), if not mitigated, could result in a cumulatively considerable contribution to a potential significant cumulative impact in the SCRW because of the local nature and vulnerability of this species in the Santa Clara River. However, the Newhall Ranch Specific Plan Program EIR mitigation measures, as well as the mitigation measures recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures), would reduce such impacts to less than significant. These measures include pre-construction surveys for any construction activity within 300 feet of river habitat to assure that stickleback are avoided or excluded, particularly during the sensitive periods such as spawning or when juvenile fish (fry) are present. These measures also specify the methods to be used for excluding stickleback, as well as how temporary diversion channels would be constructed to assure that adequate rearing habitat is present for stickleback during construction. These measures also employ provisions for constructing permanent and temporary stream crossings in the Santa Clara River in a manner that would allow for unimpeded movement upstream and downstream. Numerous water quality measures, such as construction stormwater BMPs (e.g., silt fencing, erosion control materials, sediment basins) and the installation of water quality treatment facilities are also included to minimize impacts from pollutants related to storm runoff during storm events.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the Mission Village project, also could result in potential long-term secondary effects, including potential physical changes in the River; altered base and flood flows; biochemical, substrate, and temperature alterations; vegetative changes (e.g., invasive plant species); increased human activity; impacts from pet, stray, and feral animals; and increased predation by exotic predators. Mitigation measures implemented to reduce these potential secondary impacts include protection and management of the River Corridor SMA/SEA 23; creation of buffer areas between the River Corridor SMA/SEA 23 and development, water quality requirements; restrictions on public access; controls on pet, stray and feral animals; and control on invasive predators such as bullfrog and African clawed frog. Mitigation measures related to hydrology and water quality will also ensure that potential impacts to any downstream populations of the unarmored threespine stickleback are not significant.

⁶⁷⁴ ENTRIX, *Focused Special-Status Fish Species Habitat Assessment*.

No long-term, permanent significant effects on unarmored threespine stickleback habitat would occur as a result of implementation of the RMDP and buildout of the Specific Plan (including the Mission Village project site), VCC, and Entrada planning areas, because the general morphology of the Santa Clara River, adjacent rearing habitat, and high-flow riparian refugia would not be substantially altered. No loss of unarmored threespine stickleback individuals would occur. Potential long-term secondary impacts would be mitigated to a less than significant level on site.

For the reasons set forth above, contribution of the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Western Yellow-Billed Cuckoo (CE). The western yellow-billed cuckoo has occasionally been documented within the Santa Clara River corridor during surveys conducted from 1988 to 2007, although the locations of these observations were not mapped. This species has been observed historically in 1979, 1981, and 1992,⁶⁷⁵ however, no observations of nesting, paired, or territorial western yellow-billed cuckoos have been documented within the RMDP/SCP project area. Currently, the RMDP/SCP project area appears to be a migratory stop for individual western yellow-billed cuckoos but may also be used for post-migratory movements. For breeding, this species primarily uses large blocks of riparian habitat, particularly cottonwood-willow riparian woodlands.⁶⁷⁶ Large blocks of riparian habitat suitable for western yellow-billed cuckoo generally are absent from the Santa Clara River within the RMDP/SCP project area, and likely elsewhere along the River corridor. In particular, the Mission Village project site lacks suitable large patches of riparian habitat for the western yellow-billed cuckoo. The riparian vegetation within the tributaries on the project site subject to development is not suitable for this species. This is illustrated in **Figure 4.3-4-A3** where a narrow, linear patch of southern cottonwood-willow riparian extends into the lower portions of Middle Canyon, compared to the wide swaths of the riparian in the Santa Clara River.

Based on the California GAP data,⁶⁷⁷ there are approximately 25,000 acres of riparian habitat in the SCRW. However, not all 25,000 acres support western yellow-billed cuckoos or could be reasonably expected to support them. This species appears to be rare in the SCRW, based on the lack of documented nesting, although it probably migrates through the area on occasion. Also, as noted above, this species typically nests in large blocks of riparian habitat that are probably uncommon in the watershed.

⁶⁷⁵ Labinger, Greaves, and Haupt, 1996 *Avian Survey Results*.

⁶⁷⁶ 66 FR 38611–38626.

⁶⁷⁷ UCSB, *California Gap Analysis Project*.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 1,030 acres of 25,000 acres of riparian habitat within the watershed; however, the proportion of potential western yellow-billed cuckoo habitat that could be impacted by development may be substantially higher because most potential habitat is probably in the Santa Clara River and the larger tributaries where development pressure is higher. Smaller and more remote drainages that support riparian habitat, but which is less likely to be occupied by the yellow-billed cuckoo, probably are under less development pressure. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be potential significant cumulative impact on potential habitat for the western yellow-billed cuckoo. The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 230 acres, including approximately 4 acres of permanent disturbance and 25 acres of temporary disturbance of southern cottonwood-willow riparian habitat on the Mission Village project site. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the Mission Village project, also could result in potential long-term secondary effects, including nest parasitism by cowbirds; traffic noise; nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. Habitat quality for the western yellow-billed cuckoo could be reduced by diminished water quality and invasion by exotic plant species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The Newhall Ranch Specific Plan Program EIR and this EIR recommend extensive mitigation measures that would protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to the western yellow-billed cuckoo (**subsection 4.3.10**, Project Mitigation Measures). This mitigation would result in the preservation and management of at least 332 acres of suitable habitat, primarily in the River Corridor SMA/SEA 23, that would be available for migrating individuals and a breeding population of the western yellow-billed cuckoo. These mitigation measures also include restoration, and enhancement of riparian and wetland habitat. Specific measures to reduce potential secondary impacts include controls on public access, invasive species controls, conformance with permits from federal and state agencies for impacts to wetlands and water quality (i.e., NPDES and section 401 permits), lighting controls, pesticides controls, and cowbird trapping.

In addition to the measures described above, which reduce project-related impacts, this species has not been observed to breed in the RMDP/SCP project area but is known to use the RMDP/SCP project area as a migratory stop-over. Most of the recorded breeding populations of this species occur well outside of the watershed. Typical nesting habitat (structure of riparian canopy, proximity to disturbance, etc.) associated with this species does not occur on the Mission Village project site or within the RMDP/SCP project area.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

White-Tailed Kite (CFP). Bird surveys have been conducted in the riparian areas of the Santa Clara River and Castaic Creek from 1988 through 2007. During these surveys, the white-tailed kite has been observed primarily along the Santa Clara River, where it nests in associated riparian woodlands and forages in adjacent grasslands, open sage scrub, and agricultural fields (**Figure 4.3-30, RMDP/SCP White-Tailed Kite Occurrences**). This cumulative analysis assumes that the white-tailed kite could occur throughout the Santa Clara River corridor, as well as other areas of the SCRW where riparian and woodland habitats are with upland foraging areas, including agriculture, California annual grassland, and coastal scrub, and other scrub habitats. There are three documented nest locations for the white-tailed kite in the vicinity of the Mission Village project site in the Santa Clara River northeast and east of Airport Mesa. In addition, kites have been observed flying, hunting, and perching on the project site (**Figure 4.3-30, RMDP/SCP White-Tailed Kite Occurrences**).

Based on the California GAP data,⁶⁷⁸ there are approximately 282,000 acres of suitable nesting and foraging habitat for the white-tailed kite (riparian, oak woodland, California annual grassland, agriculture, disturbed land, and coastal scrub habitats), although it would be incorrect to conclude that white-tailed kites actually use all 282,000 acres. White-tailed kites tend to forage in areas that are in proximity to nesting and roosting habitat (riparian and woodland habitat). For example, within the RMDP/SCP project area, most of the observations of hunting, flying, and perching white-tailed kites are along or adjacent to the Santa Clara River Corridor (**Figure 4.3-30**). Based on observations within the Mission Village project site and larger RMDP/SCP project area, the kite is most likely to nest and forage along the Santa Clara River and adjacent uplands.

⁶⁷⁸ UCSB, *California Gap Analysis Project*.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 25,400 acres of 282,000 acres of suitable nesting and foraging habitat for the white-tailed kite. Without accounting for past, present or reasonably foreseeable mitigation (particularly for upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of habitat in the SCRW could be a potential significant impact on suitable nesting and foraging habitat for the white-tailed kite. The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 5,130 acres, including approximately 1,445 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the Mission Village project, also could result in potential long-term secondary effects, including nest predation; nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.



FIGURE 4.3-30

Mission Village EIR

RMDP/SCP White-Tailed Kite Occurrences

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and this EIR (**subsection 4.3.10, Project Mitigation Measures**) would establish a large, managed open space system that would protect white-tailed kite habitat and reduce the effects of long-term secondary impacts. Approximately 4,421 acres of suitable habitat for this species, including 1,546 acres of nesting habitat and 2,875 acres of foraging habitat (i.e., foraging habitat within 0.5 mile of suitable nesting habitat) would be conserved in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area.

Long-term secondary impacts would be avoided and reduced through a variety of mitigation measures. Lighting restrictions along the perimeter of natural areas would help reduce predation of nest sites by predators and reduce behavioral disturbances and physiological stress. Limited recreational usage and access restrictions within the High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect white-tailed kites by allowing them to nest and forage without disturbance. Controls on pesticides would reduce the chance of direct and secondary poisoning, and loss of prey. Provision of a large, relatively undisturbed open space system providing nesting and foraging habitat away from development areas would also help mitigate for increased collisions with vehicles and man-made structures.

In addition to the measures described above, which would reduce the project-related impacts, the Mission Village project would not preclude the continued foraging and nesting by white-tailed kite along the Santa Clara River and within the preserved High Country SMA/SEA 20 and Salt Creek area within the RMDP/SCP project area, as well as along the Santa Clara River corridor upstream and downstream of the RMDP/SCP project area.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

(b) California Species of Special Concern (CSC)

This section addresses cumulative impacts to the CSC species as organized by the different wildlife guilds.

Mollusk. The mollusk guild includes the recently described spring snail.⁶⁷⁹ *Pyrgulopsis castaicensis* n. sp. is not currently a CSC, but this analysis assumes that it meets the criteria for the designation. *Pyrgulopsis castaicensis* n. sp. is known to occur only in the Middle Canyon Spring in the RMDP/SCP project area (within the Mission Village project area) and is not documented to occur elsewhere in the SCRW. Therefore, there would be no other known impacts to this species by other projects in Los Angeles and Ventura counties and, therefore, there would be no cumulative impacts.

Reptile – Low Mobility. This guild includes coast horned lizard, coast patch-nosed snake, and silvery legless lizard.

The coast horned lizard occurs in the Santa Clara River adjacent to the Mission Village project site and elsewhere along the River in the RMDP/SCP project area. It also occurs in the High Country SMA/SEA 20. In addition, coast horned lizard has been observed in the SCRW along the Santa Clara River in Oxnard to Soledad Canyon in the east, Saugus, Fillmore, Castaic Lake area, and near Sespe Creek.

Legless lizard has not been documented on the Mission Village site, but has been observed in Chiquito Canyon and Long Canyon west of the project site within the RMDP/SCP project area. Outside of the RMDP/SCP project area, there are a few documented occurrences of the silvery legless lizard at the eastern edge of SCRW in the Leona Valley area near Lancaster and Palmdale. These coast horned lizard and silvery legless lizard are expected to occur throughout the watershed in suitable habitat.

There are no CNDDDB occurrences reported in Los Angeles or Ventura counties for the coast patch-nosed snake, but this species is expected to occur uncommonly in suitable habitat in the SCRW, and potentially on the Mission Village project site and within the larger RMDP/SCP project area.

As a group, these species use a wide variety of shrubland (scrub and chaparral), grassland, riparian, and woodland habitats, although each species is expected to primarily use a smaller subset of habitats. For example, coast horned lizard is primarily a grassland and shrubland species, the coast patch-nosed snake a shrubland species, and the silvery legless lizard a riparian and woodland species. However, each could potentially occur in any of these habitat types. Based on the California GAP data,⁶⁸⁰ there are approximately 777,000 acres of suitable habitat for the coast horned lizard, coast patch-nosed snake, and silvery legless as a combined group. However, it is not expected that all 777,000 acres are occupied by these species. For example, silvery legless lizards typically are found only in loose soils; coast horned

⁶⁷⁹ Hershler and Liu, *Pyrgulopsis* (Gastropoda: Hydrobiidae).

⁶⁸⁰ UCSB, *California Gap Analysis Project*.

lizard occur in association with native ant colonies that are its primary prey; and coast patch-nosed snakes appear to be uncommon and sparsely distributed.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (which encompasses the Mission Village project site), would cause the loss of approximately 35,000 acres of 777,000 acres of suitable habitat for the coast horned lizard, coast patch-nosed snake, and silvery legless lizard. With the estimated permanent loss of more than 35,000 acres of habitat, and without accounting for past, present or reasonably foreseeable mitigation (particularly for upland habitats used by this guild), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of habitat in the SCRW could be a potential significant impact on the habitat for these species. The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 3,380 acres, including approximately 871 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the Mission Village project, also could result in potential long-term secondary effects to these species, including habitat fragmentation and isolation of some local populations, making the species more vulnerable to extirpation from smaller habitat patches. In addition, the close proximity of urban development to suitable habitat for these species could result in disruption of essential behavioral activities (e.g., foraging, reproduction) and greater vulnerability to several potential secondary impacts, including human-caused habitat degradation (e.g., trampling of vegetation and introduction of invasive species, such as Argentine ants (primarily affecting coast horned lizard), or off-road vehicles); harassment and collection; predation by pet, stray, and feral cats and dogs; increased roadkill; and use of pesticides, which may reduce its prey or cause secondary poisoning.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would result in a large, permanent open space system that would provide substantial suitable habitat to support the these species (approximately 5,687 acres for coast horned lizard, 3,724 acres for coast patch-nosed snake, and 6,058 acres for silvery legless lizard) in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection, restoration and enhancement, and management of suitable habitat in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.3-31, RMDP Study Area**). Restoration and enhancement of habitat used by the coast horned lizard, coast patch-nosed snake, and silvery legless lizard in these areas would improve habitat quality for these species.

Several specific mitigation measures would also be implemented to reduce long-term secondary effects due to human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. Pesticides would be controlled through an integrated pest management (IPM) plan. Argentine ant invasions of upland habitats would be monitored and controlled to the extent feasible. Implementation of these measures would allow these species to persist on site in the large amount of permanent open space that would be protected and managed.

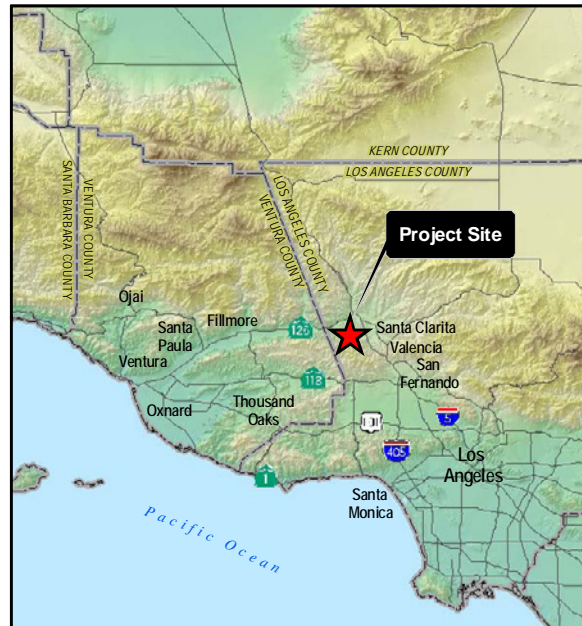
In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Reptile and Amphibian—Semi-Aquatic. This guild includes south coast garter snake, southwestern pond turtle, two-striped garter snake, and western spadefoot toad.

South coast garter snakes have not been documented on the Mission Village project site or within the RMDP/SCP project area, but they have been observed within the Santa Clara River downstream of the RMDP/SCP project area.

The southwestern pond turtle occurs in the Santa Clara River adjacent to the Mission Village project site and within the larger RMDP/SCP project area. It also has been documented in various locations throughout the SCRW (specific locations are suppressed in the CNDDDB database in order to protect populations), including the Los Padres and Angeles National Forests, and is expected to occur wherever habitat conditions are suitable.

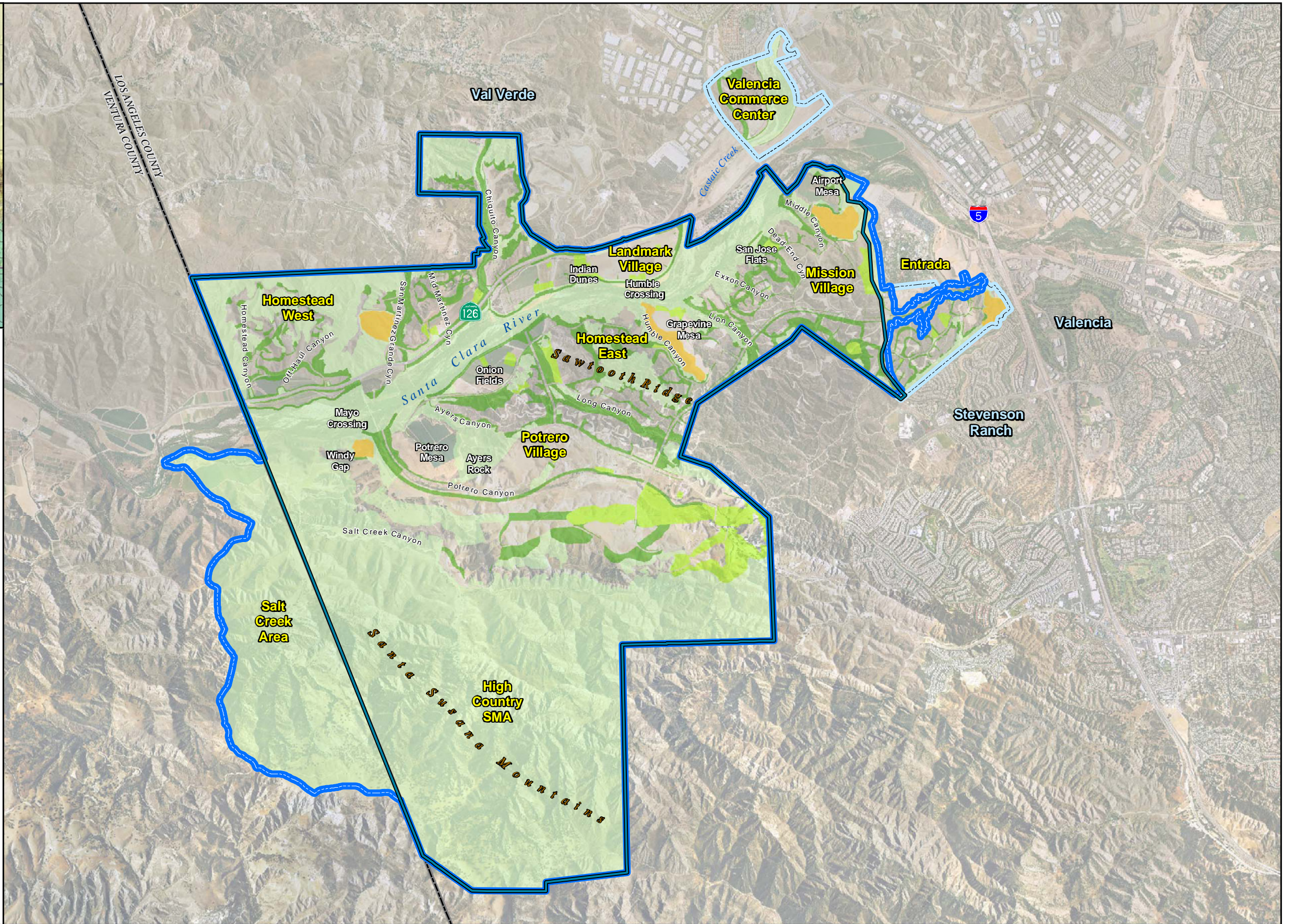
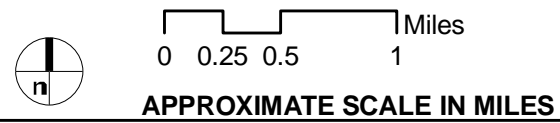


Legend

- NRSP Boundary
- RMDP Boundary
- SCP Boundary
- County Boundary

Open Space

- Open Space Man-Made
- Open Space Natural
- Open Space Recreation
- Open Space Restoration
- Spineflower Preserves



AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.3-31
 Mission Village EIR
 RMDP Study Area

The two-striped garter snake has been documented in the Santa Clara River adjacent to the Mission Village project site, within the larger RMDP/SCP project area, and throughout the SCRW outside the RMDP/SCP project area, including Maple Creek north of Fillmore, south of Fillmore, Sespe Creek, Tar Creek upstream of Sespe Creek, Castaic Creek and Fish Canyon, the Santa Clara River between Salt Creek and Summer Four Crossings, Oak Spring Canyon east of Santa Clarita, and Soledad Canyon. This species is expected to occur wherever habitat conditions are suitable. The western spadefoot toad has also been documented in several locations in the SCRW outside the RMDP/SCP project area, including Cruzan Mesa north of the City of Santa Clarita, west of Sand Canyon south of Santa Clarita, San Francisquito Creek, Soledad Canyon, Plum Canyon Creek, Grasshopper Canyon northwest of Castaic Lake, just east of Oak Spring Canyon south of the Santa Clara River, and north of Tapia Canyon.

The cumulative impacts analysis for habitat impacts presented above for the California red-legged frog presented above generally is applicable to the south coast garter snake, southwestern pond turtle, two-striped garter snake, and western spadefoot toad. Based on the California GAP data,⁶⁸¹ there are approximately 25,000 acres of riparian habitat in the SCRW, but not all of this habitat is expected to be occupied due to a lack of all necessary habitat elements. Upland habitats adjacent to occupied riparian habitat are expected to be used for important aspects of these species' life histories, including aestivation, hibernation, and nesting, but the acreage of these areas cannot be accurately estimated at the watershed scale.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of 1,030 acres of the 25,000 acres of riparian habitat. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW potentially could be a significant cumulative impact on potential habitat for south coast garter snake, southwestern pond turtle, two-striped garter snake, and western spadefoot toad. The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 230 acres, including approximately 89 acres of riparian on the Mission Village project site that would be permanently or temporarily disturbed. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation. The Mission Village project would also cause permanent loss of adjacent terrestrial habitat, such as agriculture along the Santa Clara River, that may be used by these species for aspects of their life cycles, as well as refuge from severe flood events. It is assumed that other present and reasonably foreseeable projects affecting suitable riparian habitat would also impact adjacent upland habitat, resulting in a potential significant cumulative impact,

⁶⁸¹ UCSB, *California Gap Analysis Project*.

without accounting for mitigation. The contribution of the proposed Mission Village project to this potential significant cumulative impact to terrestrial habitat could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects to these species, including disruption of nocturnal activities and greater vulnerability to predation by nocturnal predators (such as owls and coyotes) as a result of nighttime lighting; greater vulnerability to predation by pet, stray, and feral cats and dogs as well as other mesopredators;⁶⁸² collecting by children; degradation of habitat from increased human use (e.g., trampling, trash, and off-road vehicles) and altered fire regimes (likely too frequent fire); invasion by exotic plant (e.g., giant reed, tamarisk, and pampas grass) and wildlife species (e.g., Argentine ants, bullfrogs, African clawed frogs, exotic fish, and crayfish); use of pesticides; and increased risk of roadkill on roads adjacent to occupied areas. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential significant cumulative secondary impact could be cumulatively considerable, absent mitigation.

As discussed previously for the California red-legged frog, the Newhall Ranch Specific Plan Program EIR and this EIR (**subsection 4.3.10**, Project Mitigation Measures) include extensive mitigation measures that would protect riparian habitat and establish a large, managed open space system which would reduce impacts to these species. Also, the Santa Clara River corridor hydrology and habitat conditions on site or downstream would not be significantly affected by the RMDP/SCP project.⁶⁸³ Upland refugia would be available along the Santa Clara River, although under the RMDP/SCP project, construction of Potrero Bridge under the RMDP/SCP Alternative 2 at the mouth of Potrero Canyon would block access to Potrero Canyon by southwestern pond turtle. This was considered a significant unavoidable impact under Alternative 2 in the RMDP/SCP EIS/EIR because this area may be an important refuge and nesting area; however, the Mission Village project does not contribute to this condition because this important site in Potrero Canyon is located west of the Mission Village project site.

The River Corridor SMA/SEA 23 would provide a large, protected open space area that would help offset long-term secondary impacts. Several specific mitigation measures would also be implemented to control human activities in the River Corridor SMA/SEA 23, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting along the open space-urban interface would be downcast.

⁶⁸² Crooks and Soulé, "Mesopredator Release and Avifaunal Extinctions in a Fragmented System," 563-566.

⁶⁸³ PACE, *Floodplain Hydraulics Impacts Assessment - Santa Clara River*.

Pesticides would be controlled through an integrated pest management (IPM) plan. Argentine ant invasions of upland habitats in the open space system would be monitored and controlled to the extent feasible. Implementation of these measures would allow these species to persist on site after development.

In addition to these measures reducing impacts to these species at the project-level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed (with the exception of the south coast garter snake), and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Fish. This guild includes arroyo chub and Santa Ana sucker, which primarily occur in the Santa Clara River and some of its main tributaries within the SCRW. These species generally use the same aquatic habitat used by the unarmored threespine stickleback. Therefore, the cumulative analysis presented above for the unarmored threespine stickleback has been applied to these species.

Both species are considered be introduced to the Santa Clara River and associated tributaries. In addition to populations in the Santa Clara River adjacent to the Mission Village project site and the larger RMDP/SCP project area, introduced populations of arroyo chub are present in the Santa Clara River at Agua Dulce Creek and west of Chambersburg Road south of Fillmore, and in Soledad Canyon, Santa Paula Creek, and Sespe Creek along SR-33 and at the Stone Corral Creek confluence. In addition to populations in the Mission Village area and larger RMDP/SCP project area, introduced populations of the Santa Ana sucker are present in the Santa Clara River ranging from Arrastre Canyon approximately 2.5 miles east of SR-14 to Santa Paula Creek, and Piru Creek, Sespe Creek, and San Francisquito Creek.⁶⁸⁴

ENTRIX⁶⁸⁵ concluded that no long-term, permanent significant effects on arroyo chub and Santa Ana sucker habitat would occur as a result of implementation of the RMDP and buildout of the Specific Plan

⁶⁸⁴ C.C. Swift et al., "The Status and Distribution of the Freshwater Fishes of Southern California," *Bulletin of the Southern California Academy of Sciences* 92(3) (1993), 101–167; Stephenson and Calcarone, *Southern California Mountains and Foothills Assessment*; Northwest Economic Associates (NEA), *Draft Economic Analysis of Critical Habitat Designation for the Santa Ana Sucker* (2004); NatureServe, "An Online Encyclopedia of Life."

⁶⁸⁵ ENTRIX, *Focused Special-Status Fish Species Habitat Assessment*.

(including the Mission Village project site), VCC, and Entrada planning areas, because the general morphology of the Santa Clara River, adjacent rearing habitat, and high-flow riparian refugia would not be substantially altered. Further, there would be no impacts to habitat for these species resulting from impacts to tributaries to the Santa Clara River, due to the absence of perennial flows, and poor aquatic habitat quality. For these reasons, the proposed Mission Village project would not contribute to potential significant cumulative impacts to such habitat.

Some temporary impacts to habitat for these species would occur when construction occurs directly in aquatic habitat. Impacts to the active stream channel during bridge construction could affect stream flows, and cause stream diversions and dewatering when construction is occurring within the River Corridor SMA/SEA 23. However, such temporary impacts would not contribute to a potential significant cumulative effect of projects in the SCRW.

Construction-related impacts on individuals, if not mitigated, could result in a cumulatively considerable contribution to a potential significant cumulative impact in the SCRW because of the local nature and potential vulnerability of these species in the Santa Clara River. However, the Newhall Ranch Specific Plan Program EIR mitigation measures, as well as the mitigation measures recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures), would reduce such impacts to less than significant. These measures include facilities design requirements, pre-development surveys, consultation with USFWS, biological monitoring during construction, excluding fish from disturbance areas through coordination with and approval from the Corps and CDFG, and conformance with state and federal permits related to wetlands and water quality.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including potential physical changes in the River; altered base and flood flows; biochemical, substrate, and temperature alterations; vegetative changes (e.g., invasive plant species); increased human activity; impacts from pet, stray, and feral animals; and increased predation by exotic predators. Mitigation measures implemented to reduce these potential secondary impacts include protection and management of the River Corridor SMA/SEA 23; creation of buffer areas between the River Corridor SMA/SEA 23 and development, water quality requirements; restrictions on public access; controls on pet, stray and feral animals; and control on invasive predators such as bullfrog and African clawed frog. Mitigation measures related to hydrology and water quality also would ensure that potential impacts to any downstream populations of arroyo chub and Santa Ana sucker are not significant.

No long-term, permanent significant effects on arroyo chub and Santa Ana sucker habitat would occur as a result of implementation of the RMDP and buildout of the Specific Plan (including the Mission Village project site), VCC, and Entrada planning areas, because the general morphology of the Santa Clara River, adjacent rearing habitat, and high-flow riparian refugia would not be substantially altered. Potential short-term and long-term secondary impacts would be mitigated to a less than significant level.

For the reasons set forth above, the contribution of the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird—Raptor. This guild includes long-eared owl, northern harrier, short-eared owl, and western burrowing owl.

There are no CNDDDB documented occurrences for long-eared owl, northern harrier, or the short-eared owl in the SCRW, but data developed for the RMDP/SCP project indicate that these species likely occur in suitable habitat in the watershed. The long-eared owl was observed in the RMDP/SCP project area on one occasion⁶⁸⁶ and, therefore, is considered to be at least a regular migrant and/or a winter visitor to the region, with some potential to breed in the riparian and woodland habitats watershed.

The northern harrier has been observed in or near the RMDP/SCP project area infrequently during the 20 years of surveys. Most of the observations of this species were probably of wintering and migrating individuals, and these surveys are considered adequate to establish that this species is at least an occasional winter migrant in the SCRW.

The short-eared owl was observed twice near the RMDP/SCP project area⁶⁸⁷ and it is assumed for the purpose of this analysis that the short-eared owl at least occurs in the SCRW as an occasional migrant and uses watershed for foraging.

⁶⁸⁶ Dudek and Associates, Inc., *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

⁶⁸⁷ Dudek and Associates, *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*; G. Olson, letter containing comments on the Draft Environmental Impact Report for Landmark Village, letter from G. Olson (Audubon California) to D. Fierros (County of Los Angeles, Department of Regional Planning) (January 19, 2007).

In addition to two observations of the burrowing owl on the Mission Village site in Middle Canyon,⁶⁸⁸ there are two other documented occurrences of western burrowing owl in the CNDDDB. The majority of documented occurrences of burrowing owl in Los Angeles County are from the Antelope Valley in the Lancaster and Palmdale areas. It is assumed for the cumulative analysis that the burrowing owl occasionally uses SCRW for wintering or during migration, but also has potential to breed in the watershed. All four of these species are considered to have potential to forage on the Mission Village project site, and there is potential nesting habitat for long-eared owl and burrowing owl on site.

These species overlap in their use of foraging habitats, with grasslands, agriculture, and disturbed lands as the most common foraging habitats used by all of the species, and which are the basis for this analysis at the guild level. Based on the California GAP data,⁶⁸⁹ there are approximately 78,000 acres of suitable foraging habitat these species, although based on the few observations of these species in the watershed, not all of this habitat is expected to be used for foraging. Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (which encompasses the Mission Village project site), would cause the loss of 3,790 acres of 78,000 acres of foraging habitat for these species. Without accounting for past, present or reasonably foreseeable mitigation (there are no standard mitigation requirements for loss of grassland, agriculture, or disturbed lands), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 3,790 acres of habitat in the SCRW could be a potential significant impact on suitable foraging habitat for these species. The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 3,290 acres, including approximately 680 acres on the Mission Village project site that would be permanently or temporarily disturbed. The contribution of the proposed Mission Village project to this potential significant cumulative secondary impact could be cumulatively considerable, absent mitigation

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

⁶⁸⁸ K. Babcock, telephone call from K. Babcock (Dudek) to C. Ford (Dudek) (October 2007); S. Miller, verbal communication from S. Miller (Dudek) to C. Ford (Dudek) (November 2007).

⁶⁸⁹ UCSB, *California Gap Analysis Project*.

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and this EIR (**subsection 4.3.10, Project Mitigation Measures**) would establish a large, managed open space system that includes approximately 995 acres of suitable foraging habitat for these species and which would reduce secondary effects. Implementation of these mitigation measures would result in protection, restoration and enhancement, and management of suitable habitat in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.3-31**). Several specific mitigation measures would also be implemented to reduce long-term secondary effects due to human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. Pesticides would be controlled through an integrated pest management (IPM) plan.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird – Riparian. This guild includes summer tanager, tricolored blackbird, vermilion flycatcher, yellow-breasted chat, yellow-headed blackbird, and yellow warbler.

Documented occurrence data for these species in the SCRW outside of the Mission Village project site and adjacent Santa Clara River corridor are very sparse. The CNDDDB includes no documented occurrences in the SCRW for summer tanager, vermilion flycatcher, tricolored blackbird, or yellow-headed blackbird. No summer tanagers have been observed during spring surveys in the Santa Clara River during surveys in the RMDP/SCP project area, one vermilion flycatcher has been observed, and occasional yellow-headed blackbirds have been observed. No nesting vermilion flycatchers or yellow-headed blackbirds have been observed in the RMDP/SCP project area. Tricolored blackbird has been observed in the RMDP/SCP project area periodically, but was documented nesting on site only in 1994. The CNDDDB includes one occurrence each for yellow-breasted chat and yellow warbler for the watershed approximately 3 miles east of Fillmore, but these two species have been commonly observed in the Santa Clara River within the RMDP/SCP project area during spring surveys and are assumed to breed in the RMDP/SCP project area and elsewhere in the SCRW where there is suitable riparian habitat. The Mission Village project site supports potential riparian nesting habitat for these species, but the large majority of

this potential habitat, primarily southern cottonwood-willow riparian for the yellow warbler, yellow-breasted chat, summer tanager, and vermilion flycatcher, is within the Santa Clara River portion of the site and would not be developed or directly disturbed. The riparian vegetation within the tributaries on the Mission Village project site subject to development is less suitable as nesting habitat for these species because the riparian zones tend to be narrower (i.e., smaller patch sizes). This is illustrated in **Figure 4.3-4-A3** where a narrow, linear patch of southern cottonwood-willow riparian extends into the lower portions of Middle Canyon, compared to the wide swaths of the riparian in the Santa Clara River.

Because these species use habitats similar to those analyzed for the least Bell's vireo and southwestern willow flycatcher/willow flycatcher and would be subject to the same types of secondary impacts, the cumulative impact analysis for the two listed species is applied to the summer tanager, tricolored blackbird, vermilion flycatcher, yellow-breasted chat, yellow-headed blackbird, and yellow warbler.

Based on the California GAP data,⁶⁹⁰ there are approximately 25,000 acres of riparian habitat in the SCRW. However, not all 25,000 acres support these species or could be reasonably expected to support them. Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (encompassing the Mission Village project site), would cause the loss of 1,030 acres of 25,000 acres of riparian habitat; however, as noted above for least Bell's vireo, these species probably are concentrated along the Santa Clara River and immediately adjacent tributaries, so the proportionate loss of occupied habitat is probably substantially higher. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be a significant impact on potential habitat for the species in this guild, including potential migration habitat for the summer tanager, vermilion flycatcher, and yellow-headed blackbird, and nesting habitat for the yellow-breasted chat, yellow warbler, and tricolored blackbird. The RMDP/SCP project's contribution to this potentially significant cumulative impact is approximately 230 acres, including approximately 5 acres of permanent disturbance and 25 acres of temporary disturbance of southern willow scrub and southern cottonwood-willow riparian on the Mission Village project site, the riparian habitat types most likely to be used by these species. This contribution by the proposed Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, the proposed Mission Village project also could result in potential long-term secondary effects, including nest parasitism by cowbirds on yellow-breasted chat and yellow warbler; nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary

⁶⁹⁰ UCSB, *California Gap Analysis Project*.

poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. Habitat quality for these species could be reduced by diminished water quality and invasion by exotic plant species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The Newhall Ranch Specific Plan Program EIR and this EIR recommend extensive mitigation measures (**subsection 4.3.10**, Project Mitigation Measures) that protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to these species. This mitigation would result in the preservation and management of at least 332 acres of riparian habitat, primarily in the River Corridor SMA/SEA 23, that would be available for future breeding populations of yellow-breasted chat and yellow warbler, and potentially tricolored blackbird. These mitigation measures include preservation, restoration, and enhancement of riparian and wetland habitat. Species measures to reduce potential long-term secondary impacts include controls on public access, invasive species controls, conformance with permits from federal and state agencies for impacts to wetlands and water quality (i.e., NPDES and section 401 permits), and lighting controls.

In addition to these measures reducing impacts to these species at the project level, these species generally have broad geographic ranges. The yellow-breasted chat and yellow warbler are expected to breed along most of the Santa Clara River and associated tributaries wherever there is suitable habitat. The summer tanager, vermilion flycatcher, and yellow-headed blackbird are expected to use suitable habitat within the SCRW on an occasional basis or during migration. The tricolored blackbird is expected to breed occasionally in suitable habitat in the SCRW, but its breeding status in the watershed is unknown and likely to be variable due to its itinerant breeding pattern.

For the reasons set forth above, the proposed Mission Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird—Upland Grassland. The only CSC species in this guild is the grasshopper sparrow. This species has not been observed on the Mission Village project site or within the larger RMDP/SCP project area. However, because the project site is at the edge of its summer breeding range, there is some, albeit low, potential for the species to occur. The CNDDDB has one occurrence in SCRW in Tapia Canyon north of Santa Clarita.

Based on the California GAP data,⁶⁹¹ there are approximately 22,000 acres of suitable grassland habitat for the grasshopper sparrow. However, it is not expected that all 22,000 acres are occupied by this species because there is only one documented occurrence in the SCRW and it has not been observed in the RMDP/SCP project area during numerous avian surveys.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (encompassing the Mission Village project site), would cause the loss of 1,120 acres of 22,000 acres of suitable habitat for the grasshopper sparrow. The contribution of the RMDP/SCP project to this impact is 1,070 acres, including approximately 66 acres of permanent and temporary disturbance on the Mission Village project site. Because the grasshopper sparrow has a low potential to winter or nest on site, based on negative surveys findings, the RMDP/SCP EIS/EIR concluded that this impact was adverse but not significant. Since the RMDP/SCP project accounts for the majority of the impact of present and reasonably foreseeable projects in the SCRW, the cumulative effect of the present and reasonably foreseeable projects, including the Mission Village project, would not be significant at the watershed level.

Although the species has a low potential to occur on the Mission Village project site, within the larger RMDP/SCP project area, and on other present and reasonably foreseeable projects, without accounting for past, present, or reasonably foreseeable mitigation, these projects, including the proposed Mission Village project, could result in potential long-term secondary effects on the grasshopper sparrow, including habitat fragmentation; abandonment of nests from human activity; greater vulnerability to nocturnal predators as a result of nighttime lighting; noise from roadways; nest parasitism by cowbirds; greater vulnerability to predation by pet, stray, and feral cats and dogs and other mesopredators; and loss of prey or secondary poisoning due to the use of pesticides. Although these long-term secondary effects could occur, because the grasshopper sparrow is unlikely to nest or winter in the watershed in large numbers, these effects would not have a significant cumulative impact.

Even though significant cumulative impacts to the grasshopper sparrow and its habitat would not occur as a result of the proposed Mission Village project and mitigation measures are not required, several mitigation measures for other project-level impacts to biological resources would be implemented that would further reduce any potential impacts (**subsection 4.3.10**, Project Mitigation Measures). These mitigation measures include habitat preservation, restoration, enhancement, and management of the High Country SMA/SEA 20 and Salt Creek area—areas that would form a large, contiguous open space system that includes approximately 660 acres of California annual grassland. Specific measures would also be implemented to reduce potential long-term secondary effects, including controls on human activity, pet, stray, and feral cats and dogs, lighting, and pesticides.

⁶⁹¹ UCSB, *California Gap Analysis Project*.

Bird—Upland Scrub and Chaparral. The only CSC species in this guild is the loggerhead shrike. This species is commonly observed in the RMDP/SCP project area and has been documented to nest in the area. The species is likely to nest and forage on the Mission Village project site. This species also is likely to be relatively common in scrub and chaparral habitat throughout the SCRW. Although there are no records for this species for the watershed in the CNDDDB, this species has been regularly observed by biologists in the watershed.

The loggerhead shrike is considered to be primarily a scrub and chaparral species, but it also frequently forages in grassland, agriculture, and disturbed lands. Based on the California GAP data,⁶⁹² there are approximately 803,000 acres of suitable habitat for the loggerhead shrike. It is not expected that all 803,000 acres are occupied by this species because, although common, shrikes occur in low densities.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project (encompassing the Mission Village project site), would cause the loss of approximately 36,700 acres of 803,000 acres of suitable habitat for the loggerhead shrike. Without accounting for past, present or reasonably foreseeable mitigation (particularly for upland scrub and chaparral), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 36,700 acres of habitat in the SCRW could be a potential significant impact on the habitat for this species. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 5,270 acres of the combined habitats, including approximately 706 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including habitat fragmentation and reduced nest success due to nighttime lighting; noise disturbance; and harassment/disturbance by humans, especially if such disturbances occur during the nesting season; and predation by pet, stray, and feral cats and dogs as well as other mesopredators. The use of pesticides to control invertebrates and small mammals within and adjacent to open foraging areas could result in secondary poisoning and loss of prey for the species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

⁶⁹² UCSB, *California Gap Analysis Project*.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would result in a large, permanent open space system that would provide suitable habitat to support the loggerhead shrike in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection, restoration and enhancement, and management of approximately 6,100 acres of suitable habitat in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.3-31**). This set-aside would also offset long-term secondary impacts, especially habitat fragmentation and vehicle collisions. Several specific mitigation measures would also be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. Pesticides would be controlled through an integrated pest management (IPM) plan. Implementation of these measures would allow this species to persist on site after development in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to loggerhead shrike at the project level, this species remains relatively common and widespread within suitable habitat within the watershed and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bats. This guild includes pallid bat, pocketed free-tailed bat, Townsend's big-eared bat, western mastiff bat, and western red bat. RMDP/SCP project area surveys using the Anabat II Bat Detector documented the presence of pallid bat (including a maternity roost and a night roost in Potrero Canyon), the pocketed free-tailed bat, and western red bat. The western mastiff bat was audibly detected (its signals are directly detectable by humans). Townsend's big-eared bat was not detected during surveys, but has moderate potential to occur in the area due to the large amount of suitable habitat. The Mission Village project site supports suitable foraging habitat for these species, and they are expected to forage on site. There are no documented roost sites on the Mission Village project site, but these species could also roost on site. Documented occurrences in the CNDDDB elsewhere in the SCRW for these species are variable and some are decades old. The pallid bat has been documented in Soledad Canyon, Castaic, Fillmore, and Santa Paula. The western mastiff bat has been documented in Piru Creek north of the lake and at the lake, and southwest of Newhall.

The CNDDDB includes no records for the pocketed free-tailed bat, Townsend's big-eared bat, or western red bat. However, because comprehensive surveys for bats have not been conducted throughout the SCRW, and because these species are foraging generalists and use a variety of habitats, it is assumed that these species could occur throughout the SCRW. The main limitation for the occurrence of the species probably is a lack of day roost sites, such as a caves, crevices, rock outcrops, tunnels, etc.

This cumulative analysis addresses the loss of foraging habitat for these species. As foraging generalists, they use a variety of habitats, but probably concentrate most of their foraging activity in wetland and riparian habitats. Suitable foraging habitat for bats includes coastal scrub, chaparral, grassland, riparian, oak woodland, agriculture, and disturbed land. Based on the California GAP data,⁶⁹³ there are approximately 836,000 acres of suitable foraging habitat for bats in the SCRW. It is not expected that all 836,000 acres are used by bats for foraging because this habitat must be within typical flight distances of day roosts. For example, the pallid bat is capable of flying more than 18 miles, but most foraging occurs within about 2 miles of the day roost.⁶⁹⁴

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project (which encompasses the Mission Village project site), would cause the loss of approximately 38,000 acres of 836,000 acres of suitable foraging habitat for these bats. Without accounting for past, present or reasonably foreseeable mitigation (particularly upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 38,000 acres of habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 5,590 acres of the habitats, including approximately 1,484 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

In addition to loss of foraging habitat, day roosts, including maternal roosts, may be present in the SCRW and subject to potential impacts as a result of present and reasonably foreseeable projects. One documented maternal day roost and one night roost for pallid bat would be lost as a result of the proposed RMDP/SCP project in Potrero Canyon west of the Mission Village project site, but there is a potential for other roosts sites in the SCRW, including on the Mission Village project site (although not yet documented), to be impacted. Without accounting for past, present or reasonably foreseeable mitigation (particularly upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of day roosts, the loss of roost sites could result in a potential significant cumulative

⁶⁹³ UCSB, *California Gap Analysis Project*.

⁶⁹⁴ J.W. Hermanson and T.J. O'Shea, "Antrozous pallidus," *Mammalian Species*, 213 (1983), 1-8.

impact. The contribution of the proposed Mission Village project to this potential significant cumulative impact could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects resulting from increased human activity, noise, and lighting. Use of pesticides for agriculture or in landscaped areas may result in secondary poisoning and reduction of prey. Pallid bats taking prey on the ground are vulnerable to collection by humans and to predation by pet, stray, and feral cats and dogs. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The cumulative loss of foraging habitat and day roost sites, and long-term secondary impacts to these bats species would be reduced through several mitigation measures included in the Newhall Ranch Specific Plan EIR and recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures). These measures include habitat preservation, restoration, enhancement, and management of approximately 6,300 acres in the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area—areas that would form a large, contiguous open space system providing foraging and potential roosting habitat for bats. It is expected that the species in this guild would continue to forage in these areas after buildout of the RMDP/SCP project area. Alternative roost sites would be created to mitigate for any day roost sites disturbed during construction, including creation of roosts under bridges and in culverts, where practicable, in consultation with CDFG. Species measures to reduce potential long-term secondary impacts include controls on public access, pet, stray, and feral cat dogs, pesticides, and lighting.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Mammal—Low Mobility. This guild includes the San Diego desert woodrat and southern grasshopper mouse.

On the Mission Village project site and within the larger RMDP/SCP project area, the San Diego desert woodrat is common in coastal scrub and chaparral. The only other documented occurrence for desert woodrat in close proximity to the SCRW is in Weldon Canyon just west of the SR-14/I-5 junction. However, this lack of data is probably more a result of few small mammal trapping programs conducted in the watershed and/or under-reporting of the species to the CNDDDB. Based on the relative frequency with which it was captured during the Newhall Ranch trapping study,⁶⁹⁵ this species is expected to be common throughout the watershed in suitable habitat (i.e., more xeric expressions of the coastal scrub and chaparral).

The southern grasshopper mouse was not documented RMDP/SCP project area during the small mammal trapping studies or pitfall trapping conducted for reptile and amphibians area and is known only from Mint Canyon. This record dates back to 1930 and the observation occurred approximately 15 miles east of the RMDP/SCP project area. The documented geographic range of the grasshopper mouse is east of the RMDP/SCP project area.⁶⁹⁶ The habitat use of the San Diego desert woodrat and grasshopper mouse overlaps, where both may occur in drier, more open coastal scrub and chaparral, but the San Diego desert woodrat also occurs in more densely vegetated shrublands that would be unsuitable for the grasshopper mouse and the grasshopper mouse also occurs in grassland that is not used by the woodrat.

The combined habitat for these two species for the purpose of this cumulative analysis is defined as grassland, coastal scrub, and chaparral. Based on the California GAP data,⁶⁹⁷ there are approximately 747,000 acres of potential habitat in the SCRW, of which approximately 725,000 acres are coastal scrub and chaparral and approximately 22,000 acres are non-native grassland. Even though the San Diego desert woodrat is relatively common, it is not expected to occur in all 725,000 acres of coastal scrub and chaparral in the SCRW because it uses more xeric forms of these habitats, whereas the dusky-footed woodrat tends to occur in more mesic forms. The southern grasshopper mouse, if present in the SCRW, is expected to be even more sparsely distributed in xeric forms of coastal scrub and chaparral and grasslands.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (which encompasses the Mission Village project site), would cause the loss of approximately 34,100 acres of 747,000 acres of potential habitat, including approximately 33,000 acres of coastal scrub and chaparral and approximately 1,100 acres of grassland. Without accounting for past, present or reasonably foreseeable mitigation for these upland habitats, or the RMDP/SCP project's individual contribution to mitigation for

⁶⁹⁵ Impact Sciences, Inc., *Draft Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

⁶⁹⁶ Zeiner et al., *California's Wildlife: Volume III*.

⁶⁹⁷ UCSB, *California Gap Analysis Project*.

loss of habitat, the loss of 34,100 acres of habitat in the SCRW could be a potential significant impact on the habitat for both species. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 3,050 acres of the combined habitats, including approximately 773 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including habitat fragmentation and potential isolation of local populations of the San Diego desert woodrat and southern grasshopper mouse, making the species, if present, more vulnerable to local extirpation. In addition, over the long term, the close proximity of urban development to suitable habitat could result in abandonment of dens and burrows; disruption of nocturnal activities; greater vulnerability to predation by nocturnal predators (e.g., owls and coyotes) as a result of nighttime lighting; greater vulnerability to predation by pet, stray, and feral cats and dogs as well as other mesopredators such as raccoons, foxes, skunks, and opossums;⁶⁹⁸ and vulnerability to pesticides, which may reduce insect prey and cause secondary poisoning and rodenticides that may be used to control pest rodents. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would result in a large, permanent open space system that would provide suitable habitat to support the San Diego desert woodrat and southern grasshopper mouse, if present in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection and management of approximately 3,488 acres of suitable habitat for the San Diego desert woodrat and approximately 2,657 acres for the southern grasshopper mouse. This open space would be conserved in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.3-31**). This set-aside would also help mitigate long-term secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures would also be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting would be downcast away from open space

⁶⁹⁸ See Crooks and Soulé, "Mesopredator Release and Avifaunal Extinctions in a Fragmented System," 563–566.

areas. Rodenticides would be controlled through an integrated pest management (IPM) plan. Implementation of these measures would allow these species to persist on site after development in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to these species at the project level, the San Diego desert woodrat has a broad geographic range and is still common in suitable habitat. It is expected to occur relatively commonly in suitable habitat on National Forest system lands and other public lands on the SCRW. The southern grasshopper mouse, if still present in the SCRW, likely occurs in low population densities in very scattered distributions. The probability of a present or reasonably foreseeable project, including the Mission Village project, impacting this species is considered to be low.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Mammal—Moderate Mobility. This guild includes American badger and San Diego black-tailed jackrabbit. Both species are likely to be present, but uncommon on the Mission Village project site.

The American badger has been documented three times in the larger RMDP/SCP project area through systematic surveys and anecdotal observations of dens and tracks.⁶⁹⁹ The CNDDDB includes only one documented occurrence for the American badger outside the RMDP/SCP project area; a location between Bear Creek and Hopper Mountain northeast of Fillmore. However, while this species generally occurs at low abundances, observations of badgers in suitable habitat in Southern California by biologists are not uncommon. It is expected to occur throughout the SCRW in suitable habitat. However, on the Angeles National Forest and other Forest System lands the distribution of American badger is not well documented.⁷⁰⁰ This species is known to occur on portions of the Los Padres National Forest but has not been observed on many portions of the Angeles National Forest in several years.⁷⁰¹

⁶⁹⁹ Impact Sciences, *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*; P. Behrends, personal observation of badger den by P. Behrends (Dudek and Associates, Inc.) in Potrero Creek during wetland delineation (August 1, 2006); Dudek and Associates, *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*.

⁷⁰⁰ Stephenson and Calcarone, *Southern California Mountains and Foothills Assessment*.

⁷⁰¹ L. Welch, personal communication between C. Huntley (Aspen) and L. Welch (U.S. Forest Service, Los Angeles River Ranger District) regarding the distribution of American Badger on the Angeles National Forest, May 2008 (2009).

The San Diego black-tailed jackrabbit has not been observed on the Mission Village project site and was observed only in the larger RMDP/SCP project area during focused mammal surveys by Impact Sciences.⁷⁰² Negative findings for this species during many other wildlife surveys suggest that it is likely uncommon on the Mission Village project site. The CNDDDB includes only one documented occurrence for the San Diego black-tailed jackrabbit outside the RMDP/SCP project area: a location between Castaic Lake and San Francisquito Canyon. While this species appears to be uncommon in the western portion of the watershed, it is expected to be more common in the eastern portion of the watershed because several CNDDDB occurrences are from the Palmdale/Lancaster desert region just east of SCRWR. The lack of occurrence records for both the American badger and San Diego black-tailed jackrabbit probably are due to both their relatively uncommon occurrence (at least in the central and western portions of the watershed) and under-reporting to the CNDDDB.

For the purpose of this cumulative analysis, suitable habitat for these two species includes agriculture, disturbed land, grassland, and coastal scrub. Based on the California GAP data,⁷⁰³ there are approximately 252,000 acres of potential habitat in the SCRW. Because both species are uncommon in the SCRW, not all 252,000 acres are expected to be occupied.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (encompassing the Mission Village project site), would cause the loss of approximately 24,300 acres of 251,000 acres of potential habitat for the American badger and San Diego black-tailed jackrabbit. Also, past, present, and reasonably foreseeable future projects within the SCRW tend to be concentrated in the valleys and relatively gentle foothill slopes where these species are known to occur. These patterns apply both to the land use changes addressed here as cumulative effects (i.e., since the 1999 UCSB GAP project) and extensive land conversions to agricultural uses prior to 1999. These cumulative effects cause a disproportionately high loss of individuals and habitat for badgers and black-tailed jackrabbits whose habitats and distributions are primarily on gentle topography, lower foothills and canyons, or valley bottoms. Without accounting for past, present or reasonably foreseeable mitigation for these upland habitats, or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 24,300 acres of habitat in the SCRW could be a potential significant impact on the habitat for both species. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 4,800 acres of the habitats, including approximately 1,347 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

⁷⁰² Impact Sciences, *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area*.

⁷⁰³ UCSB, *California Gap Analysis Project*.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the Mission Village project, also could result in potential long-term secondary effects including habitat fragmentation; increased risk of vehicle collisions as a result of new roads and increased traffic volumes on existing roads (e.g., SR-126); nighttime illumination; increased human activity and potential harassment by humans and pet, stray, and feral cats (primarily San Diego black-tailed jackrabbit) and dogs; and the use of rodenticides that could result in accidental poisoning of both species and reduction of the rodent prey base for the American badger. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would result in a large, permanent open space system that would provide suitable habitat to support the American badger and San Diego black-tailed jackrabbit in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection and management of approximately 3,540 acres of suitable habitat for the American badger and San Diego black-tailed jackrabbit. This open space would be conserved in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.3-31**). This set-aside would also help mitigate long-term secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures would also be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting would be downcast away from open space areas. Rodenticides would be controlled through an integrated pest management (IPM) plan. Implementation of these measures would allow these species to persist on site after development in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to these species at the project level, these species likely occur in low densities on site, but have broad geographic ranges (e.g., badger occurs virtually throughout the state), are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands, although these species are likely to occur in low densities on Forest Service lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact

due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

(c) California Special Animals, Watch List Species, Specially Protected Mammal, and CDFG Trust Resource Species

This section addresses cumulative impacts to California Special Animals, Watch List Species, Specially Protected Mammal, and CDFG Trust Resource Species as organized by the different wildlife guilds.

Insect. This guild includes monarch butterfly and San Emigdio blue butterfly. Individual monarch butterflies have been regularly observed during focused butterfly surveys as well as during various other wildlife and plant surveys, but no wintering sites have been observed or documented in the SCRW. Due to the Mission Village project site's distance from the coast, it is unlikely that large numbers of adult monarch butterflies use the project site or the larger RMDP/SCP project area for overwintering.⁷⁰⁴ Monarch butterflies themselves have no special conservation status, but their overwintering sites are considered a sensitive resource.⁷⁰⁵ Because wintering sites do not occur on the Mission Village project site or the larger RMDP/SCP project area, there would be no impacts resulting from the proposed Mission Village project and no cumulative effects of the proposed project on monarch butterfly overwintering habitat.

During the 2004 surveys, San Emigdio blue butterfly was documented within the Specific Plan area in the west-central edge of Potrero Canyon.⁷⁰⁶ One San Emigdio blue butterfly was also observed in the High Country SMA/SEA 20 at the northwestern edge of Salt Creek Canyon during the 2005 surveys. No San Emigdio blue butterflies were observed on the Mission Village project site. The CNDDDB reports no known locations within the SCRW but Stephenson and Calcarone⁷⁰⁷ cite two occurrences within the SCRW, at Mint Canyon and Bouquet Canyon near Castaic. The primary location for this species is along the Mojave River near Victorville, with scattered locations in canyons along the north side of the San Gabriel Mountains near the desert's edge, and in arid areas south of Mount Abel near San Emigdio Mesa.⁷⁰⁸

⁷⁰⁴ Compliance Biology, Inc., *Results of Butterfly Surveys on the Newhall Ranch Project Site*.

⁷⁰⁵ CDFG, "Special Animals," Biogeographic Data Branch, California Natural Diversity Database (2008), <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPAnimals.pdf>.

⁷⁰⁶ Compliance Biology, *Results of Butterfly Surveys on Magic Mountain Entertainment Site, Los Angeles County, California* (2004).

⁷⁰⁷ Stephenson and Calcarone, *Southern California Mountains and Foothills Assessment*.

⁷⁰⁸ T.C. Emmel and J.F. Emmel, *The Butterflies of Southern California* (The Natural History Museum of Los Angeles County Sciences Series 26, 1973); D.D. Murphy, *A Report on the California Butterflies Listed as Candidates for*

Although the San Emigdio blue butterfly's geographic range is relatively large and its larval host plants (quail brush and four-winged saltbush) are common, it is a "habitat specialist," meaning that its distribution is much more localized than its host plants. It is known from a few scattered locations range-wide. Quail brush and four-winged saltbush have wide elevational ranges, but the mixed saltbush scrub vegetation where San Emigdio blue butterfly is found generally occurs on bajadas, flats, lower slopes, playas, and valley floors,⁷⁰⁹ where development and other land use conversions tend to be concentrated. The best-known location is outside the SCRW, along the Mojave River at the Interstate 15 crossing, near Victorville. That occurrence has declined due to surrounding urbanization.⁷¹⁰

Details of the San Emigdio blue butterfly's population status at SCRW occurrences at Bouquet and Mint canyons are unknown. Due to its occurrence in small, widely scattered locations, its susceptibility to habitat loss, and the lack of known occurrences within the SCRW, ongoing development in the watershed could be a potential significant cumulative impact to the San Emigdio blue butterfly.

Vegetation clearing associated with construction of RMDP facilities and fence construction around the Potrero Preserve Area in accordance with the SCP would result in the removal of quail brush plants associated with the colony that occurs outside the Potrero Preserve Area. The construction of Potrero Canyon Road under Alternative 2, as analyzed in the RMDP/SCP EIS/EIR, would fragment the only known colony on site. Even with replacement, preservation, and management of habitat for this species, as proposed, this impact was determined to be significant and unavoidable in the RMDP/SCP EIS/EIR, absent further mitigation for Alternative 2. Due to the species' rarity within the SCRW and throughout its known range, and the other conservation issues described above, a significant impact to even a single occurrence would result in a cumulatively considerable contribution to the species in the watershed. Therefore, the RMDP/SCP project-specific impacts of Alternative 2 would be a significant and unavoidable cumulative impact to San Emigdio blue butterfly. However, the Mission Village project site does not include any populations of San Emigdio blue butterfly, or a concentration of its host plant. Therefore, the Mission Village project would not considerably contribute to cumulative secondary impacts to this species.

Mollusk. The only species in this guild is the terrestrial gastropod Trask shoulderband snail. Surveys were conducted for the Trask shoulderband snail from November 2009 to January 2010 throughout the RMDP/SCP project area, including development areas and mitigation lands (River Corridor SMA, High Country SMA, Salt Creek areas), as well as off-site reference areas that supported suitable microhabitats

Endangered Status by the U.S. Fish and Wildlife Service (1990).

⁷⁰⁹ Sawyer and Keeler-Wolf, *Manual of California Vegetation*.

⁷¹⁰ Stephenson and Calcarone, *Southern California Mountains and Foothills Assessment*.

for the species, including woodrat nests, brush and debris piles, rock piles, isolated rocks, leaf litter, logs, trash/debris piles, and other unique features that may provide soil moisture or refugia. The microhabitats generally are found in coastal scrub, riparian, and chaparral. The surveys for the Trask shoulderband snail were negative;⁷¹¹ however, the presence of two non-special-status helminthoglyptid taxa (Southern California shoulderband snail and Vasquez rocks shoulderband snail) on site indicate that the special-status Trask shoulderband snail has potential to occur.

The Trask shoulderband snail has been documented in scattered locations in coastal Southern California, ranging from San Luis Obispo County to San Diego County, and south into northwestern Baja California, Mexico. The nearest documented occurrences of Trask shoulderband are in Ventura County: the Oxnard Plain, Tierra Rejada Valley, Santa Clara River Valley at Barsdale near Fillmore, Santa Paula Ridge, and one other record with no location provided.⁷¹² The CNDDDB also has one record for the subspecies from La Jolla Canyon in the Santa Monica Mountains at Point Mugu State Park observed in February 2008 ascending a waterfall.⁷¹³

Although there are a few documented occurrences of the Trask shoulderband in the SCRW, this species may be more widespread and common in suitable microhabitats in the SCRW and elsewhere within its range in Southern California. The documented occurrences almost certainly do not represent the actual distribution of the species, because terrestrial snails are highly cryptic, and extensive surveys for these groups have not been systematically conducted. Furthermore, with the exception of a few species, such as Trask shoulderband snail, terrestrial snails are not considered sensitive by the CDFG or USFWS, and focused surveys for this group typically are not conducted. Therefore, present and reasonably foreseeable projects in the SCRW, including the proposed Mission Village project, could cause the loss of potential microhabitats for the Trask shoulderband snail. Without accounting for past, present, or reasonably foreseeable mitigation for these microhabitats, or the RMDP/SCP project's individual contribution to mitigation for loss of these microhabitats, the loss of potential microhabitats for the Trask shoulderband snail in the SCRW could be a significant impact on the microhabitat for this species. The contribution of the RMDP/SCP project, including Mission Village, to this potential significant cumulative impact could be cumulatively considerable, absent mitigation.

⁷¹¹ C. Huntley, "Re: Snail Methods, etc." Email from C. Huntley (Aspen) to P. Behrends (Dudek), A.C. Lynch (Sohagi Law Group), D. Bedford (CDFG), K. Drewe (CDFG), S. White (Aspen), M. Carpenter (Newhall Land), S. Rojas (Newhall Land), and S. Miller (Dudek), March 12, 2010.

⁷¹² D.L. Magney, "Terrestrial Snails of Los Angeles County" (Ojai, California: David Magney Environmental Consulting. August 20, 2009).

⁷¹³ CDFG, *RareFind*, Version 3.1.0, *California Natural Diversity Database*, accessed March 11, 2010.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including habitat fragmentation and isolation of some local populations of these species, making them more vulnerable to extirpation. In addition, over the long term, the close proximity of urban development to suitable habitat could result in disruption of essential behavioral activities (*e.g.*, foraging, reproduction) and greater vulnerability to several potential secondary impacts, including altered wildfires; human-caused habitat degradation (*e.g.*, trampling of vegetation and damage to soil structure, introduction of invasive species, such as Argentine ants and decollate snails (used as a control for garden brown snail) and off-road vehicles); habitat degradation by pet, stray, and feral cats and dogs; and use of chemical pesticides, which may cause poisoning. At the watershed level, these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The required Newhall Ranch Specific Plan Program EIR mitigation measures, in conjunction with the additional mitigation measures recommended by this Draft EIR (**subsection 4.3.10**, Project Mitigation Measures), will result in a large, permanent open space system that will provide suitable microhabitats to support Trask shoulderband snail in the RMDP/SCP project vicinity. Implementation of these mitigation measures will result in protection and management of lands containing good quality microhabitats in three main interconnected areas: the River Corridor SMA, the High Country SMA, and the Salt Creek area. These areas contain a suite of topographical features, including rocky outcrops, canyons, and drainages; all features where shoulderband snail species have been documented in the literature. In addition, these areas support a variety of vegetation communities and provide large areas of open space that would allow for gene flow between watersheds or populations. This set-aside will also help mitigate long-term secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures will also be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs will be leashed or otherwise controlled in or adjacent to open space areas. Pest management activities will be controlled through an integrated pest management (IPM) plan and Argentine ant monitoring and controls will be implemented. Implementation of these measures will allow Trask shoulderband snail to persist on site after development in the large amount of permanent open space that will be protected and managed.

In addition to these measures reducing impacts to this species at the project level, this species appears to have a broad geographic range, is likely to occur in suitable microhabitats within the watershed, and

much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable microhabitats; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Reptile—Low Mobility. This guild includes coastal western whiptail, rosy boa, and San Bernardino ringneck snake. The coastal western whiptail was observed in the High Country SMA/SEA 20,⁷¹⁴ but was not observed in pitfall trapping elsewhere in the RMDP/SCP project area, including the Mission Village project site.⁷¹⁵ There is only one other documented occurrence for the SCRW in the CNDDDB south of Soledad Canyon Road. However, this species has been tracked in the CNDDDB only in recent years, with the oldest occurrence in Ventura and Los Angeles counties dating back to 1993. This species is commonly observed by biologists in suitable habitat in Southern California and it is expected to be relatively common in suitable habitat in the SCRW, on the Mission Village project site, and within the larger RMDP/SCP project area.

The San Bernardino ringneck snake and rosy boa have not been observed on the Mission Village site or within the larger RMDP/SCP project area and there are no documented occurrences in the CNDDDB for these species. While not commonly observed by biologists because of their low detectability during typical walkover surveys, both species are still relatively widespread and common in suitable habitat.⁷¹⁶ There is substantial suitable habitat for these species in the RMDP/SCP project area and elsewhere in the SCRW and both are expected to occur throughout the SCRW.

These three species overlap in their habitat use, but also may occur in habitats that are not typically used by the other species. For example, rosy boa primarily uses coastal scrub and chaparral, while the coastal western whiptail lizard and San Bernardino ringneck snake both use annual grassland and oak woodlands. Unlike the other two species, the ringneck snake also uses riparian habitats. For the purposes of this cumulative analysis for these species, the collective habitat types include riparian, grassland,

⁷¹⁴ Dudek and Associates, *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek*, and off site in Castaic Mesa; Compliance Biology, *Results of the Focused Western Spadefoot Toad Surveys on the Castaic Mesa Project Site*.

⁷¹⁵ Impact Sciences, Inc., *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area*.

⁷¹⁶ Zeiner, Laudenslayer Jr., and Mayer, *California's Wildlife: Volume I*.

coastal scrub, chaparral, and oak woodland. Based on the California GAP data,⁷¹⁷ there are approximately 777,000 acres of potential habitat in the SCRW. Because all three species probably are patchily distributed in the SCRW in association with suitable microhabitats within these broader habitat areas, not all 777,000 acres are expected to be occupied.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (which encompasses the Mission Village project site), would cause the loss of approximately 35,000 acres of 777,000 acres of potential habitat for the coastal western whiptail, rosy boa, and San Bernardino ringneck snake. Without accounting for past, present or reasonably foreseeable mitigation for these habitats (particularly grassland, coastal sage scrub, and chaparral), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 35,000 acres of habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 3,380 acres of the habitats, including approximately 871 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including habitat fragmentation and isolation of some local populations of these species, making them more vulnerable to extirpation. In addition, over the long term, the close proximity of urban development to suitable habitat could result in disruption of essential behavioral activities (e.g., foraging, reproduction) and greater vulnerability to several potential secondary impacts, including human-caused habitat degradation (e.g., trampling of vegetation, introduction of invasive species, such as Argentine ants and off-road vehicles); harassment and collection; predation by pet, stray, and feral cats and dogs; increased incidence of roadkill; and use of pesticides, which may reduce their prey or cause secondary poisoning. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would result in a large, permanent open space system that would provide suitable habitat to support coastal western whiptail, rosy boa, and San Bernardino ringneck snake in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection and management of substantial

⁷¹⁷ UCSB, *California Gap Analysis Project*.

suitable habitat for these species (approximately 5,687 acres for coastal western whiptail, 3,724 acres for rosy boa, and 6,047 acres for San Bernardino ringneck snake) in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.3-31**). This set-aside would also help mitigate long-term secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures would also be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting would be downcast away from open space areas. Rodenticides would be controlled through an integrated pest management (IPM) plan. Implementation of these measures would allow these species to persist on site after development in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges and are relatively common, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird—Raptor. This guild includes Cooper’s hawk, ferruginous hawk, merlin, prairie falcon, sharp-shinned hawk, and turkey vulture. The Cooper’s hawk is the only species in this guild that has been documented to nest in the RMDP/SCP area. The others forage in the RMDP/SCP only during the winter or during migration (ferruginous hawk, merlin, and sharp-shinned hawk) or otherwise are likely to nest off site and use the site only for foraging (prairie falcon and turkey vulture). These species are expected to nest (Cooper’s hawk, prairie falcon, and turkey vulture) and/or forage throughout suitable habitat in the watershed.

As a group these species may forage in virtually all the habitats on the Mission Village project site and immediate vicinity, including agriculture, disturbed land, grassland, coastal scrub, chaparral, riparian, and woodland. However, each of the species typically uses some subset of these habitats. For example, ferruginous hawk typically forages over open lands, such as grassland and agriculture, while Cooper’s hawk primarily forages in riparian and woodland habitat and adjacent coastal scrub. Wintering or

migrant sharp-shinned hawks may forage in all of the habitats listed above. For the purpose of this analysis, therefore, all of these habitats are considered to be suitable for the Bird–Raptor guild.

Based on the California GAP data,⁷¹⁸ there are approximately 836,000 acres of suitable foraging habitat for these species in the SCRW. It is not expected that all 836,000 acres are used by all members of this guild because of the different foraging habitat preferences of the different species.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (encompassing the Mission Village project site), would cause the loss of approximately 38,000 acres of 836,000 acres of suitable foraging habitat for species in the Bird–Raptor guild. Without accounting for past, present or reasonably foreseeable mitigation for these habitats (particularly upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 38,000 acres of habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 5,590 acres of the habitats, including approximately 1,484 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. The larger species such as turkey vulture would have increased potential for entanglement with power lines poles, resulting in physical injury or death from electrocution. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures) would establish a large, managed open space system that includes substantial foraging habitat for these species, including 1,609 acres for Cooper's hawk (includes potential breeding habitat), 2,996 acres for ferruginous hawk, 3,086 acres for merlin, 1,409 acres for prairie falcon, 6,574 acres for sharp-shinned hawk, and 4,267 acres for turkey vulture. This habitat would be set aside in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.3-31**). This set-aside would also help mitigate long-term

⁷¹⁸ UCSB, *California Gap Analysis Project*.

secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures would also be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting would be downcast away from open space areas. Rodenticides would be controlled through an integrated pest management (IPM) plan. Installation of new or relocation of existing power lines in the High Country SMA/SEA 20 and Salt Creek area would be coordinated with CDFG and structures would be designed in accordance with Avian Power Line Interaction Committee⁷¹⁹ guidelines and operated with anti-perching devices to help reduce collisions and electrocutions.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird—Riparian. This guild includes black-crowned night-heron and Nuttall's woodpecker.

The designated sensitive resource for the black-crowned night-heron is roosts or rookery sites, none of which have been documented in the RMDP/SCP project area (which encompasses the Mission Village project site) during the numerous avian surveys conducted in riparian habitats. Because roosts or rookery sites do not occur on the Mission Village project site, there would be no impacts resulting from the proposed project and no cumulative effects of the proposed Mission Village project on roosts or rookery sites for this species. Therefore, this species is not addressed further in this analysis.

Nuttall's woodpecker was observed nearly every year in the RMDP/SCP project area during riparian bird spring surveys and is considered to be common in riparian and woodland habitats in the area. It is likely to use riparian and woodland habitats on and adjacent to the Mission Village project site. It is also commonly observed in riparian and woodland habitats elsewhere in Southern California during biological surveys. For the purpose of this analysis, Nuttall's woodpecker is considered to be common in suitable habitat throughout the watershed.

⁷¹⁹ APLIC, *Avian Protection on Power Lines*.

Based on the California GAP data,⁷²⁰ there are approximately 30,000 acres of suitable habitat for Nuttall's woodpecker in the SCRW. It is not expected that all 30,000 acres are used by this species, but because it is relatively common species in suitable habitat, it is likely to have a broad distribution in the watershed.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (which encompasses the Mission Village project site), would cause the loss of approximately 1,100 acres of 30,000 acres of suitable habitat for Nuttall's woodpecker. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 320 acres of the habitats, including approximately 98 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects including noise; lighting; invasive species, such as giant reed, tamarisk, and Argentine ants; increased human activity; increased predation; and use of pesticides which could reduce prey and cause secondary poisoning. These secondary impacts would not be cumulatively significant because of this species' common occurrence in suitable habitat and widespread distribution.

Although impacts to habitat and secondary effects on Nuttall's woodpecker would not be cumulatively significant, the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR for other special-status riparian birds (**subsection 4.3.10**, Project Mitigation Measures) would protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to this species. This mitigation would result in the preservation and management of approximately 1,629 acres of suitable habitat for Nuttall's woodpecker. This set-aside of lands would also reduce long-term secondary effects. In addition, lighting restrictions along the perimeter of natural areas would help avoid predation of nest sites by nocturnal predators and avoid physiological stress. Limited recreational usage and access restrictions within the River Corridor SMA/SEA 23 and High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect this species by allowing it to nest and forage without disturbance. Controls on pesticides would reduce the chance of secondary poisoning and loss of prey. Controls on Argentine ants would help reduce impacts on young in nests.

⁷²⁰ UCSB, *California Gap Analysis Project*.

Bird—Upland Scrub and Chaparral. This guild includes Allen’s hummingbird, Bell’s sage sparrow, black-chinned sparrow, Costa’s hummingbird, rufous hummingbird, and Southern California rufous-crowned sparrow.

The rufous-crowned sparrow is a relatively common breeding resident in the RMDP/SCP project area and is expected to nest in the coastal scrub on the Mission Village project site.

The Bell’s sage sparrow has not been observed in the RMDP/SCP project area, but two individuals were observed on the adjacent Legacy project site and the species has the potential to nest in small numbers on the Mission Village project site.

The Allen’s and Costa’s hummingbirds are regularly observed in the RMDP/SCP project area and have high potential to nest on the Mission Village project site.

The rufous hummingbird is regularly observed in the early spring in the RMDP/SCP project area and is assumed to use the Mission Village project site during migration but not for breeding.

The black-chinned sparrow has not been observed in the RMDP/SCP project area and is considered to have a low potential to nest on the Mission Village project site. There are no occurrence records in the CNDDDB for the SCRW for any of these species, but because most are still relatively common and are often observed by biologists where they occur, the lack of occurrences is probably due to under-reporting. It is assumed for this analysis that their occurrence in the larger watershed is comparable to their occurrence in the RMDP/SCP project area, including the Mission Village project site.

As a group, these species forage and nest (if a breeding resident) in coastal scrub and/or chaparral throughout their ranges. However, on site, and possibly in the region, the Bell’s sage sparrow is expected to occur only in chaparral.⁷²¹ In addition, the Allen’s hummingbird, Costa’s hummingbird, and rufous hummingbird also commonly forage, and Allen’s hummingbird may nest, in riparian and woodland habitats. Therefore, for these three species the riparian and woodland habitats are included in this analysis.

Based on the California GAP data,⁷²² there are approximately 725,000 acres of suitable coastal scrub and chaparral habitat for black-chinned sparrow and Bell’s sage sparrow and 755,000 acres of suitable coastal scrub, chaparral, riparian, and woodland habitat for Allen’s hummingbird, Costa’s hummingbird, and rufous hummingbird in the SCRW. It is not expected that all of these acreages are used by all of these

⁷²¹ Garrett and Dunn, *The Birds of Southern California*.

⁷²² UCSB, *California Gap Analysis Project*.

species. Based on the RMDP/SCP project area occurrences, the Southern California rufous-crowned sparrow and the hummingbirds may be fairly common elsewhere in the SCRW, but the black-chinned sparrow and Bell's sage sparrow probably are much less common.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 33,000 acres of 725,000 acres of coastal scrub and chaparral for black-chinned sparrow and Bell's sage sparrow and approximately 34,000 acres of 755,000 acres of coastal scrub, chaparral, riparian, and woodland habitat Allen's hummingbird, Costa's hummingbird, and rufous hummingbird. Without accounting for past, present or reasonably foreseeable mitigation (particularly for upland scrub and chaparral), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of this habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the RMDP/SCP project to the impact on coastal scrub and chaparral is 1,980 acres, including approximately 706 acres of permanent and temporary disturbance on the Mission Village project site. The contribution of the RMDP/SCP project to the impact on coastal scrub, chaparral, riparian, and woodland habitat is 2,300 acres, including approximately 804 acres of permanent and temporary disturbance on the Mission Village project site. These contributions by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects including noise; lighting; invasive plant species and Argentine ants (increasing mortality of young of breeding residents); increased human activity; increased predation; and use of pesticides which could reduce prey and cause secondary poisoning. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures) would protect suitable habitat for these species and establish a large, managed open space system. The open space system would include approximately 3,487 acres of coastal scrub and chaparral for the black-chinned sparrow, 1,488 acres of chaparral for Bell's sage sparrow, and approximately 3,860 acres of coastal scrub, chaparral, riparian, and woodland habitat for the hummingbirds. This set-aside of lands would also reduce long-term secondary effects. In addition, for breeding residents lighting restrictions along the perimeter of natural areas would help to reduce predation of nest sites by nocturnal predators and reduce physiological stress. Limited recreational usage and access restrictions within the River Corridor SMA/SEA 23 and High Country SMA/SEA 20; control of

pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect these species by allowing them to nest and forage without disturbance. Controls on pesticides would reduce the chance of secondary poisoning and loss of prey. Controls on Argentine ants would help reduce impacts on young in nests.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird—Upland Grassland. This guild includes only California horned lark. This species is commonly observed in the RMDP/SCP area within the Santa Clara River and adjacent agricultural fields. Although this species has not been documented to nest in the RMDP/SCP project area (which encompasses the Mission Village project site), suitable nesting habitat exists in the area. Therefore, it is assumed that California horned lark could nest on the Mission Village project site. Based in frequent observations of this species in the RMDP/SCP project area and because it is commonly observed by biologists elsewhere in Southern California, it is assumed that the California horned lark commonly occurs in suitable habitat in the SCRW, including annual and native grassland, agriculture, and disturbed land.

Based on the California GAP data,⁷²³ there are approximately 78,000 acres of suitable in the SCRW for California horned lark. It is not expected that all 78,000 acres are used by this species, but it is common enough and has broad enough habitat preferences, that it could occur almost anywhere in these habitats where there is available insect prey, such as freshly disced fields.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project and the Mission Village project, would cause the loss of approximately 3,790 acres of 78,000 acres of suitable habitat for the California horned lark. The contribution of the RMDP/SCP project to this cumulative impact is 3,380 acres of the habitats, including approximately 871 acres of permanent and temporary disturbance on the Mission Village project site. The contribution of the RMDP/SCP project, including the

⁷²³ UCSB, *California Gap Analysis Project*.

proposed Mission Village project, is considered an adverse but not significant cumulative impact to this species because it is still common and widespread within its range and uses a variety of habitats.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, could result in potential long-term secondary effects, including habitat fragmentation; abandonment of nests from human activity; greater vulnerability to nocturnal predators as a result of nighttime lighting; noise from roadways; nest parasitism by cowbirds; greater vulnerability to predation by pet, stray, and feral cats and dogs and other mesopredators; and loss of prey or secondary poisoning due to the use of pesticides. Although these effects could occur, substantial relatively undisturbed winter foraging habitat would remain in the SCRW, which would allow the California horned lark to avoid many of these effects. Secondary effects to wintering birds would be adverse but not significant. Also, this species has not been documented to nest on the Mission Village project area or in the larger RMDP/SCP project area, and if it did, the nesting population probably would be small. Therefore, cumulative secondary impacts to nesting birds, such as cowbird parasitism, would be adverse but not significant.

Even though impacts to the California horned lark and its habitat would not be cumulatively significant and mitigation measures are not required, the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures) for other project-level impacts to biological resources will be implemented that will further reduce any potential impacts. These mitigation measures also include habitat preservation, restoration, enhancement, and management of the High Country SMA/SEA 20 and Salt Creek area—areas that will form a large, contiguous open space system that includes 995 acres of California annual grassland, agriculture, and disturbed land. This set-aside of lands will also reduce potential long-term secondary effects. In addition, for breeding residents lighting restrictions along the perimeter of natural areas will help to reduce predation of nest sites by nocturnal predators and reduce physiological stress. Limited recreational usage and access restrictions within the River Corridor SMA/SEA 23 and High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas will help protect this species by allowing it to nest and forage without disturbance.

Bird—Upland Woodland. This guild includes chipping sparrow, Lawrence’s goldfinch, hermit warbler, and oak titmouse. All of these species have been observed in the RMDP/SCP project area and the chipping sparrow, Lawrence’s goldfinch, and oak titmouse are considered to be breeding residents. The hermit warbler is considered to be a winter migrant. These species have potential to occur on the Mission Village project site. All of these species are fairly common to abundant in suitable habitat and are commonly observed by biologists during surveys in Southern California. Although the primary habitat

for these species is upland woodland, they also forage and nest in riparian habitats. Therefore, for the purpose of the cumulative analysis suitable habitat for these species is defined as woodland and riparian.

Based on the California GAP data,⁷²⁴ there are approximately 30,000 acres of suitable woodland and riparian habitat in the SCRW for these species. It is not expected that all 30,000 acres are used by these species, but because they are still common to abundant within their ranges, and based on regular observations of these species in the RMDP/SCP project area, these species area assumed to be fairly common in suitable habitat in the SCRW.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project (encompassing the Mission Village project site), would cause the loss of approximately 1,100 acres of 30,000 acres of suitable habitat for these. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 320 acres of the habitats, including approximately 98 acres of permanent and temporary disturbance on the Mission Village project site. The contribution of the RMDP/SCP project, including the proposed Mission Village project, is considered an adverse but not significant cumulative impact to this species because they are still common and widespread within their range and uses a variety of habitats, including substantial riparian and oak woodland vegetation communities within the RMDP/SCP project area, National Forest system lands, and other designated open space within the watershed.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including habitat fragmentation; abandonment of nests from human activity; greater vulnerability to nocturnal predators as a result of nighttime lighting; noise from roadways; nest parasitism by cowbirds; greater vulnerability to predation by pet, stray, and feral cats and dogs and other mesopredators; and loss of prey or secondary poisoning due to the use of pesticides. Although these effects could occur, substantial undisturbed habitat would remain in the SCRW, which would allow these species to avoid many of these effects. Therefore, cumulative secondary impacts to migrant (hermit warbler) and nesting birds would be adverse but not significant.

Even though impacts to these species and their habitat would not be cumulatively significant and mitigation measures are not required, the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures) for other project-level impacts to biological resources would be implemented and would further reduce any potential impacts. These mitigation measures include habitat preservation, restoration, enhancement, and

⁷²⁴ UCSB, *California Gap Analysis Project*.

management of the High Country SMA/SEA 20 and Salt Creek area -- areas that would form a large, contiguous open space system that includes 1,560 acres of riparian and woodland habitat. This set-aside of lands would also reduce potential long-term secondary effects. In addition, for breeding residents lighting restrictions along the perimeter of natural areas would help to reduce predation of nest sites by nocturnal predators and reduce physiological stress. Limited recreational usage and access restrictions within the River Corridor SMA/SEA 23 and High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect these species by allowing them to nest and forage without disturbance.

Bats. This guild includes fringed myotis, long-legged myotis, western small-footed myotis, and Yuma myotis. The presence of the fringed myotis and Yuma myotis was confirmed in the RMDP/SCP project area through acoustic detection (fringed myotis) and capture (Yuma myotis). The presence of long-legged myotis and western small-footed myotis was not confirmed, but bats with acoustic signatures in the 40 kHz range, which is the range for these two species, were detected on site in 2004 and 2006. Therefore, long-legged myotis and western small-footed myotis potentially occur in the RMDP/SCP project area. Suitable habitat for these species is present on the Mission Village project site, so they may occur on the site. There are no CNDDDB records of these species elsewhere in the SCRW. However, comprehensive surveys for these species have not been conducted throughout the SCRW. Because species are foraging generalists and use a variety of habitats (although the Yuma myotis primarily uses riparian and wetland habitats), it is assumed that these species could occur throughout the SCRW at least in low numbers. The main limitation for the occurrence of these species probably is a lack of day roosts sites, such as a caves, crevices, rock outcrops, tunnels, etc.

This cumulative analysis addresses the loss of foraging habitat for these species. As foraging generalists, they use a variety of habitats, but probably concentrate most of their foraging activity in wetland and riparian habitats. Suitable foraging habitat for bats includes coastal scrub, chaparral, grassland, riparian, oak woodland, agriculture, and disturbed land. Based on the California GAP data,⁷²⁵ there are approximately 836,000 acres of suitable foraging habitat for bats in the SCRW. It is not expected that all 836,000 acres are used by these bats for foraging because this habitat must be within typical flight distances of day roosts.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 38,000 acres of 836,000 acres of suitable foraging habitat for these bats. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual

⁷²⁵ UCSB, *California Gap Analysis Project*.

contribution to mitigation for loss of habitat, the loss of this habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 5,590 acres of the habitats, including approximately 1,484 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

In addition to loss of foraging habitat, day roosts, including maternal roosts, may be present in the SCRW and subject to potential impacts as a result of present and reasonably foreseeable projects. Although no day roosts for these species were detected in the RMDP/SCP project area, there is a potential for day roost sites to be established in the RMDP/SCP project area, including the Mission Village project site, and to occur elsewhere in the SCRW. Without accounting for past, present or reasonably foreseeable mitigation (particularly upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of day roosts, the loss of roost sites could result in a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential significant cumulative impact, if a day roost were impacted by construction activities, could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects resulting from increased human activity, noise, and lighting. Use of pesticides for agriculture or in landscaped areas may result in secondary poisoning and reduction of prey. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The cumulative loss of foraging habitat and day roost sites, and long-term secondary impacts to these bats species would be reduced through several mitigation measures required by the Newhall Ranch Specific Plan EIR and recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures). These measures include habitat preservation, restoration, enhancement, and management of approximately 6,300 acres in the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area—areas that would form a large, contiguous open space system providing foraging and potential roosting habitat for bats. It is expected that the species in this guild would continue to forage in these areas after buildout of the RMDP/SCP project area. Alternative roost sites would be created to mitigate for any day roost sites disturbed during construction, including creation of roosts under bridges and in culverts, where practicable, in consultation with CDFG. Species measures to reduce potential long-term secondary impacts include controls on public access and lighting.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Mammal—High Mobility. This guild includes American black bear, mountain lion, and mule deer. The mountain lion and mule deer are both present in the RMDP/SCP project area. The RMDP/SCP project area supports about 14,300 acres (22 square miles), which is probably not large enough to encompass the entire home range of a mountain lion individual (e.g., mountain home ranges in the Santa Ana Mountains range from about 32 to 86 square miles, with a mean of 43 square miles⁷²⁶), but assuming some range overlap of individuals, the RMDP/SCP project area could be included in the home ranges of two or three individuals. Female home ranges are generally much smaller than male ranges and may be as small as 20 square miles or as large as 60 square miles.⁷²⁷ Note also that the size of an individual's home range can vary from season to season and year to year, and is probably dependent on prey density and available stalking cover.⁷²⁸ In areas where habitat is limited, population densities can reach 10 adults per 100 square miles.⁷²⁹ Also, the RMDP/SCP project area supports habitat for mountain lions dispersing through the region, and the species is expected to occasionally occur on the Mission Village project site. Mule deer are common in the RMDP/SCP project area and currently use much of the area; this species likely occurs on the Mission Village project site with some frequency. American black bear has been documented to use the High Country SMA/SEA 20 and there may be some suitable denning habitat in the High Country SMA/SEA 20 and Salt Creek area. This species also may very occasionally use the Mission Village project site when moving between the Santa Susana Mountains and Santa Monica Mountains to the south and the Los Padres National Forest and Angeles National Forest in the Sierra Madre Mountains to the north; however, most movement by black bear is likely to occur west of the Mission Village project

⁷²⁶ W.D. Padley, *Mountain Lion Ecology in the Southern Santa Ana Mountains, California* (1989); W.D. Padley, "Female Mountain Lion (*Felis concolor*) Home Ranges in the Southern Santa Ana Mountains, California," abstract in *Fifth Mountain Lion Workshop* (San Diego, California: California Department of Fish and Game and the Southern California Chapter of the Wildlife Society, 1996).

⁷²⁷ Stephenson and Calcarone, *Southern California Mountains and Foothills Assessment*.

⁷²⁸ P. Currier, "Felis concolor," *Mammalian Species* 200 (1983), 1-7.

⁷²⁹ Stephenson and Calcarone, *Southern California Mountains and Foothills Assessment*.

site. All three species are considered to be relatively common to common in suitable habitat in the SCRW, but primarily use the more remote areas of the watershed north and south of the RMDP/SCP project area.

These species use a variety of habitats, and probably are limited in their habitat use only by the amount of vegetation cover available. Of the various habitats in the SCRW, these species will use all of them except large areas of annual grassland, agriculture, and disturbed lands that lack cover, although mule deer often forage in grassland at the edges of shrubland, riparian, and woodland habitats. For the purpose of this analysis, suitable habitat for these species is defined as coastal scrub, chaparral, riparian, and oak woodland.

Based on the California GAP data,⁷³⁰ there are approximately 755,000 acres of suitable habitat for these species the SCRW. It is not expected that all 755,000 acres are used by all of these species. Based on the RMDP/SCP project area occurrences, the mule deer may be relatively common in these habitats, but the mountain lion and black bear are expected to be much less common.

Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 34,000 acres of these habitats. This loss of habitat could be a potential significant impact on these species in the watershed. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 2,300 acres of the habitats, including approximately 804 acres of permanent and temporary disturbance on the Mission Village project site. This contribution by the Mission Village project to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed Mission Village project, also could result in potential long-term secondary effects, including nighttime illumination of areas adjacent to open space, which could disrupt foraging and movement behavior; increased vehicle collisions at new and expanded roadways; increased encounters with humans and pet, stray, and feral dogs; and the use of rodenticides to control small mammals (e.g., ground squirrels and rabbits, which are prey for mountain lion), which may reduce prey populations and possibly cause secondary poisoning of predators. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed Mission Village project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

⁷³⁰ UCSB, *California Gap Analysis Project*.

Several mitigation measures would be implemented to reduce cumulative impacts to habitat and long-term secondary effects associated with development. The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**subsection 4.3.10**, Project Mitigation Measures) include habitat preservation, restoration, enhancement, and management of upland and riparian habitat areas in the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area that would form a large, contiguous open space system of about 6,300 acres that supports these species. It is expected that these species would continue to use these areas as resident and movement habitat after buildout of the RMDP/SCP project area. The set-aside of lands also would reduce long-term secondary effects, such as increased noise, lighting, and increased human activity because individuals would have access to substantial habitat in undisturbed open space that would support their life history needs, including foraging, reproduction, movement, and dispersal. Long-term secondary effects, such as increased human activity; pet, stray, and feral dogs; lighting; and rodenticides would also be mitigated through a variety of measures associated with management of open space.

As discussed in detail in **subsection 4.3.9.b.1.e**, Wildlife Habitat Linkages, the RMDP/SCP project (encompassing the Mission Village project site) may affect regional habitat connectivity and movement by these species. The combined High Country SMA/SEA 20 and Salt Creek area provide the most direct connections between the River corridor habitat and large upland habitat areas south of the River, and are those identified by Penrod et al.⁷³¹ as important components of regional habitat connectivity. The River Corridor SMA/SEA 23 also is an important east-west habitat linkage and intersects the north-south linkage provided by the High Country SMA/SEA 20 and Salt Creek area. These habitat linkages would remain intact and functional after implementation of the RMDP and SCP and buildout of the Specific Plan (including the Mission Village project site), VCC, and Entrada planning areas. The impact of the RMDP/SCP project on regional habitat connectivity, therefore, was determined to be adverse but not significant. Other present and reasonably foreseeable projects considered in this analysis would not affect these regional habitat linkages.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are known to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands that provide primary habitat for these species in the SCRW.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact

⁷³¹ Penrod et al., *South Coast Missing Linkages Project*.

due to loss of suitable habitat; (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects; or (4) a cumulatively considerable contribution to a potential significant impacts to regional wildlife habitat linkages.

(d) Listed Plant Species

San Fernando Valley Spineflower (CE). The San Fernando Valley spineflower occurs at two known locations: on Newhall Land property in Los Angeles County and on the Upper Las Virgenes Canyon Open Space Preserve (formerly Ahmanson Ranch) in Ventura County. The Upper Las Virgenes Canyon Open Space Preserve occurrence lies outside the SCRW boundary; however, it is included in this cumulative impacts analysis as it is the only other known occurrence of this species. The total cumulative area occupied by San Fernando Valley spineflower, including the RMDP/SCP project site and the Ventura County site, is 30.84 acres. Of that total, 20.24 acres are on Newhall Land property and 10.60 acres are at Upper Las Virgenes Canyon Open Space Preserve. The Preserve land is owned by the State of California and is managed by the Mountains Recreation and Conservation Authority, and is preserved in perpetuity.

Due to San Fernando Valley spineflower's very limited known distribution, occurring on 30.84 acres of known occupied habitat, almost any habitat loss would be potentially significant, on both a project-specific and cumulative basis.

The Mission Village project would result in the loss of, 3.29 acres of known occupied spineflower habitat. Mission Village's contribution to cumulative impact on all known occupied spineflower habitat (30.84 acres) would be significant, absent mitigation. However, the implementation of the Spineflower Conservation Plan, including the preservation and management of the other four proposed preserves within the RMDP/SCP planning area, would mitigate its specific and cumulative impacts to spineflower to less than significant. Therefore, Mission Village's cumulative contribution to the impact would be less than significant.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including hydrologic alterations and water quality impacts; accidental clearing, trampling, and grading; runoff, sedimentation, erosion and chemical and toxic compound pollution; exposure to fugitive dust; the introduction of non-native, invasive plant and animal species; increased human activity and trampling and soil compaction; and increased risk of fire. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the RMDP/SCP project, including

the proposed Mission Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

(e) California Native Plant Society (CNPS) and Locally Regulated Plant Species

Undescribed everlasting.⁷³² This undescribed species does not have a CNPS listing status, but is assumed to meet the criteria for designation to CNPS List 1B for purposes of this analysis. The undescribed everlasting was observed on sandy, alluvial benches along the Santa Clara River and within Hasley Canyon. This undescribed everlasting occurs from San Luis Obispo south to San Diego counties, west of the Peninsular and Transverse Ranges. Because this species is associated with sandy alluvial benches along river floodplains, it was not possible to model suitable habitat within the RMDP/SCP project area, nor within the SCRW, based on the California GAP vegetation database,⁷³³ which was compiled at a broad scale and necessarily lower precision. Therefore, cumulative impacts to this species are analyzed based on the loss of individuals of this species.

Of the 900 (approximately) individual undescribed everlastings counted in 2004, the RMDP/SCP project, which includes the Mission Village project, would cause 357 to be lost. This species' distribution on site is expected to be limited to the floodplain of the Santa Clara River and the lower portions of major tributaries. It is anticipated that other present and reasonably foreseeable proposed development within the SCRW would impact occurrences of this species, although it is likely that there would be some level of avoidance of these riparian areas. This could be a potential significant cumulative impact for this species within the watershed. The contribution of the proposed Mission Village project to the loss of individuals could be a significant cumulative impact, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and hydrologic alterations and water quality impacts. This could be a potential significant cumulative impact for this species within the watershed. The contribution of the proposed Mission Village project to these secondary impacts could be cumulatively considerable, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR includes avoidance and minimization measures, including salvage of seeds and/or transplantation (see

⁷³² Some experts identify this species as white-headed cudweed (*Gnaphalium leucocephalum*), which is a CNPS List 2.2 species (S3.2).

⁷³³ UCSB, *California Gap Analysis Project*.

subsection 4.3.10, Project Mitigation Measures). As required by **MV 4.3-75** and **MV 4.3-76**, focused surveys to be conducted prior to the commencement of grading/construction activities within suitable habitat for the undescribed everlasting would ensure that individual plants are detected. Avoidance measures, and, if necessary, the salvage of seeds and/or transplantation of individuals identified within the disturbance area to an appropriate receptor site within the River Corridor SMA/SEA 23 where long-term preservation is provided, shall be implemented as outlined within the undescribed everlasting mitigation and monitoring plan. In addition, mitigation measures designed to provide for the long-term maintenance of the River Corridor SMA/SEA 23 in a natural state by restricting access and prohibiting grazing, agriculture, and recreation within the River Corridor SMA/SEA 23, as well as providing for the restoration and enhancement of habitat within the River Corridor SMA/SEA 23, would mitigate the loss of undescribed everlasting.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; or (2) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Newhall sunflower. This species is a CNPS List 1B.1 plant but has no federal status. This species is only known to occur in the Middle Canyon drainage in the RMDP/SCP project area. Therefore, there would be no other known impacts to this species by other projects in Los Angeles and Ventura counties and, therefore, there would be no cumulative impacts.

Island mountain-mahogany. This CNPS List 4.3 species is known to occur on site within chaparral within the Specific Plan and Entrada planning areas of the RMDP/SCP project area. Island mountain-mahogany was observed nearly every year in the RMDP/SCP project area and is considered to be common in chaparral vegetation communities on site. This species has been documented in chaparral throughout Los Angeles and Ventura counties, including the Channel Islands (except San Clemente Island).⁷³⁴ Island mountain-mahogany is fairly common in suitable habitat throughout the watershed.

As described in **Table 4.3-26**, Summary of Cumulative Impacts to CNPS and Locally-Regulated Plant Species in the Santa Clara River Watershed, based on the California GAP data,⁷³⁵ there are approximately 550,000 acres of chaparral in the SCRW, although island mountain mahogany are not expected to occur in all 550,000 acres. For example, within the RMDP/SCP project area, island mountain-

⁷³⁴ CNPS, *Inventory of Rare and Endangered Plants (2009)*, <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>; Hickman, *The Jepson Manual*.

⁷³⁵ UCSB, *California Gap Analysis Project*.

mahogany was found primarily in chaparral at the base of north-facing slopes. Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 12,500 acres of 550,000 acres of chaparral. This could be a potential significant cumulative impact for this species within the watershed. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 460 acres. This loss of habitat would not be a cumulatively considerable contribution to a potential significant cumulative impact because of this species' widespread distribution within its range.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. These secondary impacts would not be a significant cumulative impact because of this species' widespread distribution within its range, and the configuration of large tracts of chaparral within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Late-flowered mariposa lily. Within the RMDP/SCP project area, this CNPS List 1B.2 species is only known to occur in the High Country SMA/SEA 20. Implementation of the RMDP and SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would not result in any direct or indirect impacts to late-flowered mariposa lily. Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, could, however, result in potential long-term secondary effects, including the introduction of non-native, invasive plant species and increased human activity, trampling, and plant collecting. This could be a potential significant cumulative impact for this species within the watershed. RMDP/SCP project implementation could result in such secondary impacts by recreational visitors in the High Country SMA/SEA 20, but these secondary impacts would be minimal because even if flowers were picked or a plant trampled, the underground bulb would remain. The RMDP/SCP project would not considerably contribute to a potential significant cumulative secondary impact in the watershed.

Mainland cherry. This species does not have a CNPS listing status but is designated as special-status by the County of Los Angeles. Mainland cherry (*Prunus ilicifolia* ssp. *ilicifolia*, a subspecies of holly-leaf cherry) was observed nearly every survey year (2002 through 2007) within chaparral and big sagebrush scrub within the Specific Plan, VCC, and Entrada planning areas within the RMDP/SCP project area. Mainland cherry is an occasional component of chaparral and big sagebrush scrub vegetation communities on site. This species ranges throughout the central and southern Coast Ranges and from

Napa County southward to Baja California.⁷³⁶ Mainland cherry is an occasional component in suitable habitat throughout the watershed.

Based on the California GAP data,⁷³⁷ there are approximately 556,000 acres of chaparral and big sagebrush scrub in the SCRW, although mainland cherry is not expected to occupy all 556,000 acres (see **Table 4.3-26**). For example, within the RMDP/SCP project area, mainland cherry was found primarily in chaparral and big sagebrush scrub in association with ephemeral and/or intermittent stream channels (river wash). Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 12,000 acres of 556,000 acres of chaparral and big sagebrush scrub. This could be a potential significant cumulative impact for this species within the watershed. The contribution of the proposed Mission Village project to this potential significant cumulative impact is 460 acres. This contribution would not be cumulatively considerable because this species is relatively common and widespread throughout the SCRW.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. This would not be a significant cumulative impact for this species within the watershed because this species is relatively common and widespread throughout the SCRW. In addition, the configuration of large tracts of preserved chaparral and big sagebrush scrub within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Oak Trees. Oak trees are designated as special-status by the County of Los Angeles. Oak trees were observed every year within the Specific Plan, VCC, and Entrada planning areas within the RMDP/SCP project area. Oak trees are the dominant species in oak woodland and oak/grass vegetation communities on site, as well as occasional components of other vegetation communities on site. The oak species observed on site (coast live oak, Valley oak, scrub oak, Alvord oak, and interior live oak) have been documented throughout much of California and (for coast live oak) southward to Baja California.⁷³⁸

The combined direct and indirect permanent loss of individual oak trees resulting from implementation of the RMDP and the SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would total 1,370 individuals (5.9 percent of the oak trees in the RMDP/SCP project area). It is anticipated that

⁷³⁶ Hickman, *The Jepson Manual*; N.E. McMurray, "Prunus ilicifolia," Fire Effects Information System, U.S. Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, <http://www.fs.fed.us/database/feis/>. 2007.

⁷³⁷ UCSB, *California Gap Analysis Project*.

⁷³⁸ Hickman, *The Jepson Manual*; McMurray, "Prunus ilicifolia."

present and reasonably foreseeable projects in the SCRW would impact other occurrences of these species. Due to the coarse scale of mapping, oak woodlands were not mapped for any of the projects listed as past, present, or reasonably foreseeable in the California GAP database.⁷³⁹ Nonetheless, the fact that oaks occur in the RMDP/SCP project area (despite not occurring in the GAP data) suggests that oaks probably occur at least in small numbers on other project sites. This could be a potential significant cumulative impact for these species within the watershed. The contribution of the RMDP/SCP project to the cumulative loss of individual oak trees could be cumulatively considerable, absent mitigation.

Past, present, and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; hydrologic alterations and water quality impacts; increased human activity that may result in littering, vandalism, and increased susceptibility to diseases, and trampling and soil compaction; and an increased risk of fire. The RMDP/SCP project's contribution to these impacts in the watershed would not be a significant cumulative impact because the configuration of large tracts of oak woodland vegetation communities within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR includes avoidance and minimization measures (see **subsection 4.3.10**, Project Mitigation Measures). The applicant would implement several mitigation measures to avoid, minimize, and mitigate impacts to individual oak trees and their associated habitat. The proposed mitigation encompasses a three-part strategy that incorporates (1) planting replacement trees, per the requirements of CLAOTO and previously incorporated measure SP-4.6-48; (2) additional replacement ratios recommended in this EIR for impacts to oak trees and oak woodlands where they occur within stream channels falling under CDFG and Corps jurisdiction, per 1600 and 404 (BIO-2); and (3) additional measures recommended in this EIR for tree replacement or woodland restoration/enhancement to mitigate for oak trees and woodland occurring in uplands outside CDFG and Corps jurisdiction (**MV 4.3-28**). General procedures to avoid and minimize impacts to oak trees during construction would be implemented and a qualified biologist would be present during construction in order to avoid inadvertent impacts to biological resources outside of the grading area, further reducing impacts to the species.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; or (2) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

⁷³⁹ UCSB, *California Gap Analysis Project*.

Oak-leaved nemophila. This CNPS List 4.3 species was known to occur from Tuolumne County south through Kern County.⁷⁴⁰ Occurrences on the RMDP/SCP project site are the southernmost recorded occurrences of the species. Oak-leaved nemophila was found in several locations within oak woodland within the Specific Plan area. Oak-leaved nemophila is assumed to occur as an occasional component of oak woodlands within the Specific Plan area. For the purpose of this analysis, oak-leaved nemophila is considered to be an occasional component of oak woodlands throughout the watershed. It is anticipated that present and reasonably foreseeable projects in the SCRW would impact occasional occurrences of this species.

Based on the California GAP data,⁷⁴¹ there are approximately 5,170 acres of oak woodland vegetation communities in the SCRW (see **Table 4.3-26**). Based on the project-level mapping, 95 acres (out of 1,168 acres) of oak woodland vegetation communities on site would be impacted by the RMDP/SCP project. Given the presence of oak woodland vegetation communities within the RMDP/SCP project area, National Forest system lands and other designated open space within the watershed,⁷⁴² the impact to occasional individuals would not be a significant cumulative impact.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. These secondary effects would not be a significant cumulative impact because the configuration of large tracts of oak woodland vegetation communities conserved within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Ojai navarretia. Within the RMDP/SCP project area, this CNPS List 1B.1 species is only known to occur in the Salt Creek area. Implementation of the RMDP and SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would not result in any direct or indirect impacts to Ojai navarretia. Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, could, however, result in potential long-term secondary effects, including the introduction of non-native, invasive plant species and increased human activity, and trampling. This could be a potential significant cumulative impact for this species within the watershed. RMDP/SCP project implementation could result in such secondary impacts by recreational visitors in the Salt Creek area, but these secondary impacts would be minimal. The RMDP/SCP project

⁷⁴⁰ CNPS, *Inventory of Rare and Endangered Plants*.

⁷⁴¹ UCSB, *California Gap Analysis Project*.

⁷⁴² UCSB, *California Gap Analysis Project*.

would not considerably contribute to a potential significant cumulative secondary impact in the watershed.

Parish's sagebrush. This species does not have a CNPS listing status but is designated as special-status by the County of Los Angeles. Parish's sagebrush occurs within big sagebrush scrub within the Specific Plan and Entrada planning areas of the RMDP/SCP project area. Parish's sagebrush occurs along coastal ranges in Baja California and Southern California, extending inland to regions south of the Great Basin.⁷⁴³ It is considered regionally rare by local botanists.⁷⁴⁴ When observed in the RMDP/SCP project area, Parish's sagebrush was found primarily intermixed with common big sagebrush within big sagebrush scrub. For the purpose of this analysis, Parish's sagebrush is considered to be a minor component of big sagebrush scrub throughout the watershed.

Based on the California GAP data,⁷⁴⁵ there are approximately 5,000 acres of big sagebrush scrub in the SCRW (see **Table 4.3-26**). Based on the GAP data, present and reasonably foreseeable projects in the SCRW would cause the loss of approximately 19 acres of 5,000 acres of big sagebrush scrub. This is likely a significant underestimate, however, due to the coarse mapping scale of the GAP data. The California GAP database does not include big sagebrush scrub within the RMDP/SCP project area, but the project-level mapping indicates that 91.3 acres of big sagebrush scrub are present on site. The RMDP/SCP project would impact 70 acres of the big sagebrush scrub on site. It is anticipated that occasional individuals of this species would be impacted by other present and reasonably foreseeable projects. Given the presence of big sagebrush scrub within the National Forest system lands and other designated open space within the watershed, the impact to occasional individuals of Parish's sagebrush would not be a significant cumulative impact.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. Cumulative impacts due to secondary effects would not be significant because of the limited amount of big sagebrush scrub within the SCRW.

Peirson's morning-glory. This CNPS List 4.2 species is known to occur on site within chaparral, coastal scrub, and grassland vegetation communities within the Specific Plan, VCC, and Entrada planning areas of the RMDP/SCP project area. Peirson's morning-glory was observed nearly every year in the

⁷⁴³ Shultz, "*Artemisia tridentata* spp. *Parishii*," 517; Shultz, "*Artemisia tridentata* spp. *Tridentata*," , 516.

⁷⁴⁴ M. Meyer, Assessment of Parish's sagebrush regional distribution by local botanists, personal communication from M. Meyer (CDFG) (October 2007).

⁷⁴⁵ UCSB, *California Gap Analysis Project*.

RMDP/SCP project area and is common in chaparral, coastal scrub, and grassland vegetation communities on site. This species has been documented in Los Angeles County in the northern San Gabriel Mountains and adjacent Mojave Desert (Antelope Valley).⁷⁴⁶ In the Liebre Mountains northeast of the RMDP/SCP project Area and largely within the SCRW, it is “widespread and locally common” in grasslands, open shrublands, and woodlands.⁷⁴⁷

Based on the California GAP data,⁷⁴⁸ there are approximately 747,000 acres of chaparral, coastal scrub, and grassland vegetation communities in the SCRW (see **Table 4.3-26**). Present and reasonably foreseeable projects in the SCRW, including the RMDP/SCP project, would cause the loss of approximately 34,000 acres of 747,000 acres of chaparral, coastal scrub, and grassland. This could be a potential significant cumulative impact. The contribution of the RMDP/SCP project to this significant cumulative impact is 3,050 acres. This contribution would not be a significant cumulative impact because of this species’ widespread distribution within its range.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. Cumulative impacts due to secondary impacts would not be significant because of this species’ widespread distribution within its range. In addition, the configuration of large tracts of chaparral, coastal scrub, and grassland vegetation communities within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

⁷⁴⁶ CNPS, *Inventory of Rare and Endangered Plants*; Hickman, *The Jepson Manual*.

⁷⁴⁷ S. Boyd, “Vascular Flora of the Liebre Mountains, Western Transverse Ranges, California,” *Aliso* 18(2) (1999), 93–129.

⁷⁴⁸ UCSB, *California Gap Analysis Project*.

Table 4.3-26
Summary of Cumulative Impacts to CNPS and Locally-Regulated Plant Species
in the Santa Clara River Watershed¹

| Species | Habitat Relationships ² | Total Acres of Habitat in Watershed | Permanent Direct and Indirect Impact Acres of RMDP/SCP project | Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including RMDP/SCP project) | Estimated Cumulative Impact Acres in Watershed after Accounting for RMDP/SCP project Plus Present and Reasonably Foreseeable Projects |
|----------------------------------|--|-------------------------------------|--|---|---|
| island mountain-mahogany | Chaparral | 550,300 | 460 (<0.1%) | 12,000 (2.1%) | 12,460 (2.3%) |
| mainland cherry | Big sagebrush scrub Chaparral | 556,000 | 460 (<0.1%) | 12,000 (2.1%) | 12,460 (2.3%) |
| oaks | Oak woodland | 5,170 | 95 (1.8%) | 0 (0.0%) | 95 (1.8%) |
| oak-leaved nemophila | Oak woodland | 5,170 | 95 (1.8%) | 0 (0.0%) | 95 (1.8%) |
| Parish's sagebrush | Big sagebrush scrub | 5,000 | 0 (0.0%) | 19 (0.4%) | 19 (0.4%) |
| Peirson's morning-glory | Coastal scrub Chaparral Non-native grassland | 747,000 | 3,050 (0.4%) | 31,000 (4.1%) | 34,050 (4.5%) |
| Southern California black walnut | California walnut woodland | 3,627 | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| southwestern spiny rush | Permanently flooded lacustrine habitat | 5,000 | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |

Notes:

¹ Acreages were not quantified for the Newhall sunflower because impacts are site-specific. Acreages were not quantified for undescribed everlasting, late-flowered mariposa lily, Ojai navarretia, Plummer's mariposa lily, and slender mariposa lily because the project-level analysis was based on impacts to individuals rather than habitat.

² Acreages based on California GAP Vegetation Communities (UCSB, California Gap Analysis Project) and project-level mapping within RMDP/SCP project boundaries.

Plummer's mariposa lily. Within the RMDP/SCP project area, this CNPS List 1B.2 species is only known to occur in the High Country SMA/SEA 20. Therefore, implementation of the RMDP and SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would not result in any direct or indirect impacts to Plummer's mariposa lily and would not contribute to any cumulative impacts in the watershed. Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, could, however, result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and plant collecting; and wildfire. This could be a potential significant cumulative impact for this species within the watershed. At the project-level, because this species only occurs in the High Country SMA/SEA 20 and away from trails, human-related effects such as trampling and collecting are unlikely to occur. RMDP/SCP project implementation could cause secondary impacts to the species from a more frequent fire regime, but these impacts likely would be limited because this species also has a positive response to wildfire (e.g., bulbs tend to flower in higher numbers following wildfire, which introduces large quantities of mineral nutrients (as ash) into the soil). The RMDP/SCP project, therefore, would not considerably contribute to potential significant cumulative secondary impacts in the watershed.

Slender mariposa lily. This CNPS List 1B.2 species is known to occur on site within grassland and coastal scrub within the Specific Plan and Entrada planning areas of the RMDP and SCP RMDP/SCP project area. Slender mariposa lily was observed nearly every year in the RMDP/SCP project area and is locally abundant in some parts of the RMDP/SCP project area. This species has been documented in the southern San Gabriel Mountains and Liebre Mountains of eastern Los Angeles County and the Santa Susana Mountains in western Los Angeles and Ventura counties.⁷⁴⁹

The combined direct and indirect permanent loss of slender mariposa lily cumulative occupied area and individuals resulting from implementation of the RMDP and the SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would total 72 acres (35.0 percent of cumulative mapped occupied habitat) and 30,645 individuals (46.4 percent of plants censused on site). It is anticipated that present and reasonably foreseeable projects in the SCRW would impact other occurrences of this species, though these impacts have not been documented or quantified due to a lack of specific information. This could be a significant cumulative impact to this species within the watershed. The contribution of the RMDP/SCP project to this potential significant cumulative impact is 72 acres and 30,645 individuals, which could be a significant cumulative impact, absent mitigation.

⁷⁴⁹ CNPS, *Inventory of Rare and Endangered Plants*; Boyd, "Vascular Flora of the Liebre Mountains," 93–129.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased risk of fire; and increased human activity, collecting, trampling, and soil compaction. These secondary impacts could be a significant cumulative impact, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR includes avoidance and minimization measures (see **subsection 4.3.10**, Project Mitigation Measures). The applicant would implement several mitigation measures to avoid, minimize, and mitigate impacts to individuals. The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan⁷⁵⁰ describes how the applicant would successfully restore/enhance slender mariposa lily habitat and re-establish slender mariposa lily locations at appropriate receptor sites within the High Country SMA/SEA 20, Salt Creek area, and San Martinez Grande area where opportunities for long-term preservation are provided. While implementation of the RMDP/SCP project would result in impacts to a maximum of 72 acres of cumulative occupied area are within the development footprint, the mitigation and monitoring program mitigates impacts to slender mariposa lily cumulative occupied area at a ratio of 1:1 through successfully restoring/enhancing slender mariposa lily habitat and re-establishing slender mariposa lily locations in the High Country SMA/SEA 20, Salt Creek area, and other sites as appropriate. In addition, a minimum of 133 acres of slender mariposa lily cumulative occupied area would be conserved in the RMDP/SCP project boundaries. These conserved acres include 73 acres of occupied habitat in the Salt Creek area, 30 acres in the High Country SMA/SEA 20, and at least 28 acres in the San Martinez Grade area.

Long-term secondary impacts to slender mariposa lily include: introduction of non-native, invasive plant species; hydrologic alterations and water quality impacts; increased human activity, trampling, and soil compaction; and increased risk of fire. These impacts would be minimized by restricting access to, grazing within, and recreational usage of the High Country SMA/SEA 20; providing for transition areas along the High Country SMA/SEA 20; providing drainage guidelines; requiring conformance with NPDES and RWQCB permit provisions; requiring the implementation of a wildfire fuel modification plan; placing restrictions on domestic animals in proximity to open space areas; by providing trail signage and homeowner education; and placing restrictions on plant palettes proposed for use on landscaped slopes.

For the reasons set forth above, the proposed Mission Village project would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this

⁷⁵⁰ Dudek, *Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan* (Valencia, California: Dudek, 2007).

species; or (2) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Southern California black walnut. This CNPS List 4.2 species is known to occur on site as the dominant species of California walnut woodland, which, within the RMDP/SCP project area, is only known to occur only in the High Country SMA/SEA 20 and Salt Creek area within the RMDP/SCP project area. Southern California black walnut has also been observed as an uncommon component within other vegetation communities within the RMDP/SCP project area, including oak woodlands, coastal scrub, and chaparral. Implementation of the RMDP/SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would not result in direct or indirect impacts to the 27 acres of California walnut woodland on site. Individual Southern California black walnut trees are uncommon in other vegetation communities, but implementation of the RMDP/SCP and buildout of the Specific Plan, VCC, and Entrada planning areas is expected to result in the removal of occasional individual Southern California black walnut trees that exist in vegetation communities other than California walnut woodland.

Based on the California GAP data,⁷⁵¹ there are approximately 3,600 acres of California walnut woodland in the SCRW. Although the California GAP database does not include California walnut woodland within the RMDP/SCP project site, the project-level mapping indicates 27 acres of California walnut woodland are present on site. The RMDP/SCP project would not impact California walnut woodland on site. However, it is anticipated that present and reasonably foreseeable projects, including the RMDP/SCP project, in the SCRW would result in the removal of occasional individual Southern California black walnut trees that exist in vegetation communities other than California walnut woodland. For example, Boyd observed this species as occasionally occurring in scrub and woodland within lower Bouquet Canyon, and scarcely occurring at other sites in lower elevations to the west and south.⁷⁵² Given the presence of California walnut woodland within the National Forest system lands and other designated open space within the watershed, the impact to occasional individuals of Southern California black walnut would not be a significant cumulative impact.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. Cumulative impacts due to secondary effects would not be significant because of this species' widespread distribution within its range. In addition, the

⁷⁵¹ UCSB, *California Gap Analysis Project*.

⁷⁵² Boyd, "Vascular Flora of the Liebre Mountains," 93-129.

configuration of California walnut woodland in the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Southwestern spiny rush. This CNPS List 4.2 species was observed on site along secondary channels and low terraces along the Santa Clara River within the Specific Plan area of the RMDP/SCP project area. Southwestern spiny rush occurs in San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties, and southward into Baja California; the distribution of this species possibly extends east into Imperial County and Arizona as well.⁷⁵³ This species is considered locally and regionally rare by local botanists and has been documented from 10 vouchered collections from Los Angeles County, half of which are on Santa Catalina Island.⁷⁵⁴ This species was observed in 2006 in Violin Canyon adjacent to the Angeles National Forest and Interstate-5 (I-5), south of Templin Highway and Paradise Ranch, 8 miles north of Castaic, in Los Angeles County. Southwestern spiny rush was observed in 2007 near the western bank of Castaic Creek above the Castaic power plant. The species was also observed in 2005 and 2006 in Piru Creek (below Frenchman's flat) and Oso Creek,⁷⁵⁵ and Castaic Creek upstream of the confluence of Castaic Creek and Fish Creek, and this species is locally common in Grasshopper Canyon.⁷⁵⁶ Based on these observations, southwestern spiny rush is considered to be an occasional component in suitable habitat throughout the watershed.

This species is associated with perennially wet areas (perennial streams, seeps, marshes, etc.) within riparian habitat. The California GAP data⁷⁵⁷ includes approximately 25,000 acres of mapped riparian habitat but does not identify the very small subset of perennially wet habitat where southwestern spiny rush may occur. It is anticipated that present and reasonably foreseeable projects in the SCRW would result in the removal of occasional individual southwestern spiny rush that exist in perennially wet habitat within the watershed. However, this plant is known to occur within National Forest system lands that would not be subject to the same level of impact associated with present and reasonably foreseeable projects on private lands in the SCRW. Impacts to this species would not be cumulatively significant because of this species' widespread distribution within the watershed and its range.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the RMDP/SCP project, also could result in potential long-term secondary

⁷⁵³ CNPS, *Inventory of Rare and Endangered Plants*.

⁷⁵⁴ D.L. Magney and S. Hoskinson, "Landmark Village Draft EIR (SP 00-198/VTTM No. 53108/RCUP 200500112/OTP 00196/CUP 00-196)," letter from D.L. Magney and S. Hoskinson (David Magney Environmental Consulting) to D. Fierros (Los Angeles County Department of Regional Planning) (January 30 2007).

⁷⁵⁵ C. Huntley, "Re: Rare plant locations for *Juncus* and ringtail."

⁷⁵⁶ Boyd, "Vascular Flora of the Liebre Mountains," 93-129.

⁷⁵⁷ UCSB, *California Gap Analysis Project*.

effects, including the introduction of non-native, invasive plant species; hydrologic alterations and water quality impacts; and increased human activity, trampling, and soil compaction. Impacts to this species would not be cumulatively significant because of this species' widespread distribution within its watershed and its range.

c. Summary of Cumulative Impacts to Biological Resources

Based on the preceding discussion, the cumulative impact analysis for biological resources resulted in four different cumulative impact determinations:

1. The contribution of the proposed Mission Village project to a potential cumulative impact in the watershed resulting from present and reasonably foreseeable projects, including the RMDP/SCP project, would be cumulatively considerable and unavoidable, even after considering mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended in this EIR. No feasible additional mitigation measures applicable to Alternative 2 can be identified that would reduce the considerable contribution to a potential significant impact to a level less than cumulatively considerable under this alternative. Reasons for these significant unavoidable impacts include:
 - (a) extensive loss and fragmentation of the resource within the Santa Clara River watershed; and
 - (b) substantial on site habitat loss and fragmentation of a resource with a very limited distribution on site and/or geographic range.
2. The contribution of the proposed Mission Village project to a potential cumulative impact in the watershed resulting from present and reasonably foreseeable projects, including the RMDP/SCP project, could be cumulatively considerable, absent mitigation. Implementation of the mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended in this EIR would reduce the contribution of the proposed Mission Village project to cumulative impacts to a level less than cumulatively considerable.
3. The contribution of the proposed Mission Village project to a potential cumulative impact in the watershed resulting from present and foreseeable projects, including the RMDP/SCP project, would not be cumulatively considerable. This determination was made where the resource affected by the RMDP/SCP project comprises a very small proportion of the resource impacts in the watershed.
4. Past, present, and reasonably foreseeable projects, including the RMDP/SCP project, including the proposed Mission Village project, do not result in potential significant watershed-level impacts. This

determination was made when the resource is still common to abundance in its geographic range and/or substantial habitat for the species would remain in the watershed.

There were two significant, cumulatively considerable, and unavoidable impacts for the Mission Village project: (1) impacts to coastal scrub communities, and (2) impacts to San Fernando Valley spineflower individuals.

Table 4.3-27 provides a summary of the Mission Village project's contribution to cumulative impacts determinations for biological resources.

Table 4.3-27
Summary of Cumulative Impact Determinations for Biological Resources

| Cumulative Impact Determination | Biological Resource | Project's Contribution Cumulatively Considerable After Mitigation |
|--|--|---|
| Contribution of Mission Village, to potential cumulative impact would be cumulatively considerable, significant, and unavoidable | Vegetation Communities coastal scrub communities -- extensive loss and fragmentation in the Santa Clara River watershed | Yes |
| Contribution of Mission Village, to potential cumulative impact would be cumulatively considerable, significant, and unavoidable | San Fernando Valley Spineflower preservation and management of 13.89 occupied acres and associated spineflower preserves would not mitigate project-related impacts to less than significant | Yes |

Impacts would be cumulatively considerable, absent mitigation, for a majority of other biological resources, including vegetation communities; common wildlife as a whole; most of the federally- and state-listed threatened and endangered and all California Fully Protected species; wildlife habitat linkages, corridors, and crossings; most California Species of Special Concern; many California Special Animals, Watch List species, Specially Protected Mammals, and CDFG Trust Resources; and three special-status plants. The mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and mitigation measures recommended by this EIR (**subsection 4.3.10**, Project Mitigation Measures) would reduce impacts to these resources to a level less than cumulatively considerable. To offset loss vegetation communities and habitat for species, these mitigation measures generally include the dedication and maintenance of existing natural lands in the Open Area, River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, totaling approximately 9,753 acres. For riparian resources, these measures include replacing the functions and services of riparian communities that may be lost through construction. For both wildlife and plant species, mitigation includes measures to control

for long-term secondary effects, including controls on public access to dedicated open space areas; controls on pet, stray, and feral cats and dogs; termination of grazing activities (except for the purpose of resource management); controls on invasive plant and animal species (including Argentine ants, brown-headed cowbirds, bullfrogs, African clawed frogs, and crayfish); controls on pesticides (including rodenticides); controls on hydrological alterations and water quality; and controls on nighttime lighting; fencing and signage; and homeowner education about sensitive resources.

It was determined that the contribution of the proposed Mission Village project to potential significant cumulative impacts at the watershed level would not be cumulatively considerable for most special-status biological resources, including southern steelhead and several special-status plants. In addition, it was determined that significant cumulative impacts to a majority of wildlife and plant species at the watershed level would not occur. Although the contribution of the proposed Mission Village project would not be cumulatively considerable in these cases, the mitigation measures described above would reduce on site impacts to these resources.

In summary, although the RMDP/SCP, including the proposed Mission Village project, would include significant impacts to biological resources absent mitigation, the mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and recommended by this EIR would substantially reduce these impacts to below a level of significance. However, the proposed Mission Village project, in combination with other past, present and reasonably foreseeable projects within the SCRW, would result in significant cumulative impacts to two biological resources: coastal scrub and San Fernando Valley spineflower. Despite mitigation, the proposed Mission Village project would result in a cumulatively considerable contribution to these significant unavoidable impacts.

12. SIGNIFICANT UNAVOIDABLE IMPACTS

a. Project Impacts

The proposed project would not result in significant unavoidable impacts.

b. Cumulative Impacts

The proposed Mission Village project would contribute toward the cumulative impacts to biological resources. Most of these impacts, however, can be reduced to less than significant levels through mitigation. Nevertheless, the project's contribution toward the cumulative impacts to coastal scrub and the San Fernando Valley spineflower would remain significant even after mitigation measures are implemented.

Even with implementation of the following mitigation measures, the proposed project's contribution to cumulative impacts to coastal scrub would remain significant.

Mitigation Measures SP 4.6-37 through SP 4.6-42 (which would protect 1,311 acres of coastal scrub in the High Country SMA/SEA 20);

Mitigation Measure MV 4.3-24 (preservation of 616.3 acres of coastal scrub off-site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Mission Village); and

Protection of the Salt Creek Area (which contains 631 acres of this habitat type).

In the case of coastal scrub, no feasible additional mitigation measures applicable to Mission Village could be identified that would reduce the significant impact to a less than cumulatively considerable level. These unavoidable impacts to coastal scrub would occur due to extensive loss and fragmentation in Southern California.

With implementation of the following mitigation measures, the project's contribution to cumulative impacts to San Fernando Valley spineflower would remain significant.

Applicable mitigation measures include the following:

Mitigation Measures SP 4.6-53 and SP 4.6-59 (requires current, updated, site-specific surveys for special-status species in consultation with CDFG),

Mitigation Measure SP 4.6-65 (requiring subdivision maps responsive to spineflower characteristics),

Mitigation Measure SP 4.6-66 (guidelines for the design, establishment, and management of spineflower preserves),

Mitigation Measure SP 4.6-67 (open space connections and setbacks for spineflower preserves; prohibition of disturbance within spineflower preserves or buffers; revegetation requirements),

Mitigation Measure SP 4.6-68 (temporary fencing and signage around the spineflower preserve(s), open space connections, and buffer areas; permanent fencing and signage along the spineflower preserve boundary),

Mitigation Measure SP 4.6-69 (storm drain system requirements for spineflower preserve areas),

Mitigation Measure SP 4.6-70 (road construction requirements to reduce or avoid impacts to spineflowers),

Mitigation Measure SP 4.6-71 (engineering, design, and grading modifications around spineflower preserves),

Mitigation Measure SP 4.6-72 (fire management plan to avoid and minimize impacts to the spineflower),

Mitigation Measure SP 4.6-73 (minimization of changes in surface water flows to spineflower preserves),

Mitigation Measure SP 4.6-74 (biweekly biological monitoring of grading and fence/utility installation activities; submission of monthly monitoring reports),

Mitigation Measure SP 4.6-75 (water control and stormwater flow redirection during construction activities)

Mitigation Measure SP 4.6-76 (reassessment of impacts to spineflower populations)

Mitigation Measure SP 4.6-77 (spineflower monitoring and management plan),

Mitigation Measure SP 4.6-78 (spineflower translocation and reintroduction program),

Mitigation Measure SP 4.6-79 (consultation with the County and CDFG regarding ongoing agricultural operations), and

Mitigation Measure SP 4.6-80 (San Martinez Grande spineflower preserve area).

This impact would also be reduced through the implementation of the following:

Mitigation Measures MV 4.3-58 and MV 4.3-59 (spineflower preserve establishment and management),

Mitigation Measures MV 4.3-60, MV 4.3-61, MV 4.3-62, MV 4.3-64, and MV 4.3-66 (spineflower preserve temporary fencing requirements and education of construction workers),

Mitigation Measures MV 4.3-60, MV 4.3-62, MV 4.3-65, and MV 4.3-66 (control of construction-related dust, erosion, and water quality within spineflower preserve),

Mitigation Measures MV 4.3-68 through MV 4.3-70 (restricting access to spineflower preserves through fencing and signage),

Mitigation Measures MV 4.3-71 and MV 4.3-72 (restrictions on storm drains within spineflower preserves),

Mitigation Measure MV 4.3-63 (pre-construction review of construction plans and specifications),

Mitigation Measure MV 4.3-67 (review of plant palettes used within 200 feet of spineflower preserves and inspection of all container plants within 200 feet for disease and pests),

Mitigation Measure MV 4.3-73 (guidelines for restoration and enhancement of degraded and/or damaged spineflower habitat), and

Mitigation Measure MV 4.3-74 (emergency fire response plan and response strategies for wildfire or mass movement (*e.g.*, landslides, slope sloughing, or other geologic events) within the spineflower preserves).

In the case of San Fernando Valley spineflower, no feasible additional mitigation measures applicable to Mission Village under Alternative 2 could be identified that would reduce the considerable contribution to a potential significant impact to a level less than cumulatively considerable. These unavoidable impacts to San Fernando Valley spineflower would occur because preservation and management of 13.89 occupied acres and associated spineflower preserves would not mitigate project-related impacts to less than significant.