

**Biological Resources Synopsis for the Homestead South Site
(prepared for SEATAC discussion)**

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Biological Resources Synopsis for the Homestead South Site

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1.0 EXECUTIVE SUMMARY

The Newhall Land and Farming Company (Newhall) is currently processing a Vesting Tentative Tract Map (VTTM 060678) and a Significant Ecological Area (SEA) Conditional Use Permit (CUP 200500150) allowing development of the Homestead South Village project (Homestead South or Project) as part of implementing the Newhall Ranch Specific Plan. To obtain such a CUP, the County's SEA Technical Advisory Committee (SEATAC) must review the application and assess the project's effects, if any, on the designated SEAs within the Project.

This report provides a summary of project-specific resource impact data necessary for SEATAC's review and explains the relationship between the requested CUP for Homestead South and the CUPs previously issued by the County for the Landmark Village and Mission Village projects. As discussed below, the vast majority of the improvements identified in the Homestead South CUP application include the same ones reviewed by SEATAC when the County approved the CUP for Landmark Village and Mission Village. Additionally, the California Department of Fish and Wildlife (the Department)¹ completed a comprehensive environmental review of the entire Newhall Ranch Specific Plan area with a special emphasis on the project's effects on habitat and special-status plant, fish, and terrestrial wildlife species. This review was inclusive of the Homestead South project area. As such, the Department considered numerous project design elements to further avoid and minimize Specific Plan impacts to the River Corridor SEA and adopted a comprehensive mitigation program to minimize and offset impacts to River Corridor SEA resources.

This report also summarizes the impacts of the Homestead South project on the pre-existing San Fernando Valley spineflower (SVFS; *Chorizanthe parryi* var. *fernandina*), conservation easement located at Humble Canyon. The SVFS is a state-listed endangered species. This easement was established in February 2003 by agreement between Newhall and the Department. During the recently approved One Valley One Vision (OVOV) Area Plan update, this conservation easement area was included in Santa Clara River SMA/SEA. In 2010, the Grapevine Mesa preserve area was substantially enlarged and enhanced pursuant to the Spineflower Conservation Plan (SCP) adopted by the Department. In addition, mitigation measures were imposed by the SCP that are intended, in part, to address the impacts of the Homestead South project on sensitive resources in Humble Canyon, including impacts on the SFVS.

¹ As of January 1, 2013, the Department changed its name from the California Department of Fish and Game to the Department of Fish and Wildlife. Therefore, references to the department prior to January 1, 2013, refer to the Department of Fish and Game and after this date to the Department of Fish and Wildlife.

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Newhall is asking for acceptance of the scope of analyses to be conducted for the present project, that analysis of the present project will incorporate previous certified EIR analyses without revision, and that any newly-drafted baseline and analytical information will be limited to areas unique to Homestead South that have not been previously investigated in prior EIRs or SEATAC Biota Reports.

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2.0 INTRODUCTION

2.1 The Project

The Homestead South tract map (VTTM 60678) proposes development of 3,617 residences (699 single-family and 2,918 multi-family); 66,400 square feet of retail commercial uses; a 9.4-acre elementary school site; a 19.4-acre junior high school site; a 54.6-acre high school site; 12.1 acres of public parks; 11.0 acres of private recreation areas; and 980.5 acres of open space, which includes the 67.4-acre “Grapevine Mesa” spineflower preserve in the northeastern portion of the tract map site. The proposed project also includes: (a) the Long Canyon Road Bridge, (b) trails, (d) bank stabilization, (e) utility corridor (storm drain, water quality basins, sanitary sewer and water, cable, gas, and fiber optics), (f) agricultural wells, (g) riparian mitigation sites, (h) storm drain outlets and (i) off-site transport of materials associated with grading, including haul routes. The entire Homestead South project site occupies approximately 2,535 acres, including the 1,746-acre Homestead South Village tract map site and an additional 789 acres of off-site land primarily within the boundaries of the approved Specific Plan (Figures 1 and 2). Homestead South includes several proposed off-tract map site improvements required to provide adequate circulation, service, and utilities to the tract map site (External Map Improvements). In addition to the development described above, the proposed Project includes External Map improvements to facilitate development. The External Map Improvements can be grouped into the following categories: (1) roadway improvements, including extension of Magic Mountain Parkway and Long Canyon Road; (2) hydrology-related improvements, including improvements in or near the Santa Clara River corridor (e.g., buried bank stabilization) and various drainage improvements; (3) utility corridor between the existing Valencia WRP and the approved Newhall Ranch WRP; (4) water supply facilities; (5) wastewater-related facilities; (6) Southern California Edison substation and related facilities; and off-site transport of materials associated with grading, including haul routes.

Many of the External Map improvements were approved by the County of Los Angeles as part of the Newhall Ranch Landmark Village and Mission Village projects (“Previously Approved Improvements”). Those facilities and infrastructure improvements that would support the Homestead South project and that were previously approved by the County would only be implemented as part of the Homestead South proposed Project if the development of Homestead South would occur prior to development of the Landmark Village and Mission Village projects.

The project site includes 371 acres of riparian vegetation and 2,163 acres of upland vegetation communities and land covers (Figures 3, and 3A–3F). The project site includes 2 miles of the Santa Clara River mainstem; this represents 2.3% of the overall Santa Clara River mainstem (86 miles). The total Homestead South project area, inclusive of infrastructure improvements, includes approximately 4 miles of the Santa Clara River mainstem (4.6% of overall system). The Homestead

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South project, including the necessary off-site project components, would result in the permanent conversion of, or temporary disturbance to, 1,914 acres, as listed in Table 1.

Off-site permanent and temporary impacts associated with the Homestead South project overlap with Landmark Village and Mission Village off-site improvement areas totaling approximately 789 acres (Figure 4). The Landmark Village overlap includes an off-site disposal site. The Mission Village overlap includes Magic Mountain Parkway, water tanks, and sewer and storm drain in Lion Canyon. In addition to these impacts, the overlap includes off-site utility corridor improvements along SR-126 and The Old Road. These off-site impacts combined are hereafter referred to as “off-site improvements” in this report. Table 1 shows general vegetation community permanent and temporary impacts for the Homestead South site and the off-site improvement areas.

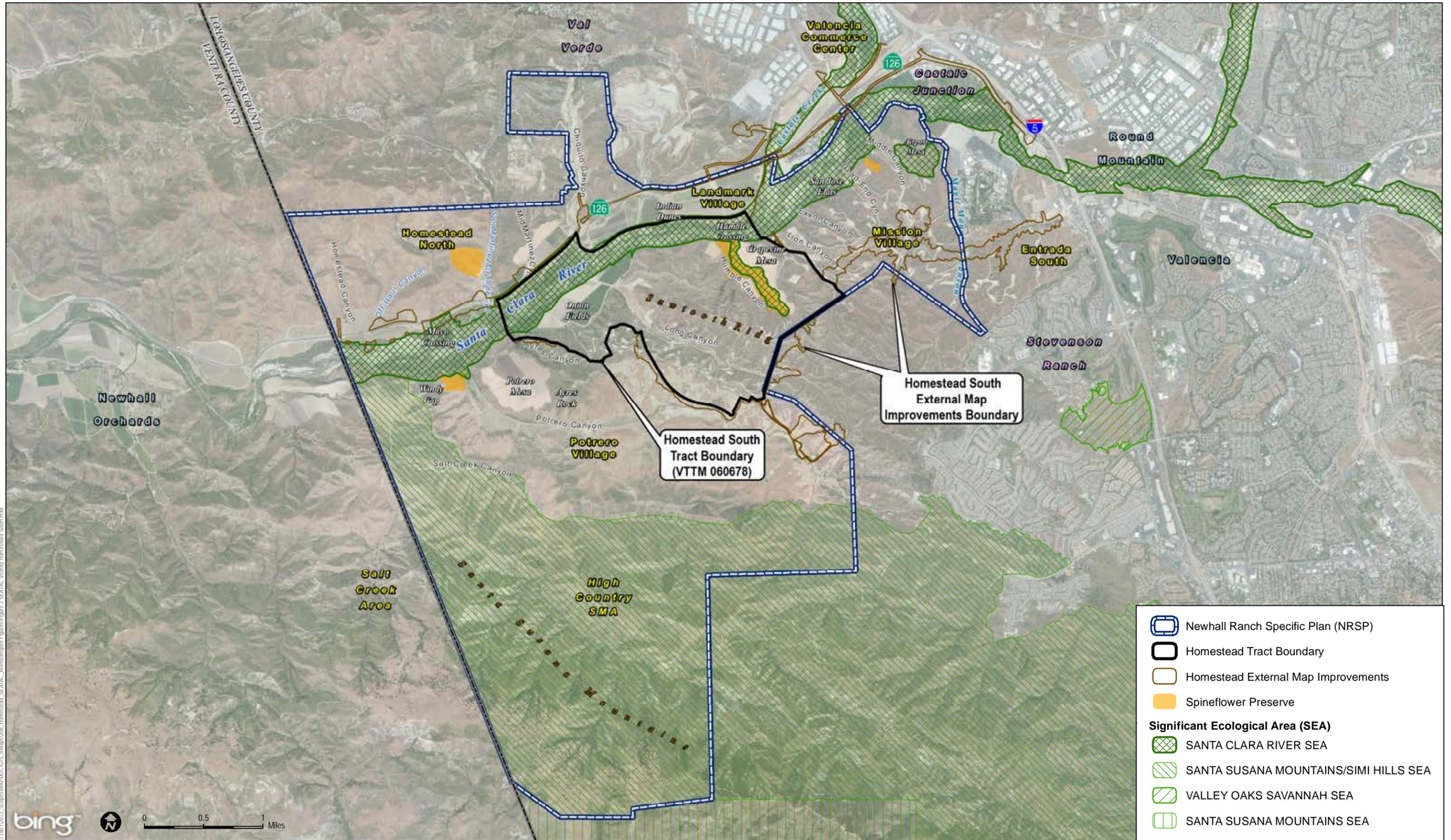
Table 1
Overlap Between Homestead South and Off-site Improvement Areas

General Habitat Type	Total Acreage	Homestead South Total Impacts		Homestead South Overlap with Off-site Improvements		Net Homestead South Impacts	
		Direct Permanent Impacts ¹	Direct Temporary Impacts	Direct Permanent Impacts	Direct Temporary Impacts	Direct Permanent Impacts	Direct Temporary Impacts
Non-native Grassland	96.6	68.9	19.3	35.2	16.7	33.7	2.6
Coastal Scrub	520.0	332.8	46.0	119.4	36.1	213.4	9.9
Other Scrubs	1.5	1.5	—	1.5	—	—	—
Chamise Chaparral	27.0	12.9	3.0	7.6	2.4	5.3	0.6
Undifferentiated Chaparral Scrubs	458.9	322.8	19.5	15.9	6.0	306.9	13.5
Oak Woodland and Forest	85.9	30.0	3.0	0.1	0.3	29.9	2.7
Riparian Forest and Woodland	172.9	4.1	28.2	2.3	15.9	1.8	12.4
Low to High Elevation Riparian Scrub	31.9	14.9	6.2	12.5	1.8	2.5	4.5
Other Riparian/Wetland	166.5	43.6	10.9	13.6	6.2	29.9	4.6
Agriculture	551.2	468.6	76.6	241.9	31.5	226.7	45.1
Disturbed land	422.2	284.5	116.6	122.5	99.8	162.0	16.9
Total	2,534.7	1,584.5	329.2	572.4	216.6	1,012.1	112.6

¹ Totals may not sum due to rounding error

Biological Resources Synopsis for the Homestead South Site

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SOURCE: County of Los Angeles Department of Regional Planning SEA 2012

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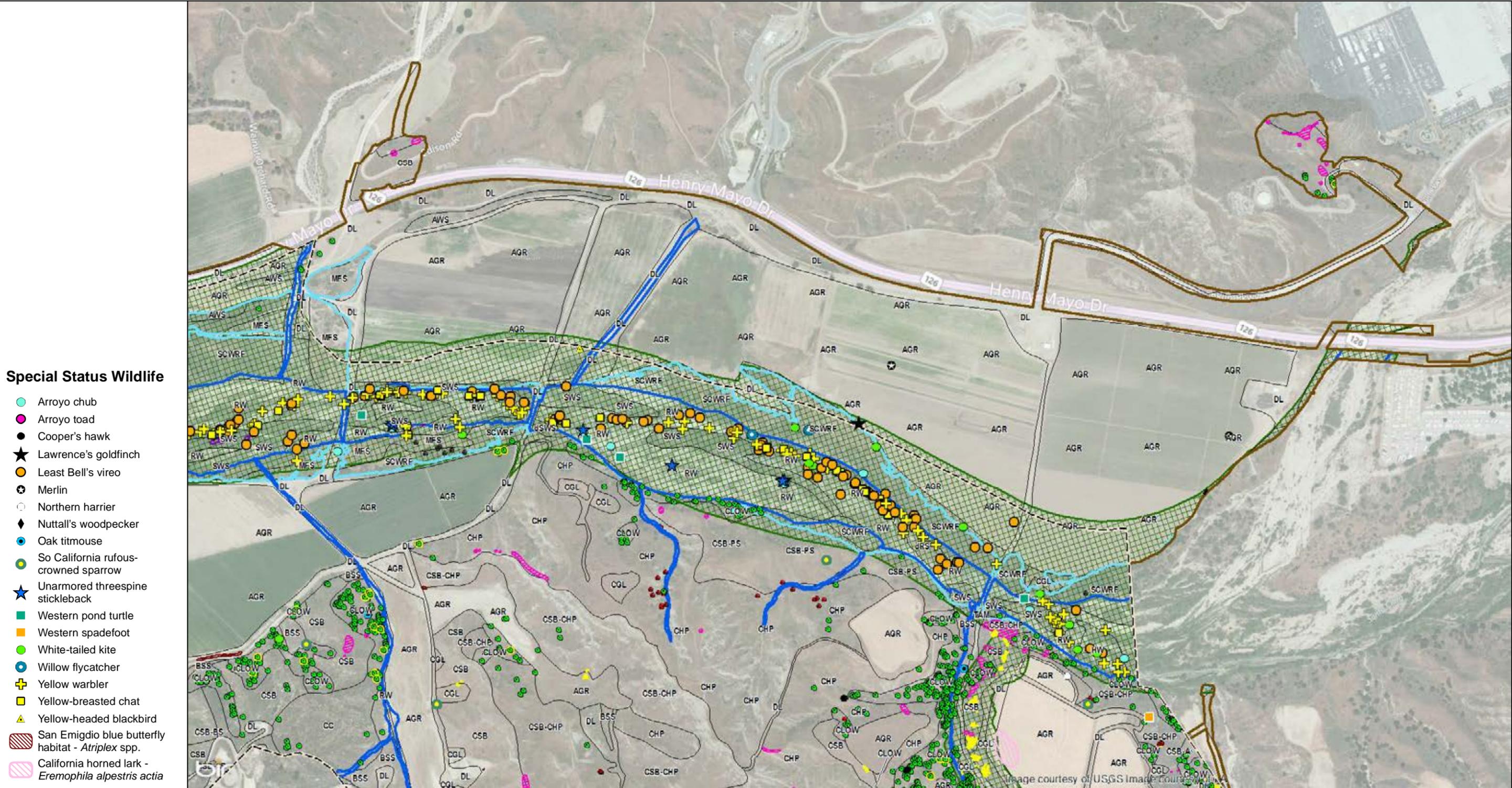
FIGURE 2
Project Vicinity

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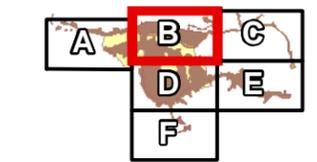
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Special Status Wildlife

- Arroyo chub
- Arroyo toad
- Cooper's hawk
- ★ Lawrence's goldfinch
- Least Bell's vireo
- ⊙ Merlin
- Northern harrier
- ◆ Nuttall's woodpecker
- Oak titmouse
- So California rufous-crowned sparrow
- ★ Unarmored threespine stickleback
- Western pond turtle
- Western spadefoot
- White-tailed kite
- Willow flycatcher
- + Yellow warbler
- Yellow-breasted chat
- ▲ Yellow-headed blackbird
- San Emigdio blue butterfly habitat - *Atriplex* spp.
- California horned lark - *Eremophila alpestris actia*



Vegetation
 AGR = Agriculture
 AWS = Arrow weed scrub
 BSS = Big sagebrush scrub
 CC = Chamise chaparral
 CGL = California annual grassland
 CHP = Undifferentiated chaparral
 CLOW = Coast live oak woodland
 CSB = California sagebrush scrub

CSB-A = California sagebrush scrub-Artemisia
 CSB-BS = California sagebrush scrub-black sage
 CSB-CB = California sagebrush scrub-California buckwheat
 CSB-CHP = California sagebrush scrub-undifferentiated chaparral
 CSB-PS = California sagebrush scrub-purple sage
 CYS = Coyote brush scrub
 DL = Disturbed land
 HCC = Hoaryleaf ceanothus chaparral
 HW = Herbaceous wetlands

MFS = Mulefat scrub
 RW = River wash
 SCWRF = Southern cottonwood-willow riparian forest
 SWS = Southern willow scrub
 TAM = Shrub tamarisk
 dCSB = Disturbed California sagebrush scrub
 dMFS = Disturbed Mulefat
 dRS = Disturbed riparian scrub
 dSWS = Disturbed southern willow scrub

Jurisdiction
□ CDFW Only
□ USACE/CDFW

Special Status Plants
■ SFVS - *Chorizanthe parryi* var. *fernandina* Cumulative Footprint 2002-2013
■ slender mariposa lily - *Calochortus clavatus* var. *gracilis*
■ undescribed everlasting - *Gnaphalium* sp. *nova*
● mainland cherry - (*Prunus ilicifolia* ssp. *ilicifolia*)
● southern California black walnut - (*Juglans californica*)
● Oak Tree
● Heritage Oak Tree

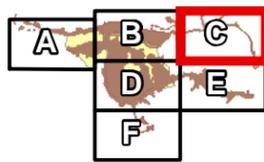
FIGURE 3B
Biological Resources

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Special Status Wildlife

- American badger
- Arroyo chub
- Arroyo toad
- ◆ California gnatcatcher
- Cooper's hawk
- ★ Lawrence's goldfinch
- Least Bell's vireo
- ★ Loggerhead shrike
- Merlin
- Northern harrier
- ◆ Nuttall's woodpecker
- Oak titmouse
- So California rufous-crowned sparrow
- ★ Unarmored threespine stickleback
- Western pond turtle
- Western spadefoot
- White-tailed kite
- Willow flycatcher
- + Yellow warbler
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 DL = Disturbed land
 HW = Herbaceous wetlands

MFS = Mulefat scrub
 OC (DEV) = Open channel (developed)
 RW = River wash
 SCWRF = Southern cottonwood-willow riparian forest
 SWS = Southern willow scrub
 TAM = Shrub tamarisk
 dCSB = Disturbed California sagebrush scrub
 dMFS = Disturbed Mulefat

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Special Status Plants
■ SFVS - *Chorizanthe parryi* var. *fernandina* Cumulative Footprint 2002-2013
▨ slender mariposa lily - *Calochortus clavatus* var. *gracilis*
● Oak Tree
● Heritage Oak Tree



AERIAL SOURCE: Bing Maps

 Homestead Tract Boundary External Map Improvement Boundary SANTA CLARA RIVER SEA

FIGURE 3C
Biological Resources

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Special Status Wildlife

- Arroyo chub
- Arroyo toad
- Blainville's horned lizard
- Cooper's hawk
- Grasshopper sparrow
- Least Bell's vireo
- ★ Loggerhead shrike
- Northern harrier
- ◆ Nuttall's woodpecker
- So California rufous-crowned sparrow
- ★ Unarmored threespine stickleback
- White-tailed kite
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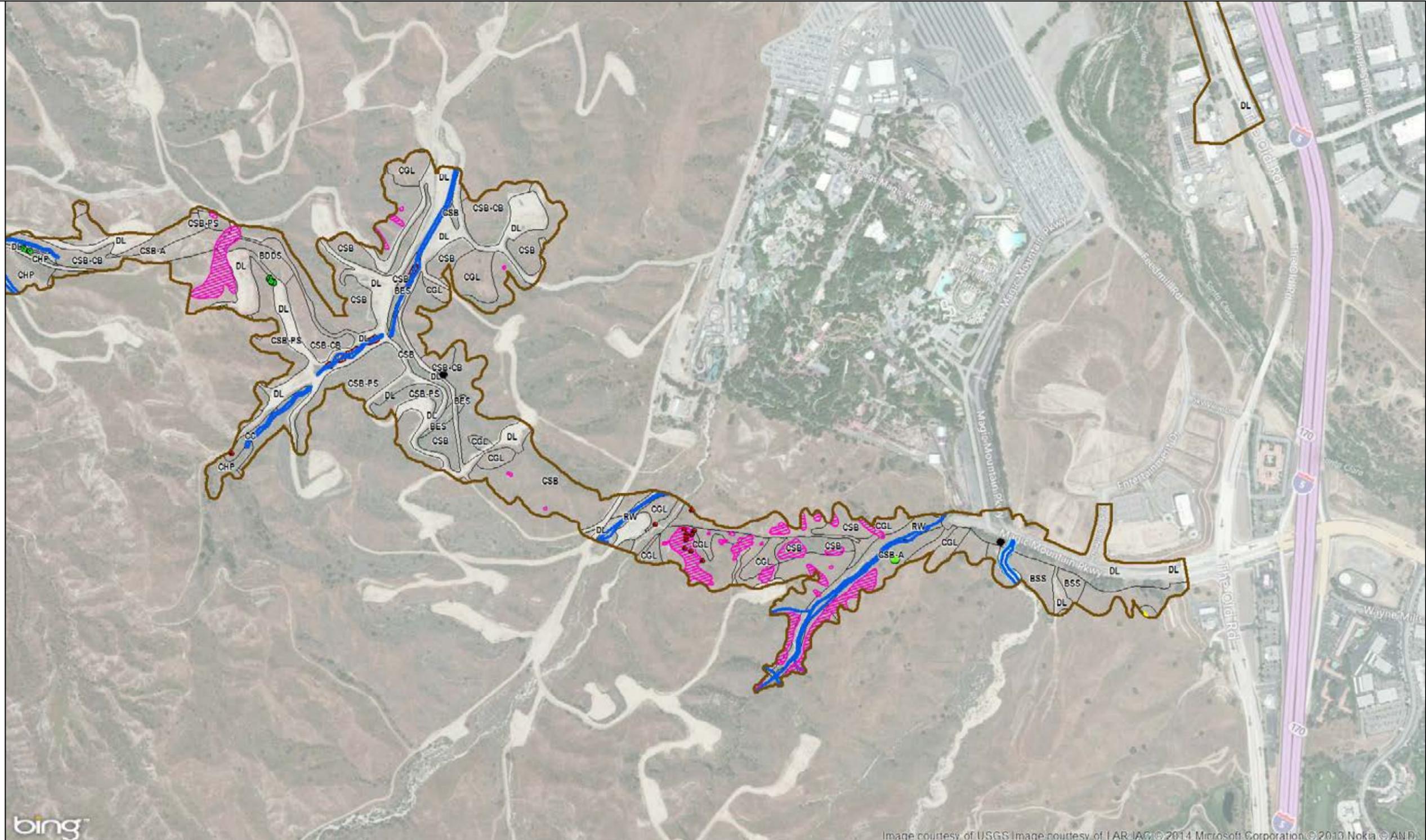
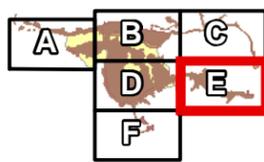


Image courtesy of USGS Image courtesy of IAR IAG © 2014 Microsoft Corporation © 2013 Nokia © AND



Vegetation

- AGR = Agriculture
- BDDS = Brittlebush drought deciduous scrub
- BSS = Big sagebrush scrub
- CC = Chamise chaparral
- CC-HCC = Chamise-hoaryleaf ceanothus chaparral
- CGL = California annual grassland
- CHP = Undifferentiated chaparral
- CLOW = Coast live oak woodland

Vegetation (continued)

- CSB = California sagebrush scrub
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Vegetation (continued)

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- ▨ slender mariposa lily - *Calochortus clavatus* var. *gracilis*
- mainland cherry - (*Prunus ilicifolia* ssp. *ilicifolia*)
- Oak Tree
- Heritage Oak Tree

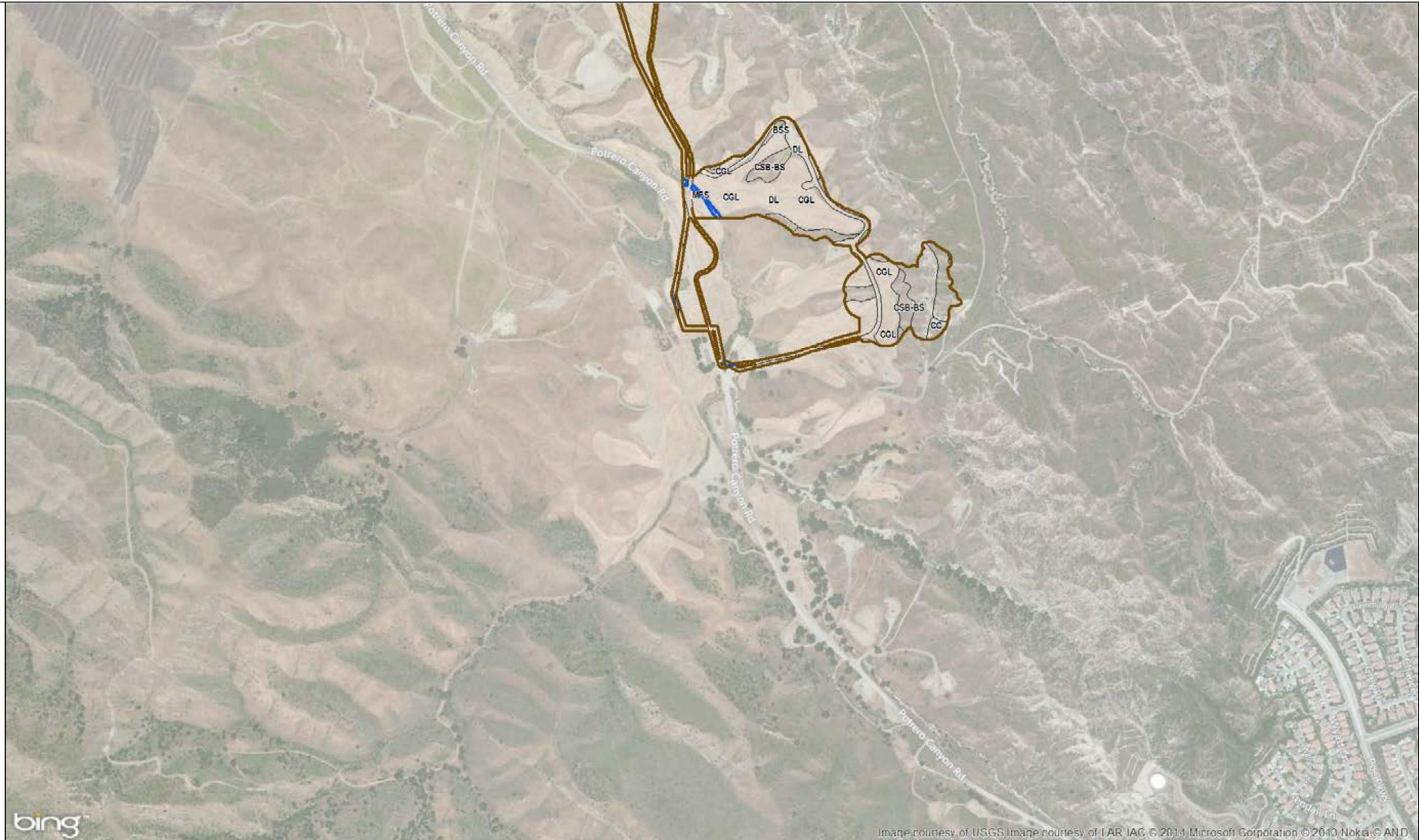


- Homestead Tract Boundary
- External Map Improvement Boundary
- ⊗ SANTA CLARA RIVER SEA

FIGURE 3E
Biological Resources

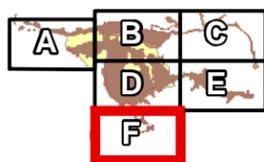
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Special Status Wildlife

- California condor
- Cooper's hawk
- ★ Loggerhead shrike
- So California rufous-crowned sparrow
- White-tailed kite



Vegetation

- AGR = Agriculture
- AWS = Arrow weed scrub
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- dCSB = Disturbed California sagebrush scrub
- dRS = Disturbed riparian scrub

Jurisdiction

- USACE/CDFW

Special Status Plants

- SFVS - *Chorizanthe parryi* var. *fernandina* Cumulative Footprint 2002-2013
- slender mariposa lily - *Calochortus clavatus* var. *gracilis*
- mainland cherry - (*Prunus ilicifolia* ssp. *ilicifolia*)
- Oak Tree
- Heritage Oak Tree



- Homestead Tract Boundary
- External Map Improvement Boundary
- SANTA CLARA RIVER SEA

FIGURE 3F
Biological Resources

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Biological Resources Synopsis for the Homestead South Site

2.2 SEAs

High Country SMA/SEA and Santa Clara River SMA/SEA

The largest land use designation of the Newhall Ranch Specific Plan Land Use Plan (Figure 2) is the approximate 4,205-acre High Country Special Management Area/Significant Ecological Area (SMA/SEA) SMA/SEA (Santa Susana Mountains). The High Country SMA/SEA 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 area in Los Angeles County. Salt Creek is a regionally significant wildlife corridor that provides an important north–south habitat link to the Santa Clara River. The Homestead South project is not adjacent to High Country SMA/SEA and has no impacts to this SEA.

The Santa Clara River SMA/SEA overlays the Santa Clara River, 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 between the Santa Susana Mountains and the River (within Ventura County). Salt Creek also provides wildlife movement connectivity (via the Santa Clara River in Ventura County) between the Santa Clara River SMA/SEA and the High Country SMA/SEA.

In 2013, the County revised the Santa Clara River SEA to include the two previously recorded conservation easements protecting the Grapevine Mesa and Airport Mesa occurrences of the SFVS. Within the Homestead South Village Project site, Santa Clara River SMA/SEA includes the Grapevine Mesa occurrence of SFVS.

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 that required that the applicant dedicate to the public a 1,517-acre (approximately) portion of Salt Creek in Ventura County, adjacent to the western boundary of the Specific Plan site. Figure 2 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 Joint Powers Authority (JPA), which is responsible for overall recreation and conservation of the High Country SMA/SEA. The Salt Creek Area is to be managed in conjunction with and in the same manner as the High Country SMA/SEA. 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 (RMP) identified the High Country SMA/SEA as a primary location for mitigating impacts that would occur within the

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development areas of the Specific Plan. The contiguous Salt Creek area provides similar mitigation opportunities. Both the High Country SMA/SEA 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.²

The Newhall Ranch Specific Plan will not significantly affect wildlife movement in the Salt Creek corridor. Wildlife movement within Salt Creek 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 areas to the east and west are easiest at the upper and lower elevations. At the lower elevations, canyons merge in the Santa Clara River Valley and are generally flat with less steep ridges. At the upper elevations, the ridgeline of the Santa Susana Mountains provides less steep connections to the upper reaches of the canyons and adjacent watersheds.

2.3 Prior SEA Analysis

2.3.1 Newhall Ranch Specific Plan

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 immediately 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 Ayres Rock at the northern edge of Potrero Canyon.

Native and naturalized plant communities 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 plant communities 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

² 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, 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 2010 Final Environmental Impact Statement/Environmental Impact Report EIS/EIR.

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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 habitat along the Santa Clara River has been designated as critical habitat by the U.S. Fish and Wildlife Service (USFWS) for the state- and federally listed endangered least Bell's vireo (*Vireo bellii pusillus*) and the federally listed endangered arroyo toad (*Anaxyrus californicus*). The River also provides habitat for the state- and federally listed endangered southwestern willow flycatcher (*Empidonax traillii extimus*), although nesting has not been observed in the Newhall Ranch portion of the River. 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, which is comprised of diverse oak woodland habitats that function as an upland wildlife corridor/linkage between the San Gabriel and Santa Monica Mountains; and (2) the Santa Clara River SMA/SEA, which is comprised of aquatic, riparian, and floodplain habitats within the Santa Clara River corridor that supports the endangered unarmored threespine stickleback and other listed and special-status 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.

Historical and ongoing grazing activities and oil and natural gas production have had an effect on much of the natural vegetation on site. Scrub vegetation has been displaced in some areas by annual grasslands as a result of grazing and land clearing for agriculture and other historical 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. 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.

Biological Resources Synopsis for the Homestead South Site

Specific Plan's Approved Land Use Plan

The approved Newhall Ranch Specific Plan Land Use Plan guides 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, a library, a golf course, fire stations, and the Newhall Ranch Water Reclamation Plant (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).

It should be noted 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 relatively large home ranges that can shift over time as habitat availability changes. Many birds also have relatively high mobility that allows them to shift home ranges, at least over generations through dispersal of young as habitat availability changes. The displacement of individuals will occur over a long period of time, allowing animals to adjust their ranges as development occurs and would be expected to affect relatively small numbers of individuals at any given time. In contrast, smaller, more sedentary wildlife species such as reptiles, amphibians, and smaller mammals would be at higher risk of both direct mortality or injury or indirect effects related to displacement (e.g., increased stress or predation, vehicle collisions, inability to reestablish home ranges or territories, etc.) due to land development. The incremental buildout of the Specific Plan will allow 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 area in Ventura County, as well as animals (e.g., smaller birds) that can both escape development activities in the short term and gradually shift home ranges over the long term as development encroaches into their current habitat. These very gradual (and temporary) increases in wildlife use/movement in the Salt Creek area in both Los Angeles County and Ventura County will be easier to absorb over several years (*i.e.*, the animals will have more time to adapt to the available resources or will have time to move out of the area to adjacent open space areas). Therefore, the direct impacts of habitat loss in the Specific Plan area on wildlife movement within the Salt Creek area, 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.

Biological Resources Synopsis for the Homestead South Site

The Santa Clara River is an important regional habitat linkage and east–west wildlife movement corridor for the larger high-mobility species. The project site also supports three identified local tributary habitat linkages—Long Canyon, Humble Canyon, and Lion Canyon—which provide habitat connectivity between the Santa Clara River and uplands south of the River. A portion of Lion Canyon will be impacted by the project, Humble Canyon will be conserved, and Long Canyon will be re-graded and restored. Post-project, long-term wildlife use and local movement along these linkages will be constrained by adjacent development, especially for species that are less “urban-tolerant,” such as mountain lion and bobcat. However, landscape-level or regional wildlife movement along the Santa Clara River and between the Santa Clara River and undeveloped lands to the south would be maintained (Figures 4 and 4A–4F). The conceptual regional open space plan developed by Penrod et al. (2006)³ providing 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, the Salt Creek area and, Santa Clara River west of Homestead South Village, which is entirely east of the regional habitat linkage. The High Country SMA/SEA and Salt Creek area comprise an important part of the “least cost (best potential or optimal route) path” linkage design identified by Penrod et al.⁴ They provide a key part of the east–west linkage that crosses Interstate 5 (I-5) and connects with the Angeles National Forest in the San Gabriel Mountains to the east and with Ventura County Save Our Agricultural Resources (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 Santa Clara River SMA/SEA 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 RMP 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 Homestead South Village Project site). The setback may include such improvements such as utilities, roads, and stormwater facilities. 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 Santa Clara River SMA/SEA or that a 100-foot-wide setback is infeasible

³ 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.

⁴ Ibid.

Biological Resources Synopsis for the Homestead South Site

for physical infrastructure planning. These buffer criteria are consistent with the Buffer Study⁵ and Department recommendations for the Specific Plan.

2.3.2 Prior SEATAC Review: Landmark Village CUP No. 00-196 (CUP I)

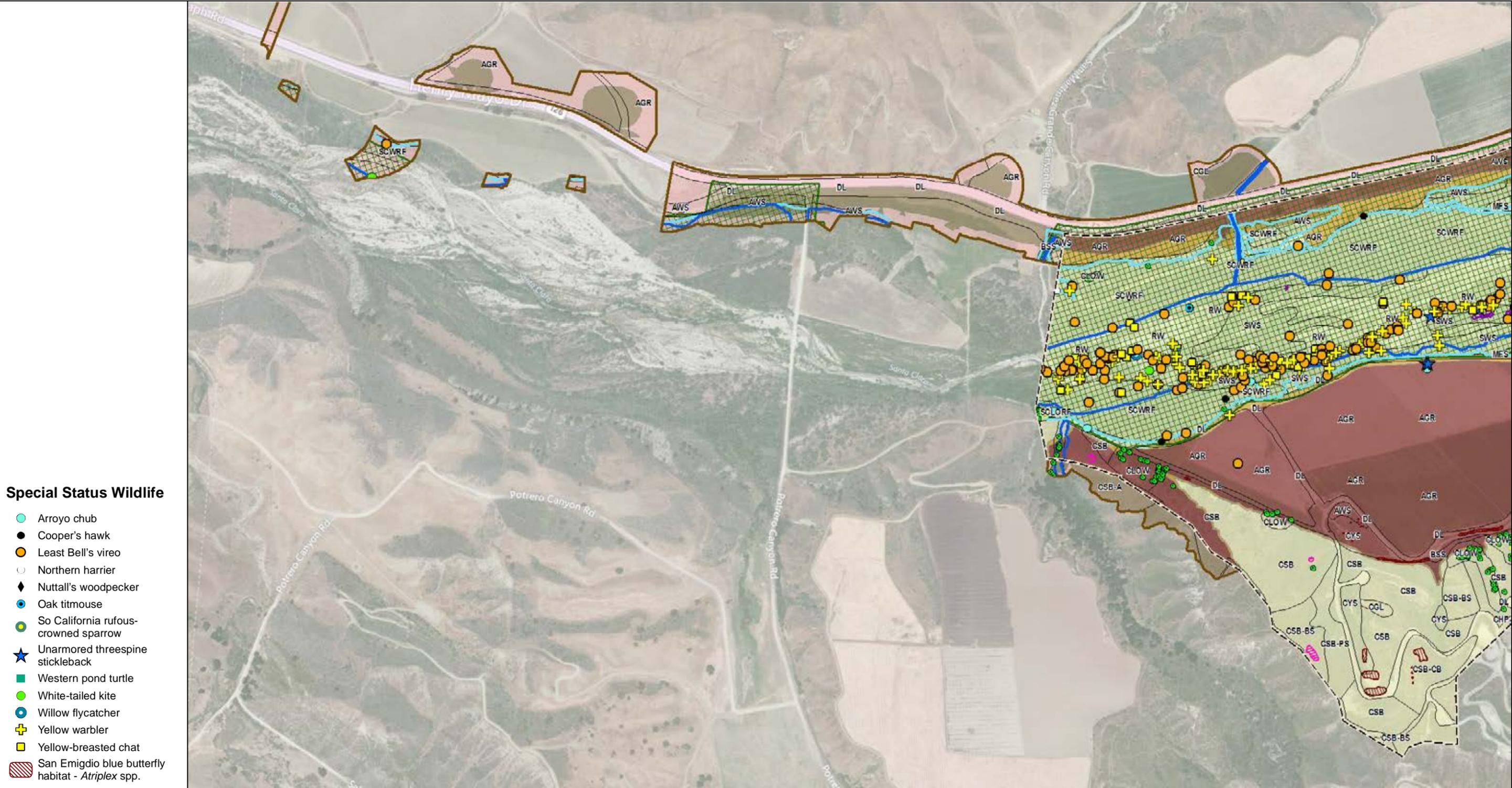
As discussed below, in 2003 the County established the Santa Clara River SMA/SEA and the High Country SMA/SEA. SEATAC was charged with the task of reviewing any planned improvements that might encroach into or otherwise affect these two SEAs. In 2000, Newhall applied to the County for a CUP allowing it to construct certain improvements in the SEA that are necessary to the proposed Landmark Village project. These improvements included: (a) the Long Canyon Road Bridge, (b) trails, (c) bank stabilization, (d) utilities (storm drain outlets, water quality basins, sanitary sewer and water, cable, gas, and fiber optics), (e) agricultural wells, (f) riparian mitigation sites, (g) water quality basins, (h) storm drain outlets, (i) water and sewer crossings, and (j) off-site transport of materials associated with grading, including haul routes. The requested Landmark Village CUP, designated CUP No. 00-196 (“CUP I”), was reviewed extensively by SEATAC for possible impacts on the Santa Clara River SMA/SEA. Following that review, the County Board of Supervisors approved CUP I on February 21, 2012.

The Homestead South project is located primarily south of the Santa Clara River and the proposed Landmark Village project that is north of the River. It will employ the trails, bank stabilization improvements, utility corridors, Long Canyon Road Bridge, and haul roads approved as part of Landmark Village CUP I. In fact, the vast majority of the improvements necessary to serve the Homestead South project are the very same improvements analyzed by SEATAC as part of its review of Landmark Village CUP I (Figure 5). Thus, SEATAC has already evaluated their impacts on the Santa Clara River SMA/SEA. Except for areas where the Homestead South project contemplates storm drain outlets additional to those identified in Landmark Village, the proposed improvements and their associated impacts have not changed since SEATAC analyzed them as part of Landmark Village CUP I. Neither the addition of the existing spineflower conservation easement located at Grapevine Mesa nor the addition of the Castaic Creek area into Santa Clara River SMA/SEA would result in additional permanent impacts to SEAs.

⁵ Impact Sciences 1997. *North Valencia Annexation Buffer Study*. Prepared for Newhall Land and Farming Company. April 28, 1997.

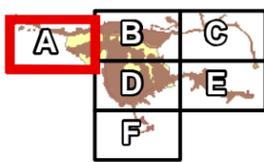
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Special Status Wildlife

- Arroyo chub
- Cooper's hawk
- Least Bell's vireo
- Northern harrier
- ◆ Nuttall's woodpecker
- Oak titmouse
- So California rufous-crowned sparrow
- ★ Unarmored threespine stickleback
- Western pond turtle
- White-tailed kite
- Willow flycatcher
- + Yellow warbler
- Yellow-breasted chat
- San Emigdio blue butterfly habitat - *Atriplex* spp.



Vegetation
 AGR = Agriculture
 AWS = Arrow weed scrub
 BSS = Big sagebrush scrub
 CC = Chamise chaparral
 CGL = California annual grassland
 CHP = Undifferentiated chaparral
 CLOW = Coast live oak woodland
 CSB = California sagebrush scrub

CSB-A = California sagebrush scrub-Artemisia
 CSB-BS = California sagebrush scrub-black sage
 CSB-CB = California sagebrush scrub-California buckwheat
 CSB-CHP = California sagebrush scrub-undifferentiated chaparral
 CSB-PS = California sagebrush scrub-purple sage
 CYS = Coyote brush scrub
 DL = Disturbed land
 EBT = Emory's baccharis thicket
 HW = Herbaceous wetlands

MFS = Mulefat scrub
 RW = River wash
 SCLORF = Southern coast live oak riparian forest
 SCWRWF = Southern cottonwood-willow riparian forest
 SWS = Southern willow scrub
 TAM = Shrub tamarisk
 dCSB = Disturbed California sagebrush scrub
 dRS = Disturbed riparian scrub
 dSWS = Disturbed southern willow scrub

Jurisdiction
□ CDFW Only
□ USACE/CDFW

Special Status Plants
■ SFVS - *Chorizanthe parryi* var. *fernandina* Cumulative Footprint 2002-2013
■ slender mariposa lily - *Calochortus clavatus* var. *gracilis*
■ undescribed everlasting - *Gnaphalium* sp. *nova*
● Oak Tree
● Heritage Oak Tree
● southern California black walnut - (*Juglans californica*)

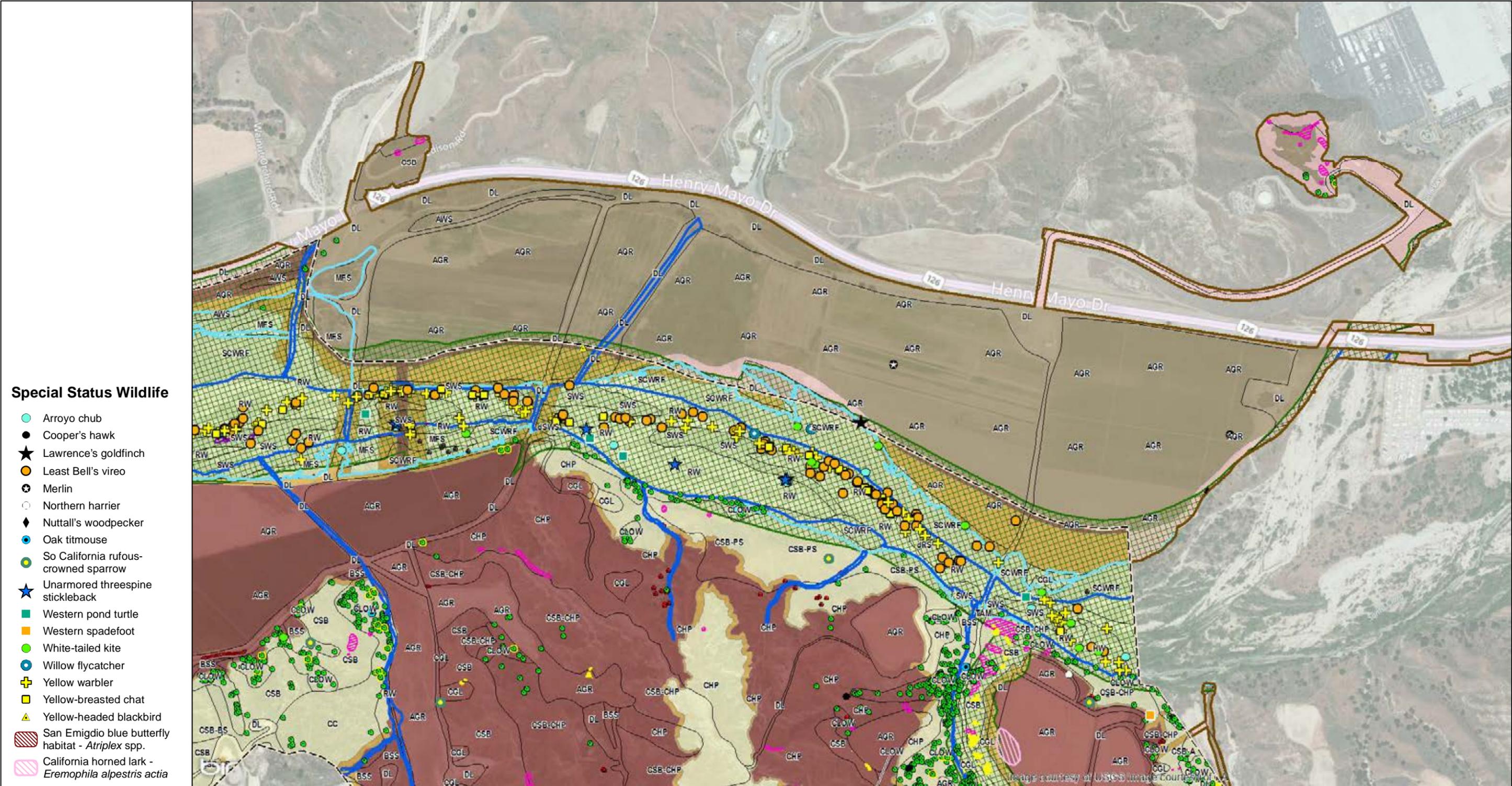


AERIAL SOURCE: Bing Maps

Impact Areas
□ Homestead Tract Boundary
□ External Map Improvement Boundary
□ SANTA CLARA RIVER SEA
■ Permanent Project Impact
■ Permanent External Map Impact
■ Temporary Project Impact
■ Temporary External Map Improvement

FIGURE 4A
Impacts to Biological Resources
 Biological Resources Synopsis for the Homestead South Site

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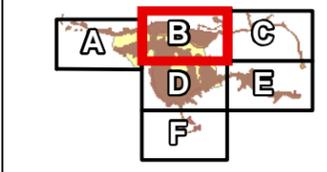
Special Status Wildlife

- Arroyo chub
- Cooper's hawk
- ★ Lawrence's goldfinch
- Least Bell's vireo
- Merlin
- Northern harrier
- ◆ Nuttall's woodpecker
- Oak titmouse
- So California rufous-crowned sparrow
- ★ Unarmored threespine stickleback
- Western pond turtle
- Western spadefoot
- White-tailed kite
- Willow flycatcher
- Yellow warbler
- Yellow-breasted chat
- ▲ Yellow-headed blackbird
- San Emigdio blue butterfly habitat - *Atriplex* spp.
- California horned lark - *Eremophila alpestris actia*

- Vegetation**
- AGR = Agriculture
 - AWS = Arrow weed scrub
 - BSS = Big sagebrush scrub
 - CC = Chamise chaparral
 - CGL = California annual grassland
 - CHP = Undifferentiated chaparral
 - CLOW = Coast live oak woodland
 - CSB = California sagebrush scrub
 - CSB-A = California sagebrush scrub-Artemisia
 - CSB-BS = California sagebrush scrub-black sage
 - CSB-CB = California sagebrush scrub-California buckwheat
 - CSB-CHP = California sagebrush scrub-undifferentiated chaparral
 - CSB-PS = California sagebrush scrub-purple sage
 - CYS = Coyote brush scrub
 - DL = Disturbed land
 - HCC = Hoaryleaf ceanothus chaparral
 - HW = Herbaceous wetlands
 - MFS = Mulefat scrub
 - RW = River wash
 - SCWRF = Southern cottonwood-willow riparian forest
 - SWS = Southern willow scrub
 - TAM = Shrub tamarisk
 - dCSB = Disturbed California sagebrush scrub
 - dMFS = Disturbed Mulefat
 - dRS = Disturbed riparian scrub
 - dSWS = Disturbed southern willow scrub

- Jurisdiction**
- CDFW Only
 - USACE/CDFW

- Special Status Plants**
- SFVS - *Chorizanthe parryi* var. *fernandina* Cumulative Footprint 2002-2013
 - slender mariposa lily - *Calochortus clavatus* var. *gracilis*
 - undescribed everlasting - *Gnaphalium* sp. *nova*
 - mainland cherry - (*Prunus ilicifolia* ssp. *ilicifolia*)
 - southern California black walnut - (*Juglans californica*)



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AERIAL SOURCE: Bing Maps

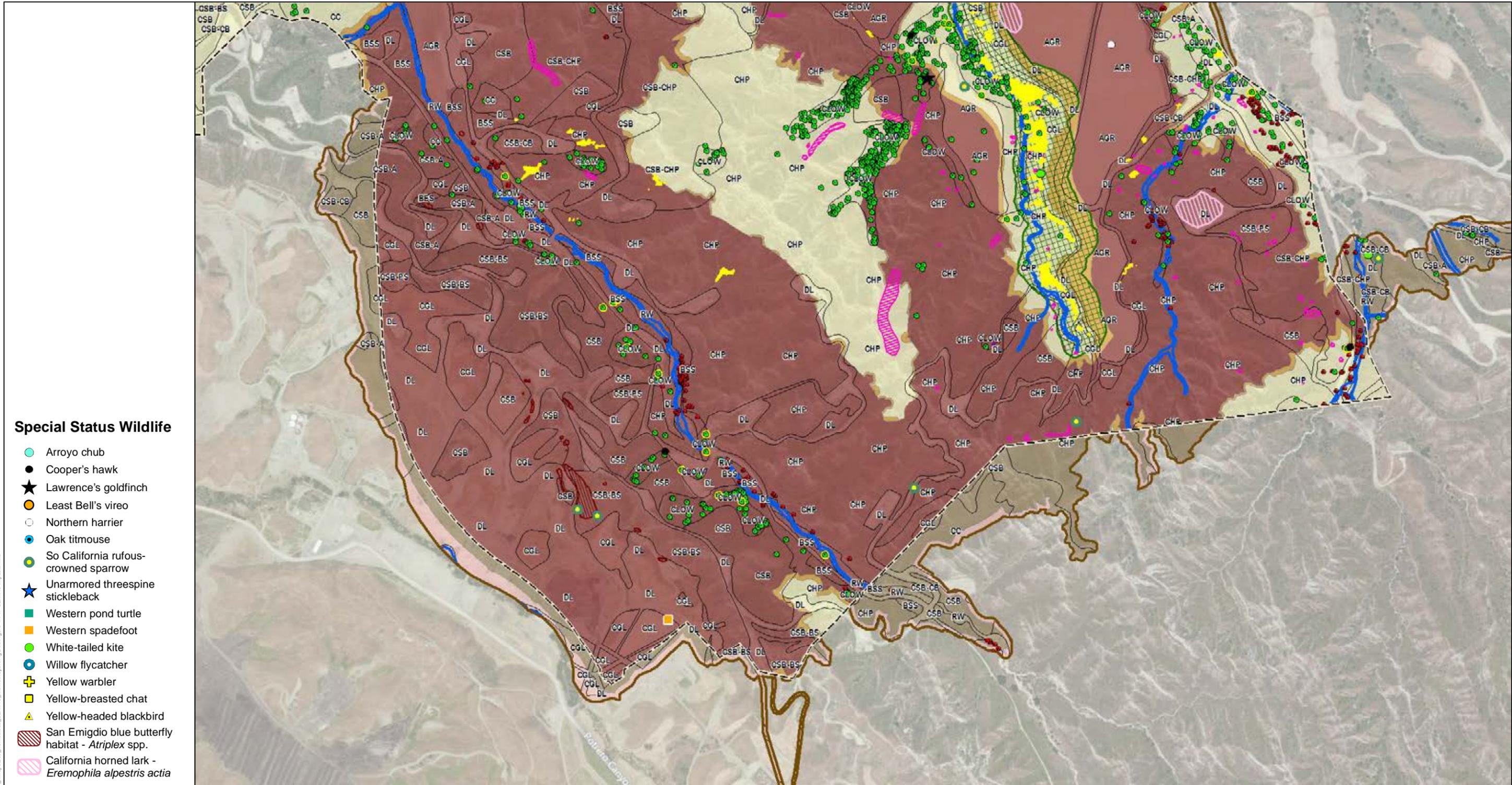
- Homestead Tract Boundary
- External Map Improvement Boundary
- SANTA CLARA RIVER SEA
- No Project Impact
- Permanent Project Impact
- Temporary Project Impact
- Permanent External Map Impact
- Temporary External Map Improvement

FIGURE 4B
Impacts to Biological Resources
 Biological Resources Synopsis for the Homestead South Site

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Special Status Wildlife

- Arroyo chub
- Cooper's hawk
- ★ Lawrence's goldfinch
- Least Bell's vireo
- Northern harrier
- Oak titmouse
- So California rufous-crowned sparrow
- ★ Unarmored threespine stickleback
- Western pond turtle
- Western spadefoot
- White-tailed kite
- Willow flycatcher
- Yellow warbler
- Yellow-breasted chat
- ▲ Yellow-headed blackbird
- San Emigdio blue butterfly habitat - *Atriplex* spp.
- California horned lark - *Eremophila alpestris actia*

Vegetation

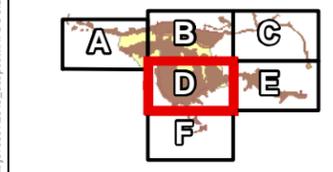
- AGR = Agriculture
- AWS = Arrow weed scrub
- BDSS = Brittlebush drought deciduous scrub
- BSS = Big sagebrush scrub
- CC = Chamise chaparral
- CC-HCC = Chamise-hoaryleaf ceanothus chaparral
- CGL = California annual grassland
- CHP = Undifferentiated chaparral
- CLOW = Coast live oak woodland
- CSB = California sagebrush scrub
- CSB-A = California sagebrush scrub-Artemisia
- CSB-BS = California sagebrush scrub-black sage
- CSB-CB = California sagebrush scrub-California buckwheat
- CSB-CHP = California sagebrush scrub-undifferentiated chaparral
- CSB-PS = California sagebrush scrub-purple sage
- CYS = Coyote brush scrub
- DL = Disturbed land
- HCC = Hoaryleaf ceanothus chaparral
- HW = Herbaceous wetlands
- MFS = Mulefat scrub
- RW = River wash
- SCWRF = Southern cottonwood-willow riparian forest
- SWS = Southern willow scrub
- TAM = Shrub tamarisk
- dCSB = Disturbed California sagebrush scrub
- dRS = Disturbed riparian scrub
- dSWS = Disturbed southern willow scrub

Jurisdiction

- CDFW Only
- USACE/CDFW

Special Status Plants

- SFVS - *Chorizanthe parryi* var. *fernandina* Cumulative Footprint 2002-2013
- slender mariposa lily - *Calochortus clavatus* var. *gracilis*
- undescribed everlasting - *Gnaphalium* sp. *nova*
- mainland cherry - (*Prunus ilicifolia* ssp. *ilicifolia*)
- southern California black walnut - (*Juglans californica*)
- Oak Tree
- Heritage Oak Tree



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AERIAL SOURCE: Bing Maps

Homestead Tract Boundary

External Map Improvement Boundary

SANTA CLARA RIVER SEA

Impact Areas

- Permanent Project Impact
- Temporary Project Impact
- No Project Impact
- Permanent External Map Impact
- Temporary External Map Improvement

FIGURE 4D
Impacts to Biological Resources
 Biological Resources Synopsis for the Homestead South Site

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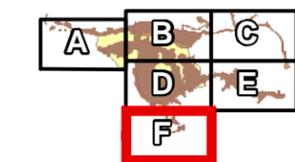
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Special Status Wildlife

- Cooper's hawk
- So California rufous-crowned sparrow
- Western spadefoot
- ▨ San Emigdio blue butterfly habitat - *Atriplex* spp.



- Vegetation**
- AGR = Agriculture
 - AWS = Arrow weed scrub
 - BSS = Big sagebrush scrub
 - CC = Chamise chaparral
 - CC-HCC = Chamise-hoaryleaf ceanothus chaparral
 - CGL = California annual grassland
 - CHP = Undifferentiated chaparral

- CLOW = Coast live oak woodland
- CSB = California sagebrush scrub
- CSB-A = California sagebrush scrub-Artemisia
- CSB-BS = California sagebrush scrub-black sage
- CSB-CB = California sagebrush scrub-California buckwheat
- CSB-CHP = California sagebrush scrub-undifferentiated chaparral
- CSB-PS = California sagebrush scrub-purple sage
- CYS = Coyote brush scrub
- DL = Disturbed land

- HCC = Hoaryleaf ceanothus chaparral
- HW = Herbaceous wetlands
- MFS = Mulefat scrub
- RW = River wash
- SCWRF = Southern cottonwood-willow riparian forest
- SWS = Southern willow scrub
- TAM = Shrub tamarisk
- dCSB = Disturbed California sagebrush scrub
- dRS = Disturbed riparian scrub

- Jurisdiction**
- USACE/CDFW

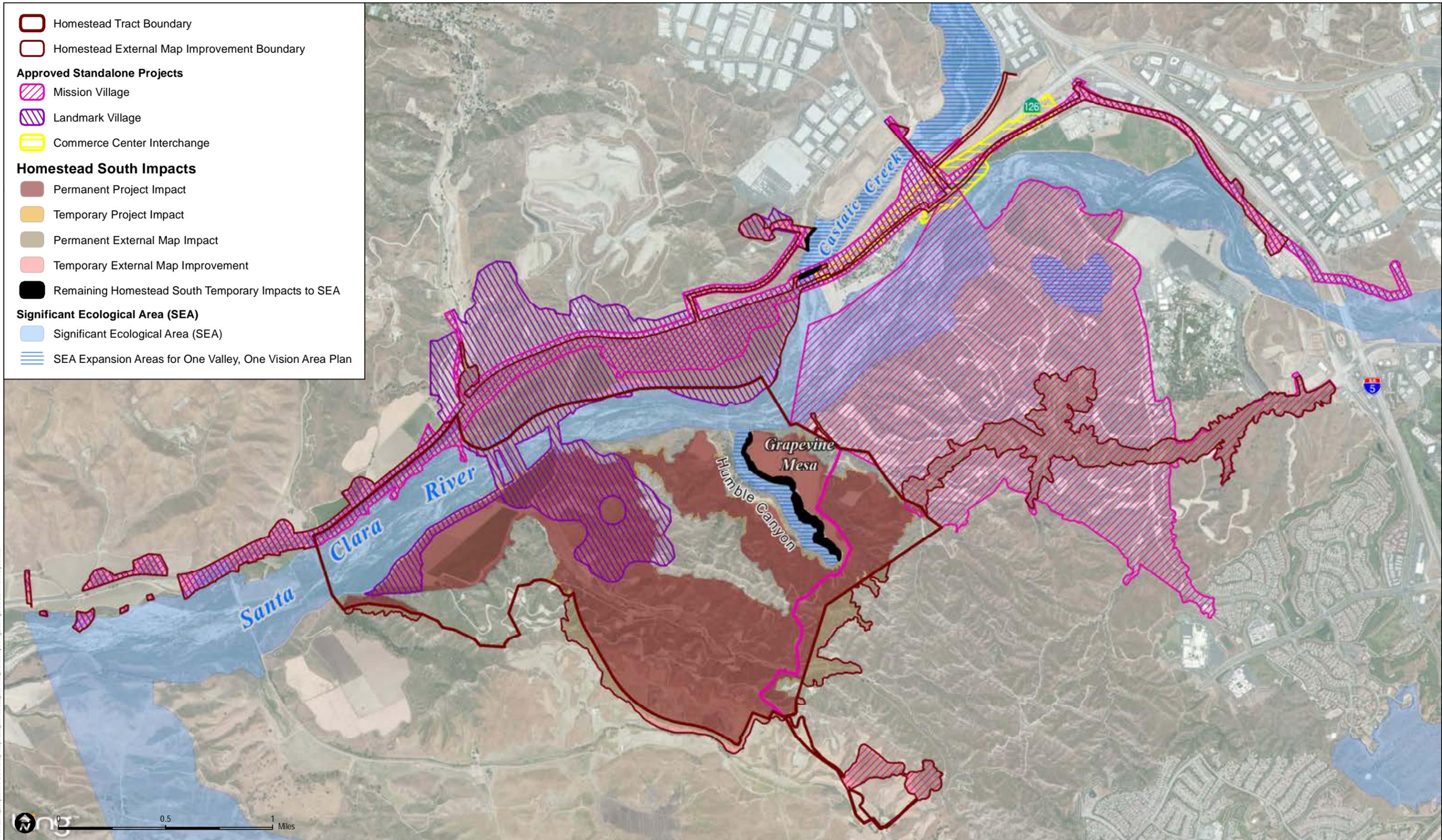
- Special Status Plants**
- SFVS - *Chorizanthe parryi* var. *fernandina* Cumulative Footprint 2002-2013
 - slender mariposa lily - *Calochortus clavatus* var. *gracilis*
 - mainland cherry - (*Prunus ilicifolia* ssp. *ilicifolia*)
 - Oak Tree
 - Heritage Oak Tree



- Homestead Tract Boundary
- External Map Improvement Boundary
- SANTA CLARA RIVER SEA
- Impact Areas
- No Project Impact
- Permanent Project Impact
- Temporary Project Impact
- Permanent External Map Impact
- Temporary External Map Improvement

FIGURE 4F
Impacts to Biological Resources
 Biological Resources Synopsis for the Homestead South Site

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- Homestead Tract Boundary
- Homestead External Map Improvement Boundary
- Approved Standalone Projects**
- Mission Village
- Landmark Village
- Commerce Center Interchange
- Homestead South Impacts**
- Permanent Project Impact
- Temporary Project Impact
- Permanent External Map Impact
- Temporary External Map Improvement
- Remaining Homestead South Temporary Impacts to SEA
- Significant Ecological Area (SEA)**
- Significant Ecological Area (SEA)
- SEA Expansion Areas for One Valley, One Vision Area Plan

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DUDEK SOURCE: County of Los Angeles Department of Regional Planning 2012

FIGURE 5
Remaining Homestead SEA Impact Areas following Mission Village and Landmark Village Approvals

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Biological Resources Synopsis for the Homestead South Site

2.3.3 Prior SEATAC Review: Mission Village Cup No. 2005-00080 (CUP I)

As discussed above and below, in 2003 the County established the Santa Clara River SMA/SEA and the High Country SMA/SEA. SEATAC was charged with the task of reviewing any planned improvements that might encroach into or otherwise affect these two SEAs. In 2005, Newhall applied to the County for a CUP allowing it to construct certain improvements in the SEA that are necessary for the proposed Mission Village project. These improvements included: (a) the Commerce Center Drive Bridge, (b) neighborhood park, (c) trails, (d) bank stabilization, (e) utility corridor (storm drain outlets, water quality basins, sanitary sewer and water, cable, gas, and fiber optics), (f) access roads and easements, (g) water and sewer crossings, (h) riparian mitigation sites, (i) grading and (j) storm drain outlets . The requested Mission Village CUP, designated CUP No. 2005-00080 (“CUP II”), was reviewed extensively by SEATAC for possible impacts on the Santa Clara River SMA/SEA. Following that review, the County Board of Supervisors approved CUP I on May 15, 2012.

The Homestead South project is located immediately west of the proposed Mission Village project. It will employ elements of the bank stabilization improvements, grading storm drain outlets, and utility corridors improvements approved as part of Mission Village CUP I. The utility corridor improvements necessary to serve the Homestead South project are the very same improvements analyzed by SEATAC as part of its review of Mission Village CUP I (Figure 5). Thus, SEATAC has already evaluated their impacts on the Santa Clara River SMA/SEA. Except for areas where the Homestead South project contemplates storm drain outlets additional to those identified in Mission Village, the proposed improvements and their associated impacts have not changed since SEATAC analyzed them as part of Mission Village CUP I. Neither the addition of the pre-existing spineflower conservation easement located at Grapevine Mesa, nor the addition of the Castaic Creek area into Santa Clara River SMA/SEA would result in additional permanent impacts to SEAs.

2.4 Prior EIR Analysis

2.4.1 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 State Route 126 (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

Biological Resources Synopsis for the Homestead South Site

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 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, and Homestead South Village being the third.

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 and Revised Additional Analysis 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, 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 SMA Visitor-Serving Uses; approximately 1,010 acres of Open Area; approximately 5,180 acres of SMA/Open Space; 10 neighborhood parks; a recreational lake; a public trail system; a golf course; fire stations; a public library; an electrical substation; reservation of elementary school sites, junior high school site, and a high school site; a 6.8 million gallon per day (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.

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. In addition, as part of its review of the Specific Plan EIR, the County caused to be prepared a Revised Additional Analysis that provided a more detailed

Biological Resources Synopsis for the Homestead South Site

assessment of the biological effects caused by the Specific Plan's potential changes to the hydrology and hydraulics of the Santa Clara River. (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 the County General Plan policies pertaining to SEAs.

The approved Newhall Ranch Specific Plan would develop approximately 5,793 acres of the 11,963-acre Specific Plan site (or 49% of the site) and would preserve, as undeveloped land, a total of approximately 6,170 acres (or 51% 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 area 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 SMA/SEA.

As described in the approved Newhall Ranch Specific Plan Program EIR (May 2003) – which consists of the Newhall Ranch Specific Plan Program EIR adopted in March 1999⁷ and the Revised Additional Analysis adopted in May 2003⁸ – the Specific Plan would have significant impacts on coast live oak woodland, coastal scrub (including brittlebush drought deciduous scrub, California sagebrush scrub and associations, and coyote scrub), riparian communities (including arrow weed scrub, Mexican elderberry scrub, mulefat scrub, river wash, southern cottonwood willow riparian forest, and southern willow scrub), wildlife habitat, special-status bird nests, special-status plant species, protected oaks, special-status wildlife species, and Department and U.S. Army Corps of Engineers (ACOE) jurisdictional resources. With the exception of **significant and unavoidable impacts** (i.e., loss of sensitive animal species, coastal sage scrub, and wildlife habitat and the increase in human and domestic animal presence), with mitigation, these direct impacts would be less than significant. Significant indirect impacts would occur with respect to increased light and glare, increased non-native plant species, and increased human and domestic animal presence. With mitigation, these indirect impacts would be less than significant.

The direct and indirect impacts associated with development and operation of the Homestead South Village project are consistent with the findings of the Newhall Ranch Specific Plan Program EIR (March 1999)⁹ and Revised Additional Analysis (May 2003).¹⁰ Implementation of (i) the

⁶ County of Los Angeles. 2003. *Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Program EIR*, Volume VIII.

⁷ County of Los Angeles, Environmental Impact Report (EIR) for the Newhall Ranch Specific Plan and Water Reclamation Plant (1999).

⁸ County of Los Angeles. 2003. *Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Program EIR*, Volume VIII.

⁹ County of Los Angeles. 1999. *Environmental Impact Report (EIR) for the Newhall Ranch Specific Plan and Water Reclamation Plant*.

¹⁰ County of Los Angeles. 2003. *Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Program EIR*, Volume VIII.

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mitigation measures required by the Newhall Ranch Specific Plan Program EIR and the Specific Plan RMP, (ii) additional mitigation measures required by the Resource Management and Development Plan (RMDP)/Spineflower Conservation Program (SCP) EIS/EIR, and (iii) mitigation measures that will be required by the project-level EIR for Homestead South Village (in preparation) would mitigate project-specific impacts to less-than-significant levels. Appendix B, 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. Appendix C is comprised of the biological mitigation measures required by the Specific Plan EIR, as well as additional mitigation required by the Department in its 2010 approval of the RMDP and SCP, which further reduced the impacts of all project-level significant impacts to a level that is less than significant.

Due to the incorporation of additional mitigation measures within the RMDP/SCP EIS/EIR and the project-level Homestead South Village EIR (in preparation), those project-level impacts identified in the Newhall Ranch Specific Plan Program EIR as **significant and unavoidable** (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. However, the Homestead South Village project would contribute to a significant unavoidable cumulative impact related to regional impacts to coastal scrub and San Fernando Valley spineflower individuals, after mitigation is incorporated. See Appendix B for the summary of the Newhall Ranch Specific Plan Program EIR Findings.

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 Appendix B) 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.

A project-level EIR will be prepared for Homestead South, tiering from the previously certified Newhall Ranch Specific Plan Program EIR. The project-level EIR will assess the Homestead South 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, additional mitigation measures required by the Resource Management and Development Plan (RMDP)/Spineflower Conservation Program (SCP) EIS/EIR, and additional mitigation measures recommended for the Homestead South Village project.

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

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2.4.2 Landmark Village

As described above, Los Angeles County conducted CEQA environmental review for both the Specific Plan and the WRP. 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. In addition, as part of the Newhall Ranch Specific Plan Program EIR, the County commissioned and adopted a second report, known as the Revised Additional Analysis, that provided a more detailed review of the biological effects caused by the Specific Plan's anticipated changes to the hydrology and hydraulics of the Santa Clara River. (Newhall Ranch Revised Additional Analysis (2003), Section 2.3, Floodplain Modifications.)¹¹ The Revised Additional Analysis (Sections 2.2 and 2.4) also examined in greater depth the Salt Creek Corridor and Specific Plan consistency against the County General Plan policies pertaining to SEAs. The County Board of Supervisors certified the adequacy of the Newhall Ranch Specific Plan Program EIR and Revised Additional Analysis on May 27, 2003.

The first such project to be processed as a project-level EIR through the County under the approved Specific Plan is the Landmark Village project with Mission Village being the second and Homestead South Village being the third.

As described in the approved Landmark Village EIR (2011), the project would have significant impacts on herbaceous wetland, river wash, alluvial scrub, arrow weed scrub, big sagebrush scrub, mulefat scrub, southern willow scrub, southern cottonwood-willow riparian, southern coast live oak riparian forest, coastal scrub and alliances/associations, coast live oak woodland, wildlife habitat, special status birds and other non-avian special-status wildlife species, special-status plant species, protected oaks, and Department and Corps jurisdictional resources. Significant indirect impacts would occur as a result of increased light and glare, increased non-native plant species, and increased human and domestic animal presence. With mitigation, these indirect impacts would be less than significant.

The direct and indirect impacts associated with development and operation of the Landmark Village project are consistent with the findings of the Newhall Ranch Specific Plan Program EIR (March 1999)¹² and Revised Additional Analysis (May 2003).¹³ It is anticipated that implementation of the mitigation measures required by the Newhall Ranch Specific Plan

¹¹ County of Los Angeles. 2003. *Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Program EIR, Volume VIII.*

¹² County of Los Angeles. 1999. *Environmental Impact Report (EIR) for the Newhall Ranch Specific Plan and Water Reclamation Plant.*

¹³ County of Los Angeles. 2003. *Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Program EIR, Volume VIII.*

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Program EIR and the Specific Plan RMP, as well as the additional mitigation measures required by the RMDP/SCP EIS/EIR and mitigation measures that will be required by the project-level EIR for Landmark Village (2011), would mitigate project-specific impacts to less than significant levels. Due to the incorporation of additional mitigation measures within the RMDP/SCP EIS/EIR and the project-level Landmark Village EIR (2011), 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 proposed Landmark Village project would contribute toward the cumulative impacts to biological resources. Landmark's contribution to these impacts, however, can be reduced to a less-than-significant level through mitigation. See Appendix B for the summary of the Newhall Ranch Specific Plan Program EIR Findings.

2.4.3 Mission Village

As described above, Los Angeles County conducted CEQA environmental review for both the Specific Plan and the WRP. 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. In addition, as part of the Newhall Ranch Specific Plan Program EIR, the County commissioned and adopted a second report, known as the Revised Additional Analysis, that provided a more detailed review of the biological effects caused by the Specific Plan's anticipated changes to the hydrology and hydraulics of the Santa Clara River. (Newhall Ranch Revised Additional Analysis (2003), Section 2.3, Floodplain Modifications.)¹⁴ The Revised Additional Analysis (Sections 2.2 and 2.4) also examined in greater depth the Salt Creek Corridor and Specific Plan consistency against the County General Plan policies pertaining to SEAs. The County Board of Supervisors certified the adequacy of the Newhall Ranch Specific Plan Program EIR and Revised Additional Analysis on May 27, 2003.

The first such project to be processed as a project-level EIR through the County under the approved Specific Plan is the Landmark Village project, with Mission Village being the second and Homestead South Village being the third.

As described in the approved Mission Village EIR (2011), 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

¹⁴ County of Los Angeles. 2003. *Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Program EIR, Volume VIII.*

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habitat, special-status bird nests, special-status plant species, protected oaks, special-status wildlife species, and Department and 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. With mitigation, these indirect impacts would be less than significant.

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)¹⁵ and Revised Additional Analysis (May 2003).¹⁶ It is anticipated that implementation of the mitigation measures required by the Newhall Ranch Specific Plan Program EIR and the Specific Plan RMP, as well as the additional mitigation measures required by the RMDP/SCP EIS/EIR, and mitigation measures that will be required by the project-level EIR for Mission Village (2011), would mitigate project-specific impacts to less than significant levels, including those project-level impacts identified in the Newhall Ranch Specific Plan Program EIR as **significant and unavoidable** (i.e., loss of sensitive animal species, coastal sage scrub, and wildlife habitat and the increase in human and domestic animal presence). However, the Mission Village project would contribute to a significant unavoidable cumulative impact related to regional impacts to coastal scrub and SFVS individuals. See Appendix B for the summary of the Newhall Ranch Specific Plan Program EIR Findings.

2.4.4 Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan

In 2003, Newhall applied to the Department for a number of approvals necessary to implement the Newhall Ranch Specific Plan and allow development in the Valencia Commerce Center (VCC) and Entrada planning areas. These sought-after approvals consisted of two Incidental Take Permits (one covering the SFVS and one covering three bird species) and a Master Streambed Alteration Agreement. In addition, Newhall requested that the Department approve (a) Newhall's proposed Resource Management and Development Plan (RMDP), which provides for the construction of key flood control infrastructure in and adjacent to the Santa Clara River and its tributaries, and (b) an SCP, which would establish a permanent system of managed preserves on Newhall Ranch for the benefit of the SFVS. The SCP—including its buffer zones, adaptive management requirements and protocols, and experimental components—was designed to fully mitigate impacts on SFVS (including take) that may occur as a result of implementing the Newhall Ranch Specific Plan. The SCP would

¹⁵ County of Los Angeles. 1999. *Environmental Impact Report (EIR) for the Newhall Ranch Specific Plan and Water Reclamation Plant*.

¹⁶ County of Los Angeles. 2003. *Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Program EIR, Volume VIII*.

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also provide the required mitigation for impacts on SFVS resulting from the Entrada and VCC developments, which are located outside the Specific Plan area.

While its applications with the Department were pending, Newhall also sought a Clean Water Act section 404 permit from the Corps. Thereafter, the Department and the Corps elected to prepare a joint EIS/EIR to analyze the potential environmental effects of the RMDP, SCP, and related permits and agreements requested by Newhall. Of the many effects analyzed in the EIS/EIR, one is of special relevance to SEATAC's review of the Homestead South project: impacts to the Santa Clara River SMA/SEA, including impacts to the existing SFVS populations in the previously established conservation easement at Grapevine Mesa. The conservation easement at Grapevine Mesa falls under SEATAC's jurisdiction by virtue of the County's 2013 decision to extend the boundary of the Santa Clara Santa Clara River SMA/SEA to encompass Grapevine Mesa.

With respect to the conservation easement at Grapevine Mesa, the EIS/EIR determined that development associated with the Newhall Ranch Specific Plan, including the Homestead South project, would not adversely affect SFVS or other sensitive resources within the conservation easement. This is because the SCP incorporates the existing easement within a larger SFVS preserve to be established at Grapevine Mesa. Whereas the prior conservation easement consisted of 46.34 acres of SFVS habitat, the new preserve—which includes the prior easement—will consist of 67.4 acres of SFVS habitat. In addition, the entire Grapevine Mesa preserve will receive further protection and enhancement from the SCP's adaptive management techniques and strategies, all of which benefit the pre-existing conservation easement.¹⁷ Therefore, for purposes of SEATAC's review of Homestead South's impacts on sensitive resources within the Grapevine Mesa conservation easement, the SCP and the EIS/EIR provide substantial evidence that such impacts will be mitigated to less-than-significant levels.

On December 3, 2010, the Department certified the EIR portion of the EIS/EIR as complete and adequate under the CEQA. In addition, the Department, on that same date, approved the two Incidental Take Permits, the Master Streambed Alteration Agreement, the RMDP, and the SCP. The Corps approved the EIS portion of the EIS/EIR on August 31, 2011, and issued the Section 404 permit the same day.

¹⁷ The SCP's adaptive management strategies/activities include the following: (1) retention of a preserve manager to monitor and oversee the entire preserve system; (2) restrictions on storm drains and water flows; (3) placement of temporary fencing during construction; (4) education of construction workers; (5) restrictions on plant palettes for use on nearby landscaped slopes to ensure no invasive species, diseases, pests, or weeds are introduced in the planted material; (6) permanent fencing and signage to restrict access to preserves; (7) restoration/enhancement of disturbed portions of preserves, including buffers, through revegetation without impacts to SFVS; (8) establishment of mitigation performance standards; (9) emergency fire response planning; (10) prevention of, and monitoring for, infestation by Argentine ants; (11) establishment of a \$7.6 million endowment for the operation, management, and protection of preserves; and (12) experimental programs relating to seed banks, SFVS reproduction and genetic exchange, and other aspects of SFVS ecology important for conservation and management.

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3.0 SCOPE OF HOMESTEAD SOUTH SEA ANALYSIS

As described above in Sections 2.3.2 and 2.3.3, the vast majority of the infrastructure improvements necessary to serve the Homestead South project are the very same infrastructure improvements analyzed and evaluated by SEATAC as part of its review of Landmark Village CUP I and Mission Village CUP I (Figure 5). The exceptions are the temporary impacts within the expanded Santa Clara River SMA/SEA areas within Humble Canyon and Castaic Creek included in the recently approved OVOV Area Plan update.

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4.0 PROJECT SEA IMPACTS AND PROJECT SPECIFIC MITIGATION

The Santa Clara River SMA/SEA occupies 27,097 acres, of which 1,181 acres occur within the RMDP/SCP boundary. Of those 1,181 acres, 38 acres would be permanently impacted and 122 acres would be temporarily impacted by the Landmark Village, Mission Village, and Homestead South projects. However, the permanent impacts attributable to Homestead Village overlap those of Landmark Village and Mission Village, all of which have been reviewed by SEATAC and assessed through the County's CEQA's process. Therefore, Homestead South would not result in any impacts to the Santa Clara River SMA/SEA outside of those SEA impacts already analyzed by Landmark Village and Mission Village.

Of the 122 acres of temporary impacts to Santa Clara River SMA/SEA, 14.8 acres are attributable to the Homestead South project, including 1.4 acres within Castaic Creek and 13.4 acres within Grapevine Mesa (Table 2). The impacts to the 1.4 acres within Castaic Creek were previously analyzed for Landmark Village and Mission Village, prior to the revised SEA designation. The impacts to 13.4 acres within Grapevine Mesa were not previously analyzed for Landmark Village and Mission Village but were analyzed in the RMDP/SCP EIS/EIR.

The 1.4 acres of temporary impact within Castaic Creek are associated with (i) bank stabilization on the northern bank to address erosion and stabilize an existing public roadway, and (ii) buried utilities on the north side of the SR-126 bridge over Castaic Creek. The 13.4 acres of temporary impact within Grapevine Mesa are associated with restoration of agricultural lands along the eastern boundary of the SFVS preserve. This area will be graded and planted with native vegetation.

The EIS/EIR provides an extensive discussion of the Specific Plan's impacts on the Santa Clara River SMA/SEA and also analyzes the extent to which the flood control improvements contemplated under the RMDP will affect the SEA. Ultimately, the EIS/EIR concluded that the Specific Plan and RMDP would directly disturb 190 acres of the Santa Clara River SMA/SEA. These impacts, however, would be reduced to less than significant through implementation of more than 50 mitigation measures. For convenience, attached, as Appendix C, to this memorandum is a complete list of the mitigation measures for the Specific Plan EIR and the RMDP/SCP EIS/EIR, which includes a variety of mitigation measures that address impacts to the River Corridor SMA/SEA.

Vegetation Communities and Land Covers

Of the 14.8 acres of temporary impacts within the Santa Clara River SEA, 1.2 acres are riparian vegetation, and 13.6 acres are upland vegetation, the majority of which is agriculture and disturbed land.

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The project would not result in impacts to special-status plant species or oak trees within the newly designated SEA areas.

Table 2
Temporary Impacts to Vegetation Communities and Land Covers
Within the New SEA Areas

Land Cover	Acres
<i>Castaic Creek</i>	
Big sagebrush scrub	0.2
California sagebrush scrub	0.2
Mulefat scrub	0.1
River wash	0.9
Castaic Creek Subtotal	1.4
<i>Grapevine Mesa</i>	
Agriculture	5.8
California annual grassland	2.2
California sagebrush scrub	0.01
Undifferentiated chaparral	0.2
Disturbed land	5.1
Grapevine Mesa Subtotal	13.4
Grand Total	14.8

Big sagebrush scrub, mulefat scrub, and river wash are considered special-status vegetation communities given their association with riparian systems. Temporary impacts to big sagebrush scrub, mulefat scrub, and river wash are considered to be significant. The specific mitigation measures that would be utilized to reduce the temporary impacts to big sagebrush scrub, mulefat scrub, and river wash to a level that is adverse but not significant are identified as follows:

For vegetation removal:

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

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- SP 4.6 26a (riparian revegetation and oak tree replacement opportunities in the High Country SMA)
- SP 4.6 27 (removal of grazing and enhancement of riparian habitat in the High Country SMA)
- SP 4.6 28 (mitigation banking for various habitat types in the High Country SMA)
- SP 4.6 34 (marking and inspection of grading perimeters prior to impacts within or adjacent to the High Country SMA)
- SP 4.6 35 (avoidance of inadvertent impacts to biological resources within or adjacent to the High Country SMA)
- SP 4.6 36 through SP 4.6 42 (open space dedication of the High Country SMA)
- SP 4.6 43 (Open Area use for mitigation of riparian or oak resources or elderberry scrub)
- SP 4.6 47a (allowing mitigation banking for riparian habitats, oak resources, and Mexican elderberry within the River Corridor SMA, High Country SMA, and Open Area)
- SP 4.6 63 (habitat restoration/enhancement in the River Corridor SMA; 1:1 riparian resource replacement)
- BIO 1 through BIO 16 (wetlands mitigation plan and riparian restoration activities on the Project site)
- BIO 19 (dedication of the Salt Creek area to the public and enhancement of existing agricultural undercrossing at SR-126)
- BIO 52 (pre-construction educational meetings, construction limit staking, construction vehicle and equipment inspection and cleaning, and biological monitoring during vegetation clearing and grading activities)
- BIO 62 (dedication to the public of at least 21,900 acres of Open Area to a Natural Land Management Organization (NLMO))
- BIO 69 (trail signage and homeowner education regarding sensitive resources in preserved natural habitat areas)
- BIO 73 (permanent fencing along trails in the River Corridor SMA)
- For indirect effects (dust, runoff, trampling, littering, etc.):
- SP 4.6 7 (revegetation plans for the River Corridor SMA to include guidelines for maintenance of the mitigation site during plant establishment)
- SP 4.6 17 (standards for trail design and limitations on human and pet access to the River Corridor SMA)
- SP 4.6 18 and SP 4.6 19 (transition areas along the River Corridor SMA)

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- SP 4.6 20 (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA)
- SP 4.6 26a (riparian revegetation and oak tree replacement opportunities in the High Country SMA)
- SP 4.6 29 through SP 4.6 32 (recreational usage and access restrictions within the High Country SMA)
- SP 4.6 31 (prohibition of hunting, fishing, motor, and trail bikes within the High Country SMA)
- SP 4.6 32 (trail design and construction to minimize impacts to native habitats within the High Country SMA)
- SP 4.6 33 (protection of transition areas along the High Country SMA, including planting palettes and Fire Management Zones (FMZs))
- SP 4.6 34 and SP 4.6 35 (guidelines for grading activities in the High Country SMA)
- SP 4.6 39 (High Country SMA grazing and recreational use restrictions)
- SP 4.6 43 (Open Area use for mitigation of riparian or oak resources or elderberry scrub)
- SP 4.6 44 and SP 4.6 45 (drainage guidelines)
- SP 4.6 49 through SP 4.6 52 (wildfire fuel modification plan and standards for FMZs)
- SP 4.6 58 (conformance with National Pollutant Discharge Elimination System (NPDES) and Regional Water Quality Control Board (RWQCB) permit provisions)
- SP 4.6 64 (golf course maintenance plan)
- BIO 45 (pre-construction diversion of all stream flows within a work zone)
- BIO 46 (requiring the presence of a qualified biologist during stream diversion)
- BIO 47 (slow moving water habitats shall be constructed upstream and downstream of any river crossing or bridge construction area)
- BIO 49 (prevention of mud and pollutants from entering streams and storm flows)
- BIO 52 (pre-construction educational meetings, construction limit staking, construction vehicle and equipment inspection and cleaning, and biological monitoring during vegetation clearing and grading activities)
- BIO 69 (trail signage and homeowner education regarding sensitive resources in preserved natural habitat areas)
- BIO 70 (project design features, construction notes, erosion and dust control, and Stormwater Pollution Prevention Plan (SWPPP) Best Management Practices (BMPs) to ensure protection of vegetation communities and special-status species)

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- BIO 71 (dust control measures to protect vegetation communities and special-status aquatic wildlife species)
- BIO 72 (review of plant palettes and inspection of container plants for use within 2,100 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation)
- BIO 73 (permanent fencing along trails in the River Corridor SMA)

California annual grassland, agriculture, and disturbed land are not considered special status by any federal, state, or local regulatory agencies within the project area. These habitats are common within the local and regional landscape, and the relative quality of these habitat types is low in many sections of the Specific Plan area, including within the Homestead South project area, due to ongoing anthropogenic disturbances, such as oil production and grazing. While these communities and land covers are not typically protected, California annual grassland, agriculture, and disturbed lands in the project area are known to support a variety of special-status plants and wildlife, and are considered to be special status for purposes of this analysis.

Temporary impacts to California annual grassland, agriculture, and disturbed lands are considered to be significant. The specific mitigation measures that would be utilized to reduce the temporary impacts to California annual grassland, agriculture, and disturbed lands to a level that is adverse but not significant are identified as follows:

For vegetation removal:

- SP 4.6 17 (standards for trail design and limitations on human and pet access to the River Corridor SMA)
- SP 4.6 18 and SP 4.6 19 (transition areas along the River Corridor SMA)
- SP 4.6 20 (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA)
- SP 4.6 21 through SP 4.6 26 (open space dedication of the River Corridor SMA)
- SP 4.6 27 (removal of grazing and enhancement of riparian habitat in the High Country SMA)
- SP 4.6 34 (marking and inspection of grading perimeters prior to impacts within or adjacent to the High Country SMA)
- SP 4.6 35 (avoidance of inadvertent impacts to biological resources within or adjacent to the High Country SMA)
- SP 4.6 36 through SP 4.6 42 (open space dedication of the High Country SMA)
- BIO 19 (dedication of the Salt Creek area to the public and enhancement of existing agricultural undercrossing at SR-126)

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- BIO 52 (pre-construction educational meetings, construction limit staking, construction vehicle and equipment inspection and cleaning, and biological monitoring during vegetation clearing and grading activities)
- BIO 62 (dedication to the public of at least 1,900 acres of Open Area to an NLMO)
- BIO 69 (trail signage and homeowner education regarding sensitive resources in preserved natural habitat areas)
- BIO 73 (permanent fencing along trails in the River Corridor SMA)

For indirect effects (dust, runoff, trampling, littering, etc.):

- SP 4.6 17 (standards for trail design and limitations on human and pet access to the River Corridor SMA)
- SP 4.6 18 and SP 4.6 19 (transition areas along the River Corridor SMA)
- SP 4.6 20 (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA)
- SP 4.6 29 through SP 4.6 32 (recreational usage and access restrictions within the High Country SMA)
- SP 4.6 31 (prohibition of hunting, fishing, motor or trail bikes within the High Country SMA)
- SP 4.6 32 (trail design and construction to minimize impacts to native habitats within the High Country SMA)
- SP 4.6 33 (protection of transition areas along the High Country SMA, including planting palettes and FMZs)
- SP 4.6 34 and SP 4.6 35 (guidelines for grading activities in the High Country SMA)
- SP 4.6 39 (High Country SMA grazing and recreational use restrictions)
- SP 4.6 44 and SP 4.6 45 (drainage guidelines)
- SP 4.6 49 through SP 4.6 52 (wildfire fuel modification plan and standards for FMZs)
- SP 4.6 58 (conformance with NPDES and RWQCB permit provisions)
- BIO 45 (pre-construction diversion of all stream flows within a work zone)
- BIO 46 (requiring the presence of a qualified biologist during stream diversion)
- BIO 47 (slow moving water habitats shall be constructed upstream and downstream of any river crossing or bridge construction area)
- BIO 49 (prevention of mud and pollutants from entering streams and storm flows)

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- BIO 52 (pre-construction educational meetings, construction limit staking, construction vehicle and equipment inspection and cleaning, and biological monitoring during vegetation clearing and grading activities)
- BIO 69 (trail signage and homeowner education regarding sensitive resources in preserved natural habitat areas)
- BIO 70 (project design features, construction notes, erosion and dust control, and SWPPP BMPs to ensure protection of vegetation communities and special status species)
- BIO 71 (dust control measures to protect vegetation communities and special status aquatic wildlife species)
- BIO 72 (review of plant palettes and inspection of container plants for use within 2,100 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation)
- BIO 73 (permanent fencing along trails in the River Corridor SMA)

The vegetation community coastal scrub (California sagebrush scrub alliance) is not considered special status by any federal, state, or local regulatory agencies within the project area. While this community is not typically protected, coastal scrub in the project area is known to support a variety of special-status plants and wildlife and are considered to be special status for purposes of this analysis.

Temporary impacts to coastal scrub are considered to be significant. The specific mitigation measures that would be utilized to reduce the temporary impacts to coastal scrub to a level that is adverse but not significant are identified as follows:

For vegetation removal:

The same mitigation measures identified above for California annual grassland, agriculture, and disturbed land, with the addition of BIO-20 (preservation of approximately 1,900 acres of coastal scrub on site) and BIO-21 (restoration/enhancement of coastal scrub in High Country SMA, Salt Creek area, and River Corridor SMA).

For indirect effects (dust, runoff, trampling, littering, etc.):

The same mitigation measures identified above for California annual grassland, agriculture, and disturbed land.

Undifferentiated chaparral scrub is not considered special status by any federal, state, or local regulatory agencies within the project area. While this community is not typically protected, undifferentiated chaparral scrub in the project area is known to support a

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variety of special status plants and wildlife and are considered to be special status for purposes of this analysis.

Temporary impacts to undifferentiated chaparral scrub are considered to be significant. The specific mitigation measures that would be utilized to reduce the temporary impacts to undifferentiated chaparral scrub to a level that is adverse but not significant are identified as follows:

For vegetation removal:

The same mitigation measures identified above for California annual grassland, agriculture, and disturbed land.

For indirect effects (dust, runoff, trampling, littering, etc.):

The same mitigation measures identified above for California annual grassland, agriculture, and disturbed land.

Wildlife

The Homestead project will have temporary impacts on suitable habitat for special-status wildlife known or potentially occurring on the SEA. These impacts consist of 0.1 acre of California red-legged frog habitat and 14.8 acres of habitat for a variety of other species, including California condor and the bats (Table 3). None of the temporary impacts to suitable habitat is considered to be significant, because the affected habitats are all widespread and abundant throughout the RMDP/SCP area. However, potential significant direct impacts to individuals of the special-status species resulting from temporary impacts are identified in Table 3. The following identifies these potential significant impacts and lists the Specific Plan and RMDP/SCP mitigation measures that would reduce the potential impacts to less than significant.

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Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
<i>Helminthoglypta traskii traskii</i>	Trask shoulderband	None/SA	Big sagebrush scrub, California sagebrush scrub, Mulefat scrub	0.5	Less than significant. Species could occur throughout RMD/SCP area in suitable habitat. Temporary 0.6 acre would not have substantial effect on distribution or abundance.
<i>Anaxyrus californicus</i>	arroyo toad	FE/CSC/LA County	Mulefat scrub, River wash	1.0	Temporary impacts to 1.0 acre of suitable habitat would be less than significant due to widespread availability in Santa Clara River and lower Castaic Creek. Direct impacts to any individuals, including adults, metamorphs, and tadpoles would be significant.
<i>Rana draytonii</i>	California red-legged frog	FT/CSC/LA County	River wash	0.1	Temporary impacts to 0.1 acre of suitable habitat would be less than significant due to widespread availability in Santa Clara River and lower Castaic Creek. Direct impacts to any individuals, including adults, metamorphs, and tadpoles would be significant.
<i>Spea hammondi</i>	western spadefoot	None/CSC/LA County	Mulefat scrub, River wash	1.0	Temporary impacts to 1.0 acre of suitable habitat would be less than significant due to widespread availability in Santa Clara River and lower Castaic Creek. Direct impacts to any individuals, including adults, metamorphs, and tadpoles would be significant.
<i>Anniella pulchra pulchra</i> ¹	silvery legless lizard	None/CSC/LA County	Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	3.8	Temporary impacts to 3.9 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.

Biological Resources Synopsis for the Homestead South Site

Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	None/SA/LA County	Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	3.8	Temporary impacts to 3.9 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.
<i>Charina trivirgata</i>	rosy boa	None/SA/LA County	Big sagebrush scrub, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	1.6	Temporary impacts to 1.6 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.
<i>Diadophis punctatus modestus</i>	San Bernardino ringneck snake	None/SA	Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	3.8	Temporary impacts to 3.9 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.
<i>Emys marmorata</i>	western pond turtle	None/CSC	California annual grassland, Mulefat scrub, River wash	3.2	Temporary impacts to 3.3 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.
<i>Phrynosoma blainvillii</i>	coast (Blainville's) horned lizard	None/CSC/LA County	Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	3.8	Temporary impacts to 3.9 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake	None/CSC/LA County	Big sagebrush scrub, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	1.6	Temporary impacts to 1.6 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.

Biological Resources Synopsis for the Homestead South Site

Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
<i>Thamnophis hammondi</i>	two-striped garter snake	None/CSC/LA County	Mulefat scrub, River wash	1.0	Temporary impacts to 1.0 acre of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.
<i>Thamnophis sirtalis</i> ssp.	south coast garter snake	None/CSC	Big sagebrush scrub, Mulefat scrub, River wash	1.2	Temporary impacts to 1.2 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any individuals would be significant.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	None/WL/LA County	Coastal scrub and chaparral.	0.4	Temporary impacts to 0.4 acre of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	None/WL/LA County	California sagebrush scrub	0.2	Temporary impacts to 0.2 acre of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Ammodramus savannarum</i> (nesting)	grasshopper sparrow	None/CSC	California annual grassland	2.2	Temporary impacts to 2.2 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Aquila chrysaetos</i> (nesting & wintering)	golden eagle	BCC/FP,WL/ LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread

Biological Resources Synopsis for the Homestead South Site

Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
			chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash		availability in RMDP/SCP area.
<i>Athene cunicularia</i> (burrow sites & some wintering sites)	burrowing owl	BCC/CSC/LA County	Agriculture, California annual grassland, Disturbed land	13.2	Temporary impacts to 13.2 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Buteo regalis</i> (wintering)	ferruginous hawk	BCC/WL/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	9.4	Temporary impacts to 9.4 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Calypte costae</i> (nesting)	Costa's hummingbird	None/SA	Big sagebrush scrub, Undifferentiated chaparral, California sagebrush scrub	0.6	Temporary impacts to 0.6 acre of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Eremophila alpestris actia</i>	California horned lark	None/WL/LA County	Agriculture, California annual grassland, Disturbed land	13.2	Temporary impacts to 13.2 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Falco columbarius</i> (wintering)	merlin	None/WL/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.

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Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
<i>Gymnogyps californianus</i>	California condor	FE/SE, FP/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults or juveniles that may land in area to forage during construction would be significant.
<i>Lanius ludovicianus</i> (nesting)	loggerhead shrike	BCC/CSC/LA County	Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	3.8	Temporary impacts to 3.8 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT/CSC/LA County	California sagebrush scrub	0.2	Temporary impacts to 0.2 acre of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Selasphorus sasin</i> / (nesting)	Allen's/ hummingbird	BCC/SA	California sagebrush scrub	0.2	Temporary impacts to 0.2 acre of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.
<i>Spizella atrogularis</i> (nesting)	black-chinned sparrow	BCC/SA	Big sagebrush scrub, Undifferentiated chaparral, California sagebrush scrub	0.6	Temporary impacts to 0.6 acre of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults, nests, eggs, or young would be significant.

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Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
<i>Antrozous pallidus</i>	pallid bat	None/CSC/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None/CSC/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Eumops perotis californicus</i>	western mastiff bat	None/CSC/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 15.5 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Lasiorycteris noctivagans</i>	silver-haired bat	None/SA	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 15.5 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Lasiurus blossevillei</i>	western red bat	None/CSC	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.

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Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
<i>Lasiurus cinereus</i>	hoary bat	None/SA	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	None/CSC/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	9.6	Temporary impacts to 9.6 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Myotis ciliolabrum</i> ²	western small-footed myotis	None/SA/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Myotis evotis</i>	western long-eared myotis	None/SA/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Myotis lucifugus</i>	little brown bat	None/SA	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.

Biological Resources Synopsis for the Homestead South Site

Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
<i>Myotis thysanodes</i>	fringed myotis	None/SA/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Myotis volans</i>	long-legged myotis	None/SA/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Myotis yumanensis</i>	Yuma myotis	None/SA	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/CSC/LA County	Big sagebrush scrub, Undifferentiated chaparral, California sagebrush scrub	0.6	Temporary impacts to 0.6 acre of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults or young would be significant.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	None/CSC/LA County	Agriculture, Big sagebrush scrub, California annual grassland, Undifferentiated chaparral, California sagebrush scrub, Disturbed land, Mulefat scrub, River wash	14.8	Temporary impacts to 14.8 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.

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Table 3
Temporary Impacts to Suitable Habitat for Special-Status Wildlife Species

Scientific Name	Common Name	Status Federal/State/LA County	Primary Habitat Associations On Site	Temporary Impacts Acres	Significance Determination
<i>Odocoileus hemionus</i>	mule deer	None/Regulated	Big sagebrush scrub, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	1.6	Temporary impacts to 1.6 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Puma concolor</i>	mountain lion	None/Regulated	Big sagebrush scrub, Undifferentiated chaparral, California sagebrush scrub, Mulefat scrub, River wash	1.6	Temporary impacts to 1.6 acres of suitable foraging habitat would be less than significant due to widespread availability in RMDP/SCP area.
<i>Taxidea taxus</i>	American badger	None/CSC	Agriculture, Big sagebrush scrub, California annual grassland, California sagebrush scrub, Disturbed land, River wash	14.5	Temporary impacts to 14.5 acres of suitable habitat would be less than significant due to widespread availability in RMDP/SCP area. Direct impacts to any adults or young would be significant.

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

State:

CE: California-listed (state-listed) as endangered
 CT: California-listed (state-listed) as threatened
 CFP: California Fully Protected
 CSC: California Species of Special Concern
 SA: Special Animal
 WL: Watch List

Los Angeles County:

LA County: Sensitive Species Occurring or Potentially Occurring within the Los Angeles SEA (County of Los Angeles 2006)

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Arroyo Toad

Construction activities would cause temporary impacts to suitable habitat for arroyo toad, leading to potentially significant direct impacts on arroyo toad adults, metamorphs, and tadpoles. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and the CDFG at important benchmarks)
- BIO-17 (conduct focused surveys for arroyo toad and, if present, implement measures required by the USFWS Biological Opinion for arroyo toad, and develop and implement a monitoring plan in consultation with the USFWS and CDFG)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)

California Red-legged Frog

Construction activities would cause temporary impacts to suitable habitat for California red-legged frog, leading to potentially significant direct impacts on California red-legged frog adults, metamorphs, and tadpoles. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-18 (conduct focused surveys for California red-legged frog and, if present, implement measures required by the USFWS Biological Opinion for California red-legged frog, and develop and implement a monitoring plan in consultation with the USFWS and CDFG)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)

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Western Spadefoot

Construction activities would cause temporary impacts to suitable habitat for western spadefoot toad, leading to potentially significant direct impacts on western spadefoot adults, metamorphs, and tadpoles. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)
- BIO-53 (pre-construction surveys and habitat creation for western spadefoot)

Silvery Legless Lizard, Coastal Whiptail, Rosy Boa, San Bernardino Ringneck Snake, Coast Horned Lizard, And Coast Patch-nosed Snake

Construction activities would cause temporary impacts to suitable habitat for reptiles, leading to potentially significant direct impacts on silvery legless lizard, coastal whiptail, rosy boa, San Bernardino ringneck snake, coast horned lizard, coast patch-nosed snake, two-striped garter snake, and south coast garter snake individuals. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)
- BIO-54 (surveys to capture and relocate special-status reptiles)

Two-striped Garter Snake/South Coast Garter Snake

Construction activities would cause temporary impacts to suitable habitat for two-striped garter snake and south coast garter snake, leading to potentially significant direct impacts to individuals of these two species. These impacts would be mitigated by the following mitigation measures:

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- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)
- BIO-89 (pre-construction surveys and relocation of two-striped garter snake and south coast garter snake)

Western Pond Turtle

Construction activities would cause temporary impacts to suitable habitat for western pond turtle, leading to potentially significant direct impacts pond turtle individuals. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-50 (conduct focused surveys for western pond turtle, and if present, prepare and implement a monitoring plan)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)

Bell's Sage Sparrow, Southern California Rufous-crowned Sparrow, Grasshopper Sparrow, Costa's Hummingbird, California Horned Lark, California Gnatcatcher, Loggerhead Shrike, Allen's Hummingbird, and Black-chinned Sparrow

Construction activities would cause temporary impacts to suitable habitat for upland birds, leading to potentially significant direct impacts on adults, nests, or young of Bell's sage sparrow, southern California rufous-crowned sparrow, grasshopper sparrow, Costa's hummingbird, California horned lark, California gnatcatcher, loggerhead shrike, Allen's/rufous humming bird, and black-chinned sparrow. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)

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- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)
- BIO-56 (pre-construction surveys for nesting native bird species and construction setbacks for active nests and restriction on construction night lighting within 200 feet of natural areas)

Burrowing Owl

Construction activities would cause temporary impacts to suitable habitat for burrowing owl, leading to potentially significant direct impacts on individuals of this species. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)
- BIO-57 (pre-construction surveys for burrowing owl)

Construction activities would cause temporary impacts to suitable habitat for California condor, leading to potentially significant direct impacts on individuals of this species. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)
- BIO-82 (construction monitoring for California condors and reporting of sightings to CDFW and USFWS within 24 hours)

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San Diego Desert Woodrat/San Diego Black-tailed Jackrabbit

Construction activities would cause temporary impacts to suitable habitat for San Diego desert woodrat and San Diego black-tailed jackrabbit, leading to potentially significant direct impacts on individuals of these two species. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-52 (pre-construction educational meetings, construction-limit staking, construction vehicle inspection and cleaning, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)
- BIO-58 (pre-construction surveys and relocation of San Diego desert woodrat and San Diego black-tailed jackrabbit)

American Badger

Construction activities would cause temporary impacts to suitable habitat for the American badger, leading to potentially significant direct impacts on individuals of this species. These impacts would be mitigated by the following mitigation measures:

- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-59 (consultation with the County and CDFG at important benchmarks)
- BIO-41 (pre-construction surveys and avoidance of American badger)

Construction-Related Short-term and Development-related Long-term Indirect Impacts

Construction could also result in short-term indirect impacts to special-status wildlife occupying habitat within the SEAs, including the following:

- Noise and vibration that could disturb behavior, including nesting by birds, aestivation by amphibians and reptiles (e.g., emergence from burrow at inappropriate times exposing them to various risks), and habitat and movement patterns by various wildlife species.
- Lighting that could disturb the behavior of nocturnal species, changing their habitat use patterns and potentially increasing their risk of predation, as well as disrupting sleep patterns of diurnal species (e.g., nesting birds).

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- Hydrologic and water quality impacts, including chemical pollution, increased turbidity, excessive sedimentation, flow interruptions, excessive dust and changes in water temperature due to short term changes to the active channel morphology that could affect aquatic (e.g., fishes), semi-aquatic (e.g., amphibians and some reptiles), and riparian/wetland (e.g., riparian birds) species.
- Trash that may attract predators such as crows, ravens, skunks, etc., that prey on small native species.

Over the long term, the proximity of urban development to wildlife habitat could also result various indirect impacts, including the following:

- Noise and lighting that could have similar long-term impacts as described above for short-term construction impacts.
- Increased predation by pet, stray, and feral cats and dogs, as well as native mesopredators (e.g., skunks, raccoons, and opossum).
- Degradation of habitat from increased human use (e.g., trampling, trash, and off-road vehicles) and increase chance of harassment and collecting.
- Altered fire regimes (likely too frequent fire).
- Invasion by exotic plant (e.g., giant reed, tamarisk, and pampas grass in riparian areas) and wildlife species (e.g., Argentine ants, bullfrogs, African clawed frogs, exotic fish, crayfish, cowbirds).
- Use of pesticides resulting in direct or secondary contamination (e.g., through prey) and reduction in prey availability (e.g., reduced insect prey for species such as bats).
- Increased risk of roadkill on roads adjacent to occupied areas.

These potential short-term and long-term indirect impacts on special-status wildlife occupying the SEAs could be significant, absent mitigation. The specific mitigation measures that would be implemented to reduce these indirect impacts to less than significant include:

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

Biological Resources Synopsis for the Homestead South Site

- SP-4.6-29 through SP 4.6-32 (recreational usage and access restrictions within the High Country SMA)
- SP-4.6-33 (protection of transition areas along the High Country SMA, including planting palettes and FMZs)
- SP 4.6-34 (marking and inspection of grading perimeters prior to impacts within or adjacent to the High Country SMA)
- SP-4.6-35 (avoidance of inadvertent impacts to biological resources within or adjacent to the High Country SMA)
- SP-4.6-36 through SP-4.6-42 (open space dedication of the High Country SMA)
- SP-4.6-44 and SP-4.6-45 (drainage guidelines)
- SP-4.6-49 through SP-4.6-52 (wildfire fuel modification plan and standards for FMZs)
- SP-4.6-53 (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- SP-4.6-55 (obtaining agency permits prior to development or disturbance within wetlands or other sensitive habitats)
- SP-4.6-56 (downcast lighting design along the boundaries of natural areas)
- SP-4.6-58 (conformance with NPDES and RWQCB permit provisions)
- BIO-17 (conduct focused surveys for arroyo toad, and if present, implement measures required by the USFWS Biological Opinion for arroyo toad, and develop and implement a monitoring plan in consultation with the USFWS and CDFG)
- BIO-18 (conduct focused surveys for California red-legged frog, and if present, implement measures required by the USFWS Biological Opinion for California red-legged frog, and develop and implement a monitoring plan in consultation with the USFWS and CDFG)
- BIO-19 (open space dedication of the Salt Creek area)
- BIO-41 (pre-construction surveys and avoidance of American badger)
- BIO-43 (pre-construction surveys of the riverbed for unarmored threespine stickleback, arroyo chub, and Santa Ana sucker)
- BIO-44 (development and implementation of a Stream Crossing and Diversion Plan)
- BIO-45 (pre-construction diversion of all stream flows within a work zone)
- BIO-46 (requiring the presence of a qualified biologist during stream diversion)

Biological Resources Synopsis for the Homestead South Site

- BIO 47 (slow moving water habitats shall be constructed upstream and downstream of any river crossing or bridge construction area)
- BIO-48 (structures within the riverbed not to impair movement of aquatic life)
- BIO-49 (prevention of mud and pollutants from entering streams and storm flows)
- BIO-50 (pre-construction surveys for western pond turtle)
- BIO-52 (pre-construction educational meetings, construction limit staking, construction vehicle and equipment inspection and cleaning, and biological monitoring during vegetation clearing and grading activities)
- BIO-56 (pre-construction surveys for nesting native bird species and construction setbacks for active nests, and restriction on construction night lighting within 200 feet of natural areas)
- BIO-57 (pre-construction surveys for burrowing owl)
- BIO-58 (pre-construction surveys and relocation of special-status mammals)
- BIO-60 (pre-construction surveys for mountain lion natal dens)
- BIO-61 (pre-construction surveys for active roosts of bats)
- BIO-63 (control of pet, stray, and feral cats and dogs in or near open space areas)
- BIO-64 (develop an integrated pest management plan that addresses pesticide use)
- BIO-68 (creation of artificial bat roosts if active roosts are indirectly impacted)
- BIO-69 (trail signage and homeowner education regarding sensitive resources in preserved natural habitat areas)
- BIO-70 (project design features, construction notes, erosion and dust control, and SWPPP BMPs to ensure protection of vegetation communities and special status species)
- BIO-71 (dust control measures to protect vegetation communities and special-status aquatic wildlife species)
- BIO-72 (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)
- BIO-73 (permanent fencing along trails in the River Corridor SMA)
- BIO-78 (cowbird monitoring and trapping program)
- BIO-80 (monitoring and control of invasive, non-native aquatic wildlife species in perpetuity)
- BIO-83 (pre-construction surveys for ringtail)
- BIO-85 (prevention of Argentine ant invasion)

Biological Resources Synopsis for the Homestead South Site

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Biological Resources Synopsis for the Homestead South Site

5.0 CONCLUSION

The Santa Clara River SMA/SEA occupies 27,097 acres, of which 1,181 acres occur within the RMDP/SCP boundary. The EIS/EIR concluded that the Specific Plan and RMDP would directly disturb 190 acres of the Santa Clara River SMA/SEA. The Landmark Village, Mission Village, and Homestead South projects would permanently impact 38 acres and temporarily impact 122 acres. Of the 38 acres of permanent impacts to Santa Clara River SMA/SEA, Homestead South would not result in any impacts to Santa Clara River SMA/SEA outside of those SEA impacts already analyzed by Landmark Village and Mission Village. Of the 122 acres of temporary impacts to Santa Clara River SMA/SEA, the Homestead South project would result in 13.4 acres of temporary impacts not previously analyzed for Landmark Village and Mission Village. However, these impacts were analyzed in the RMDP/SCP EIS/EIR.

The project would not result in impacts to special-status plant species or oak trees within the newly designated SEA areas. Temporary impacts to special-status vegetation communities and special-status wildlife species would be mitigated to less than significant as described above in Section 4.0

Biological Resources Synopsis for the Homestead South Site

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APPENDIX A

Special-Status Plant and Wildlife Species Known to Occur on the Homestead South Village Project Site

APPENDIX A

Special-Status Plant and Wildlife Species Known to Occur on the Homestead South Village Project Site

Special-Status Plants

The 14.8 acres of SEA area attributable to the Homestead South project (not previously addressed by the Landmark Village and Mission Village projects) is known to support five special-status plant species. The database for plant species has been accumulated over many years, from surveys conducted within the Newhall Ranch Specific Plan Area, and on other nearby lands, between 2001 and 2013. These included focused surveys for rare plants identified as having potential to occur on site, focused surveys for San Fernando Valley spineflower (SFVS), and focused surveys of oak trees. Table 1 lists the special-status plant species that have been observed within the Project site boundaries during the various surveys. Figures 3 and 3A-3F show the occurrence locations. One state-listed threatened species, SFVS, occurs within the Project site, and within the project area. SFVS has a California Rare Plant Rank (CRPR) of 1B.2 and is a federal species of concern. Slender mariposa lily also has a CRPR of 1.B2 and has been observed within scrub and grasslands within the Project site, and in the project area. Island mountain-mahogany and Peirson’s morning-glory are known to be scattered within scrub and grasslands within the Project site, and in the project area. Mainland cherry is known to occur along drainages within the Project site, and in the project area. Southern California black walnut, southwestern spiny rush, undescribed everlasting, Parish’s sagebrush are known to occur along the Santa Clara River within the Project site, and also within the project area. Oak trees have been mapped throughout the Specific Plan, including within the Project site. In addition to these special-status plants, a jurisdictional wetland delineation has been conducted for the Specific Plan area, including the Project site.

Table 1
Special-Status Plant Species Documented on the Project Site

Common Name Scientific Name	Sensitivity Status			Habitat	Area Where Observed
	Federal	State/ LA County	CNPS		
San Fernando Valley spineflower <i>Chorizanthe parryi</i> var. <i>fernandina</i>	FC	CE S1.1 LA County	1B.1	California sagebrush scrub and associations, California annual grasslands, or at the edge of agricultural fields on mesas	This species is known to occur within the Project site, both on site and off site within the Specific Plan Area, Valencia Commerce Center (VCC) and Entrada.
undescribed everlasting <i>Gnaphalium</i> sp. <i>nova</i> ^a	—	—	*	Alluvial sage scrub (alluvial benches)	This species is known to occur along the Santa Clara River within the Project site and upstream of the project site within the Santa Clara River and Castaic Creek.
island mountain-mahogany <i>Cercocarpus betuloides</i> var. <i>blancheae</i>	—	S3.3 LA County	4.3	Closed-cone coniferous forest and chaparral	This species is known to occur within the Project site as an occasional component of chaparral communities at the base of north-facing slope. Given the low sensitivity status of the species, individual island mountain-mahogany plants have not been mapped

APPENDIX A (Continued)

Table 1
Special-Status Plant Species Documented on the Project Site

Common Name Scientific Name	Sensitivity Status			Habitat	Area Where Observed
	Federal	State/ LA County	CNPS		
mainland cherry <i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	—	—	—	Undifferentiated chaparral, big sagebrush scrub, and river wash	This species is known to occur along drainages within the Project site, on site as well as along off-site drainages to the east. Mainland cherry woodland is considered special status by the County of Los Angeles.
oak trees <i>Quercus</i> spp.	—	—	—	Oak woodlands and savannahs	Oak trees have been mapped throughout the Project site, both on site and off site.
Parish's sagebrush <i>Artemisia tridentata</i> ssp. <i>parishii</i>	—	—	—	Big sagebrush scrub	This species is considered special status by the County of Los Angeles. This species has been observed in big sagebrush scrub within the Project site, off site. This subspecies has been observed to hybridize with the <i>A. t.</i> ssp. <i>tridentata</i> within the Specific Plan area, including the Landmark Village Project site and the Salt Creek area.
Peirson's morning-glory <i>Calystegia peirsonii</i>	—	S3.2 LA County	4.2	Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland	This species has been observed within the Project site, on site, on ridges and slopes, weakly climbing over chaparral, coastal scrub, and grasslands. Given the low sensitivity status of the species, observations were not mapped.
slender mariposa lily <i>Calochortus clavatus</i> var. <i>gracilis</i>	—	S2.2 LA County	1B.2	Chaparral, coastal scrub, and grasslands	This species has been observed within the Project site, on site and off site within Mission Village and Entrada.
southern California black walnut <i>Juglans californica</i> var. <i>californica</i>	—	S3.2 LA County	4.2	Chaparral, cismontane woodland, and coastal scrub/alluvial	This species is known to occur along the Santa Clara River within the Project site and upstream of the project site within the Santa Clara River.
southwestern spiny rush <i>Juncus acutus</i> ssp. <i>leopoldii</i>	—	S3.2 LA County	4.2	Coastal dunes (mesic), meadows and seeps (alkaline seeps), and marshes and swamps (coastal salt)	This species is known to occur occasionally within mesic riparian areas along the Santa Clara River. This species is not numerically abundant on site and occurrences of this species were not mapped due to its low sensitivity status.

^a Some experts identify this species as white-headed cudweed (*Gnaphalium leucocephalum*), which is a CNPS List 2.2 species (S3.2). See the analysis of the undescribed everlasting in **Subsection 4.5.5.3** of the RMDP-SCP EIS/EIR for more detail.

Key:

Status:

Federal: 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 4 = Plants of limited distribution (watch list)

Other: * = Undescribed species, no status currently assigned

Los Angeles County:

LA County: Sensitive Species Occurring or Potentially Occurring within the Los Angeles SEA (County of Los Angeles 2006)

APPENDIX A (Continued)

Special-Status Wildlife

The Project site (and Santa Clara River SEA) is known to support or potentially supports numerous special-status wildlife species, most of which occur or potentially occur within the Santa Clara River mainstem. The database for wildlife species has been accumulated over many surveys conducted on site, within the Specific Plan Area, and on other nearby lands between 1988 and 2013. These included protocol surveys in the Santa Clara River and adjacent uplands, as appropriate, for the listed least Bell's vireo, southwestern willow flycatcher, arroyo toad, and coastal California gnatcatcher, as well as focused surveys for many other species, including, but not limited to, unarmored threespine stickleback and other special-status fish, special-status semi-aquatic amphibians and reptiles (e.g., western spadefoot, western pond turtle, two-striped garter snake), nesting and foraging raptors, special-status butterflies (e.g., San Emigdio blue butterfly), upland reptiles (pit-fall surveys), small mammals (live-trapping), bats (acoustic and mist-netting surveys), and wildlife movement (tracking stations, spotlighting). Table 2 lists the special-status species that have been detected within the Project site boundaries during the various surveys. Figures 3 and 3A-3F show the occurrence locations of special-status species for which there are site-specific data. Table 3 lists the special-status species considered to have at least moderate potential to occur on the Project site based on several factors, including: detections in the immediate Project vicinity, general distribution and abundance of the species in the project region, available suitable habitat on the Project site, and the professional judgment of the biologists who have conducted the various wildlife surveys.

Three federal- and/or state-listed species have been documented in the Santa Clara River within the Project site: unarmored threespine stickleback, willow flycatcher, and least Bell's vireo (Table 2). The Santa Clara River within the Project site, and along both upstream and downstream areas, supports a substantial least Bell's vireo breeding population. The willow flycatchers observed to date appear to have been migrants, but nesting has been documented downstream near Fillmore (11 miles downstream) and Santa Paula (24 miles downstream). Depending on habitat conditions, presence of unarmored threespine stickleback in the Santa Clara River has been highly variable, ranging from abundant to rare or absent in particular reaches. Several other listed species have potential to occur on the Project site or to be indirectly affected by the Project. Southern steelhead do not occur in the Project reach of the river, but do occur downstream where they could be affected by hydrological and water quality effects of the Project.

Arroyo toad tadpoles have been detected in the Santa Clara River just upstream of the Project site, but protocol surveys in the reach within the Project site have been negative. The California red-legged frog is not expected to breed on site, but may move along the River based on documented populations in Piru Creek downstream and San Francisquito Creek upstream.

APPENDIX A (Continued)

The California condor may occasionally land to feed on mammal carcasses that may occur on the Project site. Condors frequently fly over the Project vicinity when moving between the Sespe Wilderness and the San Gabriel Mountains and have recently been observed landing and feeding in Potrero Canyon. The coastal California gnatcatcher had not been detected during numerous avian surveys over the years in the Project vicinity, including USFWS protocol surveys, but transient individuals were incidentally observed in October 2007 and August 2008 in the Project vicinity during monitoring, and a breeding pair was detected in June 2012 about 1.5 miles east of the Project site.

Other notable special-status wildlife occurrences on or near the Project site include: several observations of western pond turtle and two-striped garter snake in the Santa Clara River; substantial use of the Project vicinity by nesting and/or foraging raptors, including golden eagle, Cooper's hawk, white-tailed kite, northern harrier, ferruginous hawk, American peregrine falcon, sharp-shinned hawk, merlin, and prairie falcon. In addition to nesting by least Bell's vireo and migration stopover habitat for willow flycatcher, the riparian habitat in the Santa Clara River provides high quality riparian nesting habitat for several riparian/woodland birds, including yellow warbler, yellow-breasted chat, Nuttall's woodpecker, and oak titmouse.

The Project site and vicinity, including the Santa Clara River and the uplands also provides foraging habitat for several special-status bats, including pallid bat, western mastiff bat, western red bat, hoary bat, silver-haired bat, little brown bat, fringed myotis, western long-eared myotis, western small-footed myotis Yuma myotis, and pocketed free-tailed bat. Pallid bat, western red bat, silver-haired bat, hoary bat, little brown bat, western long-eared myotis, and Yuma myotis also may roost in the riparian and woodland habitats on site. Few special-status birds have been documented in the upland shrub habitats on site, with only southern rufous-crowned sparrow observed on site. However, in addition to California gnatcatcher, Bell's sage sparrow, black-chinned sparrow, and Costa's hummingbird could nest on site in the coastal scrub and chaparral habitats. Grasshopper sparrow and California horned lark may nest on site in grassland. Finally, the Santa Clara River is a regional wildlife corridor that may provide movement and refuge habitat for mule deer, mountain lion, and black bear.

APPENDIX A (Continued)

Table 2
Special-Status Wildlife Species Observed on Project Site

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
<i>Fish</i>				
unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	FE	CE CFP LA County	Slow-moving and backwater areas.	This species is known to occur in the Santa Clara River and has been observed in the portion of the River within the Project site. It has been commonly observed in the River upstream and downstream of the Project site.
arroyo chub <i>Gila orcutti</i>	—	CSC LA County	Slow-moving or backwater sections of warm to cool streams with mud or sand substrates.	This species is known to occur in the Santa Clara River and has been observed in the portion of the River within the Project site. It has been commonly observed in the River upstream and downstream of the Project site.
<i>Amphibians</i>				
western spadefoot <i>Spea hammondi</i>	—	CSC LA County	Open areas in lowland grasslands, chaparral and pine–oak woodlands; requires temporary rain pools that last approximately three weeks.	One pool on the Project site near Grapevine Mesa has been observed to supported western spadefoot tadpoles, but no adults have been observed. Adult spadefoot toads and tadpoles have also been observed in Potrero Canyon and elsewhere in the Project vicinity.
<i>Reptiles</i>				
silvery legless lizard <i>Anniella pulchra pulchra</i>	—	CSC LA County	Stabilized dunes, beaches, dry washes, chaparral, scrubs, pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils.	This species was observed in Long Canyon on the Project site by Huntley in 2006. It potentially occurs in other portions of the Project site in suitable habitat.
western pond turtle <i>Emys marmorata</i>	—	CSC LA County	Streams, ponds, freshwater marshes, and lakes with growth of aquatic vegetation.	This species is known to occur in the Santa Clara River and has been observed in the portion of the River within the Project site. This species also occurs in several locations in the River upstream and downstream of the Project site.
two-striped garter snake <i>Thamnophis hammondi</i>	—	CSC LA County	Perennial and intermittent streams with rocky or sandy beds and artificially created aquatic habitats (manmade lakes and stock ponds); requires dense riparian vegetation.	This species is known to occur in the Santa Clara River and has been observed in the portion of the River within the Project site. This species also occurs in several locations in the River upstream and downstream of the Project site.

APPENDIX A (Continued)

Table 2
Special-Status Wildlife Species Observed on Project Site

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
<i>Birds</i>				
Cooper's hawk (nesting) <i>Accipiter cooperii</i>	—	WL LA County	Dense stands of live oak, riparian woodlands, or other woodland habitats near water.	This species is known to be a year-round resident in the project area, and there are several observations for the species in the Santa Clara River and the uplands south of the River. A nest site was also documented in uplands south of the River.
southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	—	WL LA County	Coastal scrub and chaparral.	This species has been observed in chaparral on the Project site. This species also occurs within 0.5 mile of the Project site.
golden eagle (nesting and wintering) <i>Aquila chrysaetos</i>	BCC	WL CFP LA County	Nests on cliff-walled canyons and large trees in open areas. Forage in open shrublands, agriculture, and grassland.	This species has been observed on site and may foraging in the area. Nesting on site has not been observed, but suitable nesting habitat is present in the Santa Clara River. 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 in the project vicinity (Bloom Biological 2008).
oak titmouse (nesting) <i>Baeolophus inornatus</i>	BCC	***	Montane hardwood-conifer, montane hardwood, blue oak, valley oak and coastal oak woodlands, montane and valley foothill riparian habitats.	This species is known to occur in the Santa Clara River and has been observed in the portion of the River within the Project site. It is expected to be fairly common in the riparian and woodland habitats on site.
Lawrence's goldfinch <i>Carduelis lawrencei</i>	BCC	***	Valley foothill hardwood, valley foothill hardwood-conifer; and, in southern California, desert riparian, palm oasis, pinyon-juniper and lower montane habitats.	This species is known to occur in the Santa Clara River and has been observed in the portion of the River within the Project site. It is expected to be fairly common in the riparian and woodland habitats on site. It has been observed off-site within 0.5 mile of the Project site.
northern harrier (nesting) <i>Circus cyaneus</i>	—	CSC LA County	Coastal salt marsh, freshwater marsh, grasslands, and agricultural fields.	This species has been observed in uplands just south of the Santa Clara River, but no nest sites have been observed.
white-tailed kite (nesting) <i>Elanus leucurus</i>	—	CFP LA County	Inhabits herbaceous and open stages of most habitats, common in cismontane in California.	This species is known to roost and nest in the Santa Clara River and has been observed in the portion of the River within

APPENDIX A (Continued)

Table 2
Special-Status Wildlife Species Observed on Project Site

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
			Nests are placed near top of dense oak, willow or other tree stand; usually 6–20 meters (20–100 feet) above ground. Nest located near open foraging area.	the Project site and upstream and downstream of the Project site. It likely forages in the uplands on the Project site.
willow flycatcher (nesting) <i>Empidonax traillii</i>	—	CE LA County	Riparian woodlands that contain water and low willow thickets.	This species is known to occur in the Santa Clara River and has been observed in the portion of the River within the Project site several times. The observations have been of individuals species, thought to be migrants passing through the area based on their behavior and time of year (no observations occurred after June 22). No nesting has been observed.
southwestern willow flycatcher (nesting) <i>Empidonax traillii extimus</i>	FE	CE LA County	Riparian woodlands that contain water and low willow thickets.	Most of the observations of the willow flycatcher in the Santa Clara River have not identified individuals to the subspecies level. The Project site supports suitable nesting and foraging habitat, but all observed 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 (Forde Biological Consultants 2006).
yellow-breasted chat (nesting) <i>Icteria virens</i>	—	CSC LA County	Riparian thickets and riparian woodlands with a dense understory.	This species is known to occur in the Santa Clara River and has regularly been observed in the portion of the River within the Project site. It has been commonly observed in the River downstream of the Project site.
Nuttall's woodpecker (nesting) <i>Picoides nuttallii</i>	BCC	***	Lower elevation riparian deciduous and oak habitats.	This species is known to occur in the Santa Clara River in the portion of the River within the Project site. This species also occurs within 0.5 mile of the Project site.
yellow warbler (nesting) <i>Setophaga (Dendroica) petechia brewsteri</i>	BCC	CSC LA County	Riparian thickets and woodlands.	This species is known to occur in the Santa Clara River and has been observed in the portion of the River within the Project site. This species has been observed both during nesting season and migration. It is expected to be fairly common in the riparian and woodland and has been

APPENDIX A (Continued)

Table 2
Special-Status Wildlife Species Observed on Project Site

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
				frequently observed in the River upstream and downstream of the Project site.
least Bell's vireo (nesting) <i>Vireo bellii pusillus</i>	FE	CE LA County	Riparian vegetation with extensive willows below 2,000 feet.	This species has been observed regularly in the Santa Clara River in the portion of the River within the Project site, including numerous nesting locations. This species also occurs in the River upstream and downstream of the Project site.
yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	—	CSC	Nests in freshwater marsh and forages in annual grassland, native grassland and agriculture.	There is one observation for this species in an agricultural field on the Project site north the Santa Clara River. This species is expected to occur occasionally on site and only as a migrant or vagrant that uses the Project site for foraging; it is not expected to nest on site.

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

State:

CE: California-listed (state-listed) as endangered
 CT: California-listed (state-listed) as threatened
 CFP: California Fully Protected
 CSC: California Species of Special Concern
 WL: Watch List
 **: Overwintering (or roosting) sites should be protected, butterfly probably not at risk currently
 ***: Special Animal
 †: Trust resource

Los Angeles County:

LA County: Sensitive Species Occurring or Potentially Occurring within the Los Angeles SEA (County of Los Angeles 2006)

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
<i>Insects (Butterflies)</i>				
San Emigdio blue butterfly <i>Plebulina emigdionis</i>	—	*** LA County	Often near streambeds, washes, or alkaline areas. Associated with four-wing saltbush (<i>Atriplex canescens</i>) and quail brush (<i>Atriplex lentiformis</i>).	Moderate potential to occur on the Project site. A colony was observed in Potrero Canyon west of Project site in association with <i>Atriplex lentiformis</i> plants. The Project site supports approximately 3.1 acres of the <i>A. lentiformis</i> (1.1 acres) and <i>A. canescens</i> (2.0 acres) that could support the species.
<i>Terrestrial Mollusks</i>				
Trask shoulderband snail <i>Helminthoglypta traskii traskii</i>	—	***	Moist microhabitats in coastal scrub, riparian, and chaparral, including woodrat nests, brush, decaying yucca clumps, logs, rocks, stick litter, and rocks.	Moderate potential to occur on the Project site. Suitable microhabitats within coastal scrub, riparian, and chaparral occur throughout the Project vicinity, including the Santa Clara River. Reconnaissance surveys for the Trask shoulderband snail were negative (Huntley, pers. comm. 2010); however, the presence of two non-special-status helminthoglyptid taxa (Southern California shoulderband snail and Vasquez rocks shoulderband snail) in the Project vicinity indicate that the special-status Trask shoulderband snail has potential to occur.
<i>Fish</i>				
Santa Ana sucker <i>Catostomus santaanae</i>	FT	CSC LA County	Occupies small- to medium-sized perennial streams with water ranging in depth from a few centimeters to a meter or more.	High potential to occur in the Santa Clara River on the Project site. This species is known to occur in the Santa Clara River and has been sparsely observed in the portion of the river within the Project site. The population in the Santa Clara River system is not listed as threatened because it is introduced to the area.
southern steelhead <i>Oncorhynchus mykiss</i>	FE	— LA County	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 banks, large and small woody debris, and overhanging vegetation. As non-spawning adults: Pacific Ocean.	Occurs downstream of the Project site. Within the Santa Clara River drainage, southern steelhead historically inhabited Piru Creek, Sespe Creek, Santa Paula Creek, Hopper Creek, and possibly Pole Creek (Titus <i>et al.</i> n.d.). 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

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
				and Pole Creeks (Stoeker and Kelly 2005). Although reconnaissance surveys conducted along the Santa Clara River and tributary drainages within the Specific Plan area, which includes the Project site, were negative in 2004 and 2005 (ENTRIX 2009), this species was included in this category (Potential to Occur on Site) due to potential downstream effects of the proposed Project.
<i>Amphibians</i>				
arroyo toad <i>Anaxyrus californicus</i>	FE	CSC LA County	Restricted to rivers with shallow, gravelly 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.	Moderate potential to occur on the Project site in the Santa Clara River floodplain. Numerous focused surveys have been conducted for the arroyo toad throughout Santa Clara River, including the Project site and east of the Project site. Adult toads have been documented in limited numbers upstream of the Project site along the Santa Clara River and tributaries. One study (Aquatic Consulting Services 2002A) detected three arroyo toad tadpoles in the river within NRSP site, downstream of the Commerce Center Drive bridge site within 0.5 mile of the Project site; and another study (Aquatic Consulting Services 2002D) detected three arroyo toad tadpoles, two near the Valencia Water Treatment Plant and one upstream of Commerce Center Drive.
California red-legged frog <i>Rana draytonii</i>	FT	CSC LA County	Water sources such as ponds, lakes, reservoirs, streams, and adjacent riparian woodlands.	Moderate potential to occasionally occur on the Project site in the Santa Clara River floodplain. Field investigations indicate that potential breeding or summer habitat is generally absent from the portion of the Santa Clara River within the Project site and the NRSP generally (ENTRIX 2006B); the species generally avoids large river channels with widely fluctuating flows because such habitat does not permit successful reproductive activity (Hayes and Jennings 1989). The species has not documented in the Santa Clara River. In the general region, 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

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
				downstream tributaries, non-breeding frogs could occur in the Santa Clara River within the Project site.
<i>Reptiles</i>				
coastal whiptail <i>Aspidoscelis tigris stejnegeri</i>	—	*** LA County	Open areas in semiarid grasslands, scrublands, and woodlands.	Moderate potential to occur in the coastal scrub, grasslands, and woodlands on the Project site. Observed within NRSP in the High Country (Dudek and Associates 2006B) and one was observed off site in Castaic Mesa (Compliance Biology 2006D). It should be noted that Impact Sciences (2006) identified the subspecies <i>A. t. munda</i> (California whiptail) as occurring on the Project site during pitfall trapping. This subspecies generally occurs in Central Valley and the central Coast Range to north of Monterey Bay. Its southern extent is Ventura County where there appears to be an intergradation zone with <i>A. t. stejnegeri</i> . Therefore, assignment of western whiptail to either of the subspecies is uncertain, and it is assumed that the whiptails observed on site could be <i>A. t. stejnegeri</i> .
rosy boa <i>Charina trivirgata</i>	—	*** LA County	Inhabits desert and chaparral habitats with rocky soils in coastal canyons and hillsides, desert canyons, washes and mountains.	Moderate potential to occur in the coastal scrub and chaparral on the Project site. Suitable shrub habitats for this species occur on the Project site, but the species has not been observed on site or in the Project vicinity during wildlife surveys.
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.	Moderate potential to occur in oak woodland and riverbank habitats on the Project site; riverbank habitat occurs on site along the Santa Clara River.
coast (Blainville's) horned lizard <i>Phrynosoma blainvillii</i>	—	CSC LA County	Exposed gravelly-sandy soils with minimal shrubs, riparian woodland clearings, dry chamise chaparral, and annual grasslands with scattered seepweed or saltbush.	High potential to occur in the shrub and grassland habitats on the Project site. This species was observed off site during reptile surveys in 2004 and 2006 (Impact Sciences 2006) in similar habitats those present on site.

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	—	CSC LA County	Inhabits brushy or shrubby vegetation. Requires small mammal burrows for refuge and overwintering sites.	Moderate potential to occur in the coastal scrub, chaparral, and riparian scrub on the Project site. Suitable shrub habitats for this species occur on the Project site, but the species has not been observed on site or in the Project vicinity during wildlife surveys. California ground squirrel and Botta's pocket gopher burrows occur on site. Species is known to occur in the Project region.
south coast garter snake <i>Thamnophis sirtalis</i> spp.	—	CSC	Inhabits scrub, chaparral, annual and native grassland, freshwater marsh, and agriculture.	Moderate potential to occur in coastal scrub, chaparral, grassland, and agriculture habitats on the Project site, although subspecies is now rare.
<i>Birds</i>				
sharp-shinned hawk (nesting) <i>Accipiter striatus</i>	—	WL LA County	Nests in woodlands and forages over dense chaparral and scrublands.	High potential to occur on the Project site as a migrant or winter visitor and to forage in woodlands, chaparral, coastal scrub, and edge/ecotone areas between these communities. This species has been observed in the Project vicinity along agriculture fields along the Santa Clara River and in Salt Creek. All observations were thought to be migrants and/or wintering birds. The Project site is outside the known breeding range for this species.
tricolored blackbird (nesting colony) <i>Agelaius tricolor</i>	BCC	CSC LA County	Freshwater marshes and riparian scrub (nesting). Grassland and agriculture (foraging).	Moderate potential to nest in the Santa Clara River and to forage in upland grassland and agriculture on the Project site. This species has been observed upstream of the Project site during focused bird surveys, including, including approximately 200 breeding pairs at Castaic Junction and 20 breeding pairs next to Castaic Creek in 1994. Non-breeding birds were observed at Castaic Creem in 1995, but did not breed. Migrants have also been observed in the Project vicinity.
grasshopper sparrow <i>Ammodramus savannarum</i>	—	CSC	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.	Moderate potential to nest and forage in the grassland and fallow agricultural field on the Project site. 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.

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
Bell's sage sparrow (nesting) <i>Amphispiza belli belli</i>	BCC	WL LA County	Coastal scrub and chaparral.	Moderate potential to nest and forage in the coastal scrub and chaparral on the Project site. This species has been observed off site in Castaic Mesa, near Soledad Canyon, and in the Legacy Village project site, and the Salt Creek area.
short-eared owl (nesting) <i>Asio flammeus</i>	—	CSC LA County	Grassland, prairies, dunes, meadows, irrigated lands, saline and freshwater emergent wetlands.	Moderate potential to occur forage in grassland and agriculture on the Project site as a winter visitor. This species was observed in the Salt Creek area just west of the Ventura/Los Angeles County line in the fall of 2005. A freshly dead individual was found at the edge of a cultivated field just west of I-5 during the Santa Clarita Bird Count in December 2006.
long-eared owl (nesting) <i>Asio otus</i>	—	CSC LA County	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.	Moderate potential to nest in the Santa Clara River and forage in grassland and agriculture within the Project site. This species was observed Via Canyon in Fall 2005 (Dudek and Associates 2006B), but otherwise has not been observed during avian and other wildlife surveys.
burrowing owl (burrow sites and some wintering sites) <i>Athene cunicularia</i>	BCC	CSC LA County	Grasslands, open scrub, and agriculture, particularly with ground squirrel burrows.	Moderate potential to winter or nest in grassland and agriculture on the Project site. The species has not been detected during numerous avian surveys. Only two non-nesting occurrences have been documented in the Project vicinity, both in Middle Canyon in December of 2006 and April 2007.
ferruginous hawk (wintering) <i>Buteo regalis</i>	BCC	WL LA County	Grasslands, agricultural fields, and open scrublands.	High potential to occasionally forage in the grassland and agriculture on the Project site as an infrequent seasonal migrant. Individuals were observed foraging in the east alfalfa fields, Wolcott fields, and Potrero Canyon, and other agriculture fields along the Santa Clara River in winter 2008 (Bloom Biological 2008).
Costa's hummingbird (nesting) <i>Calypte costae</i>	—	***	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.	High potential to occur in coastal scrub, chaparral, and riparian scrub on the Project site. This species has been observed over multiple years in the Project vicinity; it is thought to be a summer resident, although does not appear to be an abundant species in the vicinity based on the small number of sightings each year.

APPENDIX A (Continued)

Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
turkey vulture <i>Cathartes aura</i>	—	†	Rangeland, agriculture, grassland; uses cliffs and large trees for roosting, nesting and resting.	High potential forage and temporarily roost in large trees on the Project site. This species has been observed over multiple years in the Project vicinity and roosting habitat is available in the Santa Clara River and other woodland habitats on site.
western yellow-billed cuckoo (nesting) <i>Coccyzus americanus occidentalis</i>	FC BCC	CE LA County	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.	Moderate potential to occasionally occur in the Santa Clara River within the Project area as a migrant but low potential to nest on site. Single individuals have occasionally been observed in the Project vicinity, including the Santa Clara River east of the Project site and west of the Ventura county line in 1997 and 1998; none have been observed since then. Individuals were also observed historically in 1979, 1981 and 1992.
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.	Moderate potential to occur as a migrant in riparian and woodland habitats on the Project site. Individuals have been observed in the Project vicinity in 1994, 1996, and 2002. The Project site is within this species winter range, but nesting on site is not expected.
California horned lark <i>Eremophila alpestris actia</i>	—	WL	Grasslands, disturbed areas, agriculture fields, and beach areas.	High potential to nest and forage in grassland and agriculture on the Project site. This species has not been directly observed in upland portions of the Project site, but has been observed in agriculture immediately north of the site.
merlin (wintering) <i>Falco columbarius</i>	—	WL LA County	Coastlines, wetlands, woodlands, agricultural fields, and grasslands.	High potential to forage in grassland and agriculture and roost in riparian and woodland habitats on the Project site. Several individuals observed on different occasions hunting over agriculture fields along the Santa Clara River and in Potrero Canyon).
prairie falcon (nesting) <i>Falco mexicanus</i>	BCC	WL LA County	Grasslands, savannas, rangeland, agricultural fields, and desert scrub; requires sheltered cliff faces for shelter and nesting.	High potential to forage in coastal scrub, grassland and agriculture on the Project site, but very low potential to nest on site. Individuals have been observed on several occasions in Potrero Canyon and along the Santa Clara River, Castaic Creek, and Salt Creek. All of these

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
				occurrences were thought to be migrants in the Project vicinity and limited nesting habitat is available in the High Country.
American peregrine falcon <i>Falco peregrinus anatum</i>	BCC Delisted	CFP Delisted LA County	Nests near wetlands, lakes, rivers, or other water bodies, on cliffs, banks, dunes, and other human-made structures.	High potential to forage in in the Santa Clara River floodplain and upland grassland and agriculture on the Project site, but very low potential to nest on site. Individuals have been occasionally observed foraging in the Project region, including over the Wolcott agriculture field and over the Santa Clara River corridor near the Grapevine Mesa area; no other occurrences of this species have been documented during annual bird surveys. The species may nest in the Santa Susana Mountains, south of the Project site.
California condor <i>Gymnogyps californianus</i>	FE	CE CFP LA County	Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags.	Moderate potential to land on the Project site to feed on mammal carcasses. Until April 2008, California condors had not been known to nest or land in the Project vicinity within the last 25 years. In April 2008, a California condor was observed feeding on a dead calf in a Potrero side canyon by wildlife biologist Chris Niemela (Carpenter 2008). The USFWS provided information that condors fitted with GPS transmitters had landed on Newhall Ranch on several days from April through August 2008 (Root 2008). In January 2009, up to five condors were detected feeding on a dead calf in the middle section of Potrero Canyon south of Potrero Mesa between January 27 and 30 (Niemela 2009). Additional 2009 flight data provided to CDFG by the USFWS indicate that the condor frequently flies over the Project vicinity 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 area. It is expected to continue to foraging opportunistically in portions of the Project vicinity for dead cattle and other large mammal carcasses.

APPENDIX A (Continued)

Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
loggerhead shrike <i>Lanius ludovicianus</i>	BCC	CSC LA County	Grasslands and open shrublands with scattered shrubs, trees, fences, or other perches.	High potential to nest and/or forage in grassland, coastal scrub, chaparral and riparian scrub on the Project site. This species is a breeding resident in the Project vicinity, and has been regularly observed in Potrero Canyon, Tapo Canyon, near the Magic Mountain ranch gate, the Wolcott agriculture fields, Salt Creek, and along the Santa Clara River.
black-crowned night-heron (rookery) <i>Nycticorax nycticorax</i>	—	***	Riparian; nests in dense-foliaged trees and dense emergent wetlands.	Moderate potential to occur in the Santa Clara River within the Project site. This species has been observed along the Santa Clara River over several years, but observations have been early in the year and thought to have been wintering or migrant individuals. No rookery sites have been detected on or near the Project site.
summer tanager (nesting) <i>Piranga rubra</i>	—	CSC	Cottonwood-willow riparian habitats, especially older, dense stands along rivers and streams.	Moderate potential to occur in riparian habitats in the Santa Clara River within the Project site. Individuals have been observed during annual bird surveys in Project vicinity, including in 1991, 1993, 1994, 2000, and 2003.
coastal California gnatcatcher <i>Polioptila californica californica</i>	FT	CSC LA County	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.	Moderate potential to occur as a breeder or disperser in coastal scrub on the Project site. Although prior to 2007, this species had not been detected in the Project vicinity during numerous avian surveys (including USFWS protocol surveys), in October 2007 an individual believed to be a dispersing transient was detected in the Valencia Commerce Center during biological monitoring. An individual was also detected in August 2008 during monitoring for improvements of Del Valle Training Center Road located south of the town of Val Verde off of Chiquito Canyon. In June 2012 a California gnatcatcher pair was detected on the Mission Village site approximately 15. miles east of the Project site.
vermillion flycatcher (nesting) <i>Pyrocephalus rubinus flammeus</i>	—	CSC LA County	Breeding habitat includes riparian woodlands, riparian scrub, and freshwater marshes.	Moderate potential to occur in riparian habitats in the Santa Clara River within the Project site. A single individual was observed along the Santa Clara River in 1993.

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
Allen's/Rufous hummingbird (nesting) <i>Selasphorus sasin/rufus</i>	BCC	***	Breeds in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats. Migrates in woodland and scrub habitats.	High potential to occur in riparian, woodland, and coastal scrub habitats on the Project site. These species have been observed within adjacent to the Santa Clara River in the Project vicinity during avian surveys over various years, including 1998, 1999, and 2004. Although the project is within Allen's hummgbird's year-round ranges, all observations were thought to be of migrants.
chipping sparrow (nesting) <i>Spizella passerine</i>	—	***	Open woodlands with sparse or low shrubs.	High potential to occur in riparian and woodland habitats in the Santa Clara River within the Project site. This species has been observed as a common migrant in the Project vicinity during avian surveys over various years, including 1991-1994, 1999-2000, 2004 and 2007. The Project site is within the species' year-round range, but nesting has not been observed in the Project vicinity.
<i>Mammals</i>				
pallid bat <i>Antrozous pallidus</i>	—	CSC LA County	Arid habitats, including grasslands, shrublands, woodlands and forests; for roosting, prefers rocky outcrops, cliffs and crevices with access to open habitats for foraging.	High potential to forage in all habitats on the Project site, but low potential to roost on site due to lack of suitable roosting habitat. This species was detected in the Project vicinity and there was at least one maternity site in a metal storage building in middle Potrero Canyon and a nocturnal roost in a wooden shed along Potrero Creek.
western mastiff bat <i>Eumops perotis californicus</i>	—	CSC LA County	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees and tunnels.	High potential to forage in all habitats on the Project site, low potential to roost on site due to lack of suitable roosting habitat. This species was audibly detected just south of the Project boundary in 2006.
silver-haired bat <i>Lasionycteris noctivagans</i>	—	None/SA	Old growth forest, maternity roosts in trees (primarily woodpecker hollows), large diameter snags 50 ft above ground; hibernates in hollow trees, under sloughing bark, in rock crevices, and occasionally in	Moderate potential to roost on site in woodlands and forage on site and in off-site improvement areas. Species detected at the SR-126/Commerce Center Drive project in 2013.

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
			buildings, mines and caves; forages in or near coniferous or mixed deciduous forest, often following stream or river drainages.	
western red bat <i>Lasiurus blossevillii</i>	—	CSC	Forages along open streams and rivers; roosts in tree canopy in forest, woodland, riparian, mesquite bosque and orchards, including fig, apricot, peach, pear, almond, walnut, and orange.	High potential for forage along the Santa Clara River within the Project site and moderate potential to winter roost in riparian and woodland habitats on site (breeding is concentrated in the Central Valley). There have been three acoustic detections of the western red bat in the Project vicinity; two in 2004 in willow riparian habitat a 2006 detection under The Old Road Bridge.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	—	CSC LA County	Open chaparral and coastal scrub, grassland and agriculture.	Moderate potential to in coastal scrub, grassland and open chaparral on the Project site. This species in uncommon in the Project vicinity and has only been detected at the mouth of Potrero Canyon during wildlife surveys.
western long-eared myotis <i>Myotis evotis</i>	—	*** LA County	Semiarid shrublands, sage scrub, chaparral, and agricultural areas, but typically associated with coniferous forests; roosts in hollow trees, under exfoliating tree bark, caves, mines, cliff crevices, sinkholes, and rocky outcrops on the ground, as well as buildings and under bridges.	High potential to forage in all habitats on the Project site, but low potential to roost on site due to lack of suitable roosting habitat. This species was detected in the Project vicinity in 2013 on the Potrero Village site.
little brown bat <i>Myotis lucifugus</i>	—	***	Tree-associated, primarily in forested habitat; roosts in wide variety of natural and man-made roost sites in woodland or forest habitat.	High potential to forage in all habitats on the Project site, but low potential to roost on site due to lack of suitable roosting habitat. This species was detected in the Project vicinity in 2013 on the Potrero Village site.
fringed myotis <i>Myotis thysanodes</i>	—	*** LA County	Primarily drier woodlands, including oak, pinyon-juniper, ponderosa pine, and also desert scrub, mesic coniferous forest, grassland, and sage-grass steppe from sea level to 9,350 feet; roosts in crevices in buildings, mines, rocks, cliff faces, and bridges, and large, decadent trees and snags	High potential to forage in all habitats on the Project site, but low potential to roost on site due to lack of suitable roosting habitat. This species was detected in the Project vicinity in coast live oak habitat in 2004.

APPENDIX A (Continued)

Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
Yuma myotis <i>Myotis yumanensis</i>	—	***	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees;	High potential to forage in habitats along the Santa Clara River within the Project site, and moderate potential to roost on in trees on site. This species was detected in the Project vicinity in 2006 at two locations: at the Old Road Bridge and just south of the Project site boundary.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	—	CSC LA County	Open chaparral, coastal scrub, cactus patches and the understory of tree thickets.	Moderate potential to occur in open chaparral and coastal scrub on the Project site. A species of desert woodrat was observed during 2004 small mammal surveys in the Project vicinity and woodrat middens have been observed in various locations in the vicinity during wildlife surveys. The woodrats in the Project vicinity have not been identified to species, but the Project site is within the range of the San Diego desert woodrat.
pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	—	CSC LA County	Arid lands, including pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, palm oases; roosts in high cliffs or rock outcrops with dropoffs, caverns, buildings.	High potential to occasionally forage in open habitats on the Project site, but low potential to roost on site due to a lack of roosting habitat. The species was acoustically detected in 2006 in lower Potrero Creek. However, the Project vicinity is at the extreme northwestern part of its range in California and does not contain the desert habitats typically used by the species. Though present in the vicinity, it is probably an occasional visitor.
mule deer <i>Odocoileus hemionus</i>	—	†	Variety of habitats including forests, woodlands, brush, meadows and standing waters.	High potential to occur on the Project site. This species has been observed throughout the Project vicinity during various wildlife surveys.
mountain lion <i>Puma concolor</i>	—	✦	Occurs in a variety of scrub and forested habitats.	High potential to occasionally occur on the Project site, particularly along the Santa Clara River. This species has been observed several times during various wildlife surveys in the Project vicinity and may occur wherever suitable prey (e.g., mule deer) is present. The Santa Clara River is a regional wildlife corridor that likely is used by mountain lions.

APPENDIX A (Continued)

**Table 3
Special-Status Wildlife Species with Potential to Occur on the Project Site or
Otherwise be Affected by the Proposed Project**

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status
	Federal	State/ LA County		
American badger <i>Taxidea taxus</i>	—	CSC	Grasslands, agriculture, drier open stages of shrub, forest, and herbaceous habitats with friable soils.	High potential to occur on the Project site. This species has been observed during various wildlife surveys, and as recently as 2013 in Potrero Canyon west of the Project site.
black bear <i>Ursus americanus</i>	—	†	Dense forests; forages in brush forests, valley foothill riparian and wet meadows.	High potential to occasionally occur on the Project site, particularly along the Santa Clara River. This species was observed in the High Country in 2005 and may occur on the Project site during movement between suitable mountainous habitats north and south of the site.

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

Los Angeles County:

LA County: Sensitive Species Occurring or Potentially Occurring within the Los Angeles SEA (County of Los Angeles 2006)

State:

CE: California-listed (state-listed) as endangered
 CT: California-listed (state-listed) as threatened
 CFP: California Fully Protected
 CSC: California Species of Special Concern
 WL: Watch List
 **: Overwintering (or roosting) sites should be protected, butterfly probably not at risk currently
 ***: Special Animal
 †: Trust resource

APPENDIX B

*Significant Biological Impacts—Newhall Ranch
Specific Plan and WRP*

APPENDIX B

Significant Biological Impacts—Newhall Ranch Specific Plan and WRP

Table 1 below, 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 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 individual sensitive animal species.	Significant
Wildlife Movement —Implementation of the Newhall Ranch Specific Plan will have potentially significant impacts on the movement of resident wildlife species due to reductions 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
Loss of Habitat —As approved, implementation of the Specific Plan would result in the loss of 1,820 (35%) of the 5,183 acres of coastal sage scrub, 202 (17%) of the 1,213 acres of chaparral, and 1,480 (78%) of the 1,896 acres of non-native grassland habitat present on the site (when combined, 42% 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
<i>It is acknowledged that any loss of plant species listed as Rare, Threatened, or Endangered is considered a significant impact. Those include the following:</i>		
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

APPENDIX B (Continued)

Table 1
Significant Biological Impacts—Newhall Ranch Specific Plan and WRP

Impact Description	Mitigation Measures	Conclusion After Mitigation
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
<i>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:</i>		
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
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

APPENDIX B (Continued)

Table 1
Significant Biological Impacts—Newhall Ranch Specific Plan and WRP

Impact Description	Mitigation Measures	Conclusion After Mitigation
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
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

APPENDIX B (Continued)

Table 1
Significant Biological Impacts—Newhall Ranch Specific Plan and WRP

Impact Description	Mitigation Measures	Conclusion After Mitigation
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
<i>Development of the Specific Plan would result in impacts to sensitive habitats including the following:</i>		
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
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).

APPENDIX C

*Biological Mitigation Measures Required by the
Specific Plan EIR*

4.5.6 MITIGATION MEASURES

Eighty mitigation measures were identified in the Newhall Ranch Specific Plan Program EIR (County of Los Angeles 2003) for biological resources. These measures (SP-4.6-1 through SP-4.6-80) are included below in **Subsection 4.5.6.1**. Eighty-nine additional mitigation measures have been developed for this EIS/EIR and are included below in **Subsection 4.5.6.2**. These additional measures (BIO-1 through BIO-89) are consistent with and supplement those mitigation measures listed in the previously certified Newhall Ranch Specific Plan Program EIR (County of Los Angeles 2003).

4.5.6.1 Mitigation Measures Already Required by the Adopted Specific Plan

- 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 a 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.

4.5 BIOLOGICAL RESOURCES

- 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.
- 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.

4.5 BIOLOGICAL RESOURCES

- 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.
- 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.
- 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.

4.5 BIOLOGICAL RESOURCES

- 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.

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,

4.5 BIOLOGICAL RESOURCES

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.

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

4.5 BIOLOGICAL RESOURCES

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).

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 savannahs.

- 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.

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

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- Management Plan provides a list of appropriate plant species for use in enhancement areas in the High Country SMA.
- 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.
- SP-4.6-29 Access to the High Country SMA will be limited to day time use of the designated trail system.
- 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.
- SP-4.6-31 No hunting, fishing, or motor or trail bike riding shall be permitted.
- SP-4.6-32 The trail system shall be designed and constructed to minimize impacts on native habitats.
- 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.
- 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.
- 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

4.5 BIOLOGICAL RESOURCES

uses and development standards for the SMA are governed by the Development Regulations, Chapter 3.

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

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- 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*.
- 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.
- 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.

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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

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, Mainland cherry trees, and Mainland cherry 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.

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.

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- 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.
- 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.

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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 (*CEQA Guidelines* section 15370); (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.

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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 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.

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- 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.
- 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.
- 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 one 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.
- 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.
- 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**).

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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 five 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.

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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 five years.

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

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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.

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.

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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).

- 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.

- 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.

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.

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

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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.

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.

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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).

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

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approval to the County the treatments to be applied to exposed graded slopes that would ensure minimization of erosion.

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.

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

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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 5 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

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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.

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

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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 offsite. 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 onsite and offsite. 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.

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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.

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.

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.

4.5.6.2 Additional Mitigation Measures Proposed by this EIS/EIR

BIO-1 Mitigation Measures SP-4.6-1 through SP-4.6-16 specify requirements for riparian mitigation conducted in the High Country SMA, Salt Creek area, and Open Area. The RMDP includes requirements 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 Newhall Land that provides an outline of mitigation to offset impacts described in the RMDP. The CMIP demonstrates the feasibility of creating the required mitigation acreage from RMDP project impacts (see BIO-2). 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 necessary Corps mitigation requirements would be met or exceeded.¹

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 of 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 BIO-2 and BIO-10. The detailed wetlands mitigation plans shall

¹ 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.

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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 CDFG and the Corps and approved prior to the impact to riparian resources. BIO-4 describes that the functions and values will be assessed for the riparian areas that will be removed, and BIO-2 and BIO-10 describe the replacement ratios for the habitats that will be impacted.

BIO-2 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 Mitigation Measure BIO-4 and Mitigation Measure SW-3 of **Section 4.6** of the Final EIS/EIR) on the Project site, or as allowed under Mitigation Measure BIO-10.

a. Permanent impacts to Corps jurisdiction (which is a subset of CDFG jurisdiction) are to be mitigated by initiating mitigation site creation and/or restoration in advance of impacts, to replace the combined loss of acreage, functions, and services at a minimum 1:1 ratio. Initiation of a Corps mitigation site is defined as: (1) completion of site preparation; (2) installation of temporary irrigation; and (3) seeding and/or planting of the mitigation site. For detailed information, please refer to the *Mitigation Plan for Impacts to Waters of the United States* included in the Draft 404(b)(1) Alternatives Analysis in **Appendix F1.0** of the Final EIS/EIR. The Potrero Canyon CAM creation and restoration site and the Mayo Crossing restoration site (*i.e.*, an existing agricultural field) are considered the initial sites to be implemented prior to Corps jurisdictional impacts by development, thereby establishing upfront mitigation credits. As individual Project components are proposed for construction, consistent with the construction notification, quantities of mitigation acreage required to offset permanent impact acreages shall be calculated and compared to pre-mitigation area credits remaining. A project would not proceed unless adequate mitigation capacity is demonstrated. Temporary impact areas shall be mitigated in place in a manner that restores impacted functions and services as described in the mitigation plan noted above. If upfront compensatory mitigation cannot be achieved, a Corps-approved method would be utilized to determine the additional compensatory mitigation to offset the temporal loss of functions and services not included in the 1:1 mitigation ratio for permanent impacts.

These measures satisfy the Corps mitigation requirements for impacts to Corps jurisdictional areas. However, impacts to jurisdictional areas (which include all areas subject to Corps and/or CDFG jurisdiction) are also subject to all of the mitigation requirements for impacts to CDFG jurisdiction, including BIO-2b.

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b. For permanent and temporary impacts to CDFG jurisdiction, consistent with the sub-notification, quantities of mitigation acreage required shall be calculated in accordance with the criteria below:

- If suitable mitigation sites have met success criteria (BIO-6) prior to disturbance at the impact site, the mitigation sites shall replace the permanently impacted habitats in kind at a 1:1 ratio.
- If a suitable mitigation site has not met success criteria prior to disturbance of the impact site, habitat shall be replaced in kind (tributary for tributary impacts, river for river impacts) according to the replacement ratios specified in **Table 4.5-68**, below. These ratios provide compensatory mitigation for temporal losses of riparian function by considering the existing functional condition of the resources to be impacted, as well as time required for different vegetation types to become established and mature.
- If a suitable mitigation site has not been initiated within two years following disturbance of the impact site, but is initiated within five years following such disturbance, the permanently impacted habitats shall be replaced in kind at a replacement ratio equal to the ratio required by **Table 4.5-68**, below, plus 0.5:1. (For example, if mitigation for impacts to high-quality mulefat scrub were initiated three years after disturbance, the required replacement ratio would be 2.5:1.)
- If a suitable mitigation site has not been initiated within five years following disturbance of the impact site, the permanently impacted habitats shall be replaced in kind at a replacement ratio equal to the ratio required by **Table 4.5-68**, below, plus 1:1. (For example, if mitigation for impacts to high-quality mulefat scrub were initiated six years after disturbance, the required replacement ratio would be 3:1.)

Where temporary impacts to CDFG-jurisdictional areas are proposed, the mitigation acreage required shall be determined based upon the duration of the proposed construction disturbance and the type of vegetation to be impacted. As individual Project components are proposed for construction, consistent with the sub-notification process, the quantities of mitigation acreage required for temporary impacts to CDFG jurisdictional areas shall be calculated according to the following criteria:

- If suitable mitigation sites have met success criteria prior to temporary disturbance at the impact site, the mitigation sites shall replace the temporarily impacted habitats in kind at a 1:1 ratio regardless of the duration of the temporary disturbance.
- If the duration of temporary disturbance is less than two years, and no suitable mitigation sites have met success criteria prior to the disturbance, temporarily impacted habitats shall be replaced in kind at a 1:1 ratio, except for southern

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cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality.

- If the duration of temporary disturbance is between two and five years, and no suitable mitigation sites have met success criteria prior to the disturbance, temporarily impacted habitats shall be replaced in kind at a 1.5:1 ratio, except for southern cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality.
- If the duration of temporary disturbance exceeds five years, and no suitable mitigation sites have met success criteria prior to the disturbance, temporarily impacted habitats shall be replaced in kind at a 2:1 ratio, except for southern cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality.

In lieu of the habitat replacement described above and subject to CDFG approval, removal of invasive, exotic plant species from existing CDFG jurisdictional areas, followed by restoration/revegetation, may also be used to offset impacts. If this method is employed, mitigation shall be credited at an acreage equivalent to the percentage of exotic vegetation present at the restoration site. For example, if a 10-acre jurisdictional area is occupied by 10% exotic species, restoration shall be credited for 1 acre of impact. If appropriate, as authorized by CDFG, reduced percentage credits may be applied for invasive removal with passive restoration (weeding and documentation of natural recruitment only).

**Table 4.5-68
CDFG Jurisdictional Permanent Impacts Mitigation Ratios**

Ratios Listed by Vegetation Types & Quality				
<i>Vegetation Community</i>	<i>Veg Code / ID</i>	<i>HIGH Reach Value*</i>	<i>MEDIUM Reach Value**</i>	<i>LOW Reach Value***</i>
		<i>(Mit. Ratio)</i>	<i>(Mit. Ratio)</i>	<i>(Mit. Ratio)</i>
Southern Cottonwood–Willow Riparian Forrest	SCWRF	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

Table 4.5-68
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)
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 this 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.

BIO-3 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 BIO-12). 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 as part of the annual mitigation status report and mitigation accounting form agency review. 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.

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BIO-4 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 4.5-69** for example of recommended plant species for the River Corridor SMA 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 4.5-69
Potential Plant Species for Vegetation Community Restoration in the River
Corridor SMA 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.

BIO-5 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.

BIO-6 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.

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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% 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% 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 Plan² for Waters of the United States.

BIO-7 If at any time prior to Agency 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 in BIO-6. Should a second act of God occur prior to Agency approval of the restoration area, the applicant shall coordinate with the Agencies and develop an alternative restoration strategy(ies) to meet success requirements. This may include restoration elsewhere in the River corridor or tributaries.

BIO-8 Temporary irrigation shall be installed as necessary for plant establishment. Irrigation shall continue as needed until the restoration site becomes self sustaining, regarding survivorship and growth. Irrigation shall be terminated in the fall to provide the least stress to plants.

²For 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.

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- BIO-9 In areas where invasive exotic plant species control is authorized by CDFG in-lieu of other riparian habitat mitigation (BIO-2), removal areas shall be kept free of exotic plant species for five years after initial treatment. In areas where extensive exotic removal occurs, revegetation with native plants or natural recruitment shall be documented.
- BIO-10 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 EIR, 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 or annual mitigation status report submittal. Exotic plant species control will be credited at an acreage equivalent to the percentage of exotic vegetation at the restoration site. By example: a 10-acre site occupied by 10% exotic species will be credited for one acre of mitigation. The exotic weed control location will be documented on the annual mitigation status report and mitigation accounting form. If “in-lieu fees” are paid, it will be documented on the annual mitigation status report and mitigation accounting form, along with a reporting of the status of exotic vegetation treatment.
- BIO-11 To provide an accurate and reliable accounting system for mitigation, the applicant utilizing the RMDP shall file a mitigation accounting form annually with the Corps and CDFG by April 1. This form shall document the amount of vegetation planted during the past year, any “in-lieu fees” paid for exotic invasive plant species control, the status of all mitigation credits to date, and any credits subtracted by projects implemented during the past year. The applicant, utilizing the RMDP, shall keep detailed records and provide a mitigation accounting form to the Corps and CDFG annually for review for the life of the permit, or until all credits have been used up for individual projects, and success criteria have been met. The Corps and CDFG shall provide concurrence within 60 days, including written verification for all restoration and weed removal sites that meet the specified performance criteria. Adequate proof of delivery of applicable reports would be required as well as subsequent notice to the Agencies requesting surety release.
- BIO-12 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 BIO-6. 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

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- 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 BIO-11), 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.
- BIO-13 The mitigation program shall incorporate applicable principles in the interagency Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (60 FR 58605–58614) to the extent feasible and appropriate, particularly the guidance on administration and accounting. Nothing in the section 404 or section 2081 Permit or section 1605 agreement shall preclude the applicant from selling mitigation credits to other parties wishing to use those permits or that agreement for a project and/or maintenance activity included in the permits/agreement.
- BIO-14 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.
- BIO-15 All native riparian trees with a three-inch diameter at breast height (dbh) or greater in temporary construction areas shall be replaced using one- or five-gallon container plants, containered trees, or pole cuttings in the temporary construction areas in the winter following the construction disturbance. The mitigation ratios for temporary impacts to vegetation communities are described in BIO-2. The growth and survival

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- of the replacement trees shall meet the performance standards specified in BIO-6. 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 BIO-6, BIO-7, BIO-11, and BIO-12.
- BIO-16 Vegetation communities temporarily impacted by the proposed Project shall be revegetated as described in BIO-2. 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 six- 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 BIO-1, BIO-2, and BIO-6. Annual monitoring reports on the status of the recovery of temporarily impacted areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (BIO-11 and BIO-12).
- BIO-17 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

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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 elimination 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.

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- 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.

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- 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.

BIO-18 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;

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- 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

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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.

BIO-19 The 1,518-acre Salt Creek area shall be offered for dedication to the public pursuant to Condition 42 of the approved Specific Plan using a “rough step” land dedication approach. Irrevocable offers of dedication will be provided to CDFG for identified impact offsets in accordance with the Plan (BIO-1). The Salt Creek area includes approximately 629 acres of coastal scrub communities within both Ventura and Los Angeles counties. This land dedication shall be managed in conjunction with the 4,205-acre High Country SMA (containing 1,314 acres of coastal scrub communities).

- a. To facilitate wildlife movement between the north side of SR-126 and the Salt Creek area, enhancements will be made to the existing agricultural undercrossing and to the agricultural land at the base of Salt Creek as discussed in BIO-59. A Wildlife Movement Enhancement Plan shall be

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submitted to the Corps and CDFG for approval prior to implementation. The plan shall include at the minimum the following:

- i. A portion of the agricultural field on the north side of SR-126 will be dedicated to wildlife movement. Trees and/or scrubs will be planted in the agricultural field to guide wildlife into the existing undercrossing.
- ii. On the south side of SR-126 two rows of trees/scrubs will be planted to guide wildlife to the Santa Clara River.
- iii. A wildlife corridor will be created through the agricultural fields at the base of Salt Creek Canyon.

BIO-20 Approximately 1,900 acres of coastal scrub shall be preserved on the Project site. The preservation of this vegetation type shall occur on site within the High Country SMA, the Salt Creek area, and the River Corridor SMA within the Specific Plan site. Irrevocable offers of dedication will be provided to CDFG for identified impact offsets in accordance with the Plan (BIO-1) using a “rough step” land dedication approach. Some of this habitat is recovering from wildfire and the expectation is that it will recover without active intervention. The functional values of any burned dedicated land areas shall be evaluated annually until such time that conditions are commensurate with the quality of the impacted habitat being mitigated. In the event that the functional value of this burned habitat has not recovered within five years of the dedication due to invasive species, to fire ecology, erosion, drought, or unforeseen events, then adaptive management pursuant to BIO-21 will be implemented for coastal scrub restoration.

BIO-21 Supplemental restoration of coastal scrub shall be conducted as an adaptive management measure pursuant to BIO-20. Eight areas were identified in the Draft Newhall Ranch Mitigation Feasibility Report in the High Country SMA, Salt Creek area, and River Corridor SMA (Dudek 2007A) for coastal scrub restoration. In the event that coastal scrub restoration is required pursuant to BIO-20, the applicant shall develop a Coastal Scrub Restoration Plan, subject to the approval of CDFG. The plan shall specify, at a minimum, the following: (1) the location of mitigation sites to be selected from suitable mitigation land in the High Country and Salt Creek areas identified in the Feasibility Study; (2) a description of “target” vegetation (native shrubland) to include estimated cover and abundance of native shrubs; (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 (*e.g.*, seed, potted nursery stock, *etc.* collected from within five miles of the restoration site), the quantity and species of seed or potted stock of all plants to be introduced or planted into the

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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% of cover and species richness at reference sites; and (2) the replacement vegetation has persisted at least one summer without irrigation.

Annual monitoring reports will be prepared and submitted to CDFG and will be made available to the public to guide future mitigation planning. 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 vegetation survival or establishment in quantitative terms.

- BIO-22
- a. Newhall Land shall prepare an Oak Resource Management Plan, to be submitted for approval to CDFG and County of Los Angeles, and implemented upon approval. The Plan shall identify areas suitable for oak woodland enhancement and creation. The Plan shall distinguish between oaks to be planted in compliance with CLAOTO (BIO-22b) and the additional measures required by this EIS/EIR (BIO-2 for woodlands in jurisdictional streambeds; and BIO-22c and BIO-22d for upland areas).

The Oak Resource Management Plan shall include measures to create or enhance woodlands as follows: (1) locations and acreages of mitigation sites where woodland creation or enhancement will occur; (2) a description of proposed cover and number of native trees, shrubs, and grasses per acre to be established. This description shall be based on comparable intact woodlands in the area of impact or elsewhere within the RMDP planning area, consistent with conditions of the proposed mitigation site; (3) site preparation measures to include (as appropriate) topsoil treatment, soil decompaction, erosion control, weed grow/kill cycle, or as otherwise approved by the agencies; (4) methods for the removal of non-native plants (*e.g.*, mowing, weeding, raking, herbicide application, or burning); (5) a plant palette listing all species, including sizes, planting densities, or seeding rates, to be based on target vegetation; (6) the

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source of all plant propagules (*e.g.*, seed, potted nursery stock) and the quantity and species of seed or potted stock of all plants to be introduced or planted into the mitigation areas; (7) temporary irrigation, protection from herbivores, fertilizer, weeding, *etc.*; (8) 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 five years total and no less than two years after removal of irrigation (if any); (9) where sites are near trails or other access points, measures such as fencing, signage, or security patrols to exclude unauthorized entry into the mitigation areas shall be implemented as needed; (10) tree protection standards to be implemented for individual trees or woodlands adjacent to development activity; (11) success criteria as stated in BIO-22b and BIO-22d; and (12) contingency measures, such as replanting, erosion control, irrigation system repair, or understory re-seeding, to be implemented if habitat improvement/restoration efforts do not meet the success criteria stated in the plan.

- b. To meet the minimum mitigation criteria set forth in CLAOTO, Newhall Land will replace impacted oaks (measuring 8 inches in diameter, or greater, or with a combined diameter of 12 inches for multi-stem oaks) at a ratio of 2:1. Additionally, oaks meeting the criteria for classification as a Heritage Tree (defined by CLAOTO as “any oak tree measuring 36 inches or more in diameter”) will be replaced at a ratio of 10:1.

Whether they are planted in dedicated open space areas or developed areas, replacement oak trees planted in conformance with CLAOTO shall adhere to the following standards:

1. Replacement oak trees shall be exclusively indigenous species, shall be at least a 15-gallon size specimen, and measure at least one inch in diameter one foot above the base, unless otherwise approved by the County Forester.
2. Replacement trees shall be properly cared for and maintained for a period of two years and replaced by Newhall Land if mortality occurs within that period.
3. Replacement planting shall be conducted in phases as impacts occur. Alternatively, Newhall Land may choose to plant replacement trees in open space areas prior to realization of Project-related impacts (pre-mitigation). Any pre-mitigation shall adhere to the standards outlined herein.

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4. Following completion of the two-year maintenance period, the County Forester shall provide final authorization that CLAOTO standards have been met.
- c. In addition to the CLAOTO requirements (BIO-22b, above), this EIS/EIR requires replacement of oak trees at the ratios in the table below for trees lost or impacted in uplands. These trees are in addition to the CLAOTO requirement described above. These additional trees may also be incorporated into woodland habitat enhancement or creation, as described above.

Additional replacement ratios are provided in **Table 4.5-70**.

Table 4.5-70
Additional BIO-22c Oak Tree Replacement Ratios

Trunk Diameter*	Mitigation Ratio
8 – 35	0.5:1
36 +	2.5:1

* Trunk diameter measured at 4.5 feet above mean natural grade. Mitigation required for single-stem oaks with a minimum 8-inch diameter and multi-stem oaks with a combined diameter of 12 inches.

- d. Newhall will mitigate lost oak woodlands occurring on upland sites (i.e., outside CDFG/Corps jurisdictional stream channels) by creating or enhancing oak woodlands in the Salt Creek area and High Country SMA. At minimum, Newhall Land will mitigate woodland habitat at a 1:1 ratio through creation of new oak woodlands. As an alternative, Newhall Land may choose to enhance, improve, and manage existing degraded woodland areas at a minimum 2:1 ratio for lost woodland acreage.

For woodland enhancement or replacement, dominant species (coast live oak or valley oak) and planting densities will be based on mitigation site suitability. All plant propagules, including acorns or tree cuttings and all seed or potted nursery stock of oaks or other species, shall be collected within a five-mile radius and within 1,000 feet elevation of the restoration site.

The woodland creation or enhancement sites shall be monitored for oak tree survival and vigor and other habitat values, including species diversity and wildlife use. The replacement or enhancement sites will be considered “complete” upon meeting all of the following success criteria, or as otherwise approved by CDFG. Any replacement oak trees planted in woodlands for conformance with CLAOTO will also be subject to CLAOTO performance criteria (BIO-22b).

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1. Regardless of the date of initial woodland creation or enhancement, each site must have been without active manipulation by irrigation, planting, or re-seeding for a minimum of three years prior to evaluation for successful completion.
2. The percent cover and species richness of restored or enhanced native vegetation shall be evaluated based on target vegetation described in the woodland creation or enhancement plan.
3. Densities (numbers/acre) of surviving, healthy oak shall be within 5% of the plan target density. Cover and species richness of other native shrubs shall reach 50% of the cover and species richness described for the “target” woodland. Optimal woodland densities and acorn planting quantities, by oak woodland type, are presented in **Table 4.5-71**.

Table 4.5-71
Optimal Woodland Densities and Acorn Planting Quantities,
by Oak Woodland Type

Woodland Type	Average Existing Woodland Density (trees per acre)	Target Density for Newhall Land (trees per acre)
Coast live oak woodland	22	50
Mixed oak woodland	19	40
Valley oak woodland	16	25

4. Non-native grass cover shall not exceed the “target” woodland non-native grass cover, and other non-native species shall not exceed 10% cover at any time. 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 at the time that project success is determined.

BIO-23 A final Spineflower Conservation Plan (SCP) shall be adopted and implemented after approval by CDFG, including the permanent dedication of preserves (see draft in Appendix 1.0). 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.

BIO-24 The spineflower preserves shall be managed by Newhall Land and their preserve manager(s) and/or natural lands management organization(s) (NLMO). Newhall Land shall submit a statement of qualifications for their proposed preserve manager(s)/NLMO(s) for approval by CDFG. Newhall Land will fund in full all

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- implementation of spineflower preserve management as described in the SCP and all mitigation measures listed in this document.
- BIO-25 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% 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.
- BIO-26 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 Newhall Land 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% maximum threshold (see BIO-25). 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 LACFD 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.
- BIO-27 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

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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.

BIO-28 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.

BIO-29 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) shall include minimum BMPs. 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;

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- 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 BIO-31 for temporary fencing and BIO-36 for permanent fencing);
- Provide location and details for any dust control fencing along preserve boundaries (per BIO-32); and
- Provide location and details for any stormwater run-on controls/BMPs coming from development area to spineflower preserve (per BIO-38 and BIO-39).

BIO-30 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.

BIO-31 Spineflower preserves shall be protected prior to clearing and during construction with temporary construction fencing as described in BIO-27. 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 U.V. stabilized polyethylene construction “snow” fencing, attached to metal t-posts that extend at least four 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

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- 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.
- BIO-32 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 six-foot high chain link fence with green fabric up to a height of five feet) shall be installed to protect spineflower locations.
- BIO-33 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 Newhall Land 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.
- BIO-34 Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and FMZ areas within 200 feet of a spineflower preserve shall be reviewed and approved within 30 days by the spineflower preserve manager

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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>).

- BIO-35 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, Newhall Land, and CDFG.
- BIO-36 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 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 four feet above grade and include wood-doweled split rail fencing, exterior grade heavy-duty vinyl three-railed fencing, three-strand non-barbed wire, or similar. Fencing installed adjacent to native vegetation communities and natural open space areas will allow for the passage of animals.

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- BIO-37 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 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.
- BIO-38 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.
- BIO-39 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 Mitigation Measure SP-4.6-69). Storm drains and permanent structural BMPs shall be designed by a licensed civil engineer. Requirements of BIO-29 and BIO-38, 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.
- BIO-40 The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan (Dudek 2007I) 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

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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, spineflower preserves, or River Corridor SMA) 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 and Salt Creek area identified in the Draft Newhall Ranch Mitigation Feasibility Study (Dudek 2007A); (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% 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

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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. Newhall Land 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 and Salt Creek area, and two acres occur within the River Corridor SMA 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.

- BIO-41 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 four inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers

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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.

- BIO-42 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 five 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.
- BIO-43 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.
- BIO-44 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 1/8-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.

BIO-45

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 BIO-44 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

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greater than four 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.

- BIO-46 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.
- BIO-47 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.
- BIO-48 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.
- BIO-49 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.
- BIO-50 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

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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.

- BIO-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.
- BIO-52 Prior to grading and construction 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

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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;

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- Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented;
- To reduce the potential for the spread of exotic invasive invertebrates (e.g. New Zealand mud snails) and weeds (including weed seeds) during Project clearing 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 exotic invasive invertebrate (e.g. 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 exotic invasive invertebrates (e.g. 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 exotic invasive invertebrates (e.g. 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; and
- Submit to CDFG an immediate report (within 72 hours) of any conflicts or errors resulting in impacts to special-status biological resources.

BIO-53 Prior to the issuance of a grading permit for 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.

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- (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 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 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 adults, 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 the 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.

BIO-54 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

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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.

- BIO-55 a. As a supplement to BIO-1 through BIO-16, additional habitat mitigation through replacement or enhancement of nesting/foraging habitat for least Bell's vireo will be provided for certain key habitat zones at higher ratios (identified as "key population areas" in **Figure 4.5-86**, Alternative 2 Impacts to Least Bell's Vireo Habitat). Southern willow scrub, southern cottonwood–willow riparian, arrow weed scrub, mulefat scrub, and Mexican elderberry scrub and woodland that provide nesting/foraging habitat for least Bell's vireo in "key population areas" shall be replaced or enhanced. All permanent loss to nesting/foraging habitat in key population areas shall be mitigated at a 5:1 ratio unless otherwise authorized by CDFG or USFWS. Temporary habitat loss of foraging/nesting habitat in key population areas shall be mitigated at a 2:1 ratio. The requirements for replacing habitat by either creating new habitat or removing exotic species from existing habitat shall follow the procedures outlined in BIO-1 through BIO-16. To replace the lost functions of habitat located adjacent to the Santa Clara River due to noise impacts, all nesting/foraging habitat within the 60 dBA sound

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contour (associated with development site roadway improvements) shall be considered degraded. Nesting/foraging habitat within this area shall be mitigated at a ratio of 2:1.

b. The loss of documented occupied nesting habitat for coastal California gnatcatcher shall be mitigated. If the coastal California gnatcatcher is identified nesting on site, the applicant will acquire or preserve nesting coastal California gnatcatcher habitat at a 3:1 ratio for impacts to documented occupied habitat, or by the ratio specified in BIO-2, whichever is greater. Mitigation acquisition shall occur at an agreed-upon location as approved by the USFWS upon consultation. The applicant shall enter into a binding legal agreement regarding the preservation of occupied habitat describing the terms of the acquisition, enhancement, and management of those lands.

BIO-56 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. Pre-construction surveys shall include nighttime surveys to identify active rookery sites. The surveys shall continue on a weekly basis, with the last survey being conducted no more than seven 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 seven 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, 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.

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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 dBA hourly Leq 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 dBA Leq 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 dBA Leq 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.

BIO-57 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

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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.

BIO-58 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

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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.

- BIO-59 Road undercrossings will be built in accordance with accepted design criteria to allow the passage of mountain lions and mule deer. The applicant shall prepare a Wildlife Movement Corridor Plan that specifically addresses wildlife movement corridors at San Martinez Grande, Chiquito Canyon, and Castaic Creek, which shall be monitored for one year prior to construction of the SR-126 widenings. The Plan shall address current movement that is occurring, the methods that will be implemented to provide for passage, including lighting, fencing, vegetation planting, the installation of bubblers to encourage wildlife usage, and the size of the passage. The applicant shall install motion cameras at these locations in consultation with CDFG and monitor these passages for a period of two years subsequent to constructing improvements. A report of the wildlife documented to utilize these crossings shall be provided to CDFG annually. In addition, the Salt Creek crossing west of the Project area will be enhanced prior to initiation of construction in Long Canyon (southern portion of the Homestead Village). This crossing will be monitored for one year at the initiation of RMDP development, for two years at the time the crossing is enhanced, and then for three years after Project build-out. Prior to the construction of adjacent developments, signs will be placed along the roads indicating potential wildlife crossings where mountain lions and mule deer are likely to cross.
- BIO-60 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

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within 2000 feet and inform CDFG with 24 hours. No construction activities shall occur in the 2000 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.

- BIO-61 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 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

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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.

- BIO-62 At least 1,900 acres of Open Area within the Specific Plan area shall be offered for dedication to an NLMO in fee and/or by conservation easement. These 1,900 acres of the Open Area will be left as natural vegetation. Dedication of open areas lands shall be reported annually to CDFG.
- BIO-63 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, and 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, 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, High Country SMA, 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.
- BIO-64 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

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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 CC&Rs for each tract map shall include language that prohibits the use of anticoagulant rodenticides in the Project site.

- BIO-65 Pre-construction surveys for San Emigdio blue butterfly shall occur in all areas containing host plants in sufficient density to support this species. A qualified Lepidoptera biologist shall conduct focused surveys at a time of year and during weather conditions when the detection of eggs, larvae, or adults is possible. All occupied habitat shall be mapped and the locations provided to CDFG. Should the removal of quail brush or other documented host plants from occupied San Emigdio blue butterfly habitat in Potrero Canyon or other areas be required, the plants shall be removed when eggs and larvae are not present (*i.e.*, mid-September to March). Removal of quail brush plants from the documented habitat in Potrero Canyon may only be conducted from April through early September if it is determined by a qualified biologist that eggs and/or larvae are not present on the plants to be removed.
- BIO-66 The removal of quail brush or other documented host plants from any occupied San Emigdio blue butterfly habitat in Potrero Canyon or other areas shall be replaced at a minimum of a 1.5:1 ratio. The replacement plants shall be planted contiguous to the existing quail brush plants associated with the San Emigdio blue butterfly habitat. The success of the replanting shall be monitored for survival and vigor consistent with survivorship requirements of Mitigation Measure BIO-6 and BIO-7.
- BIO-67 Prior to any construction activities occurring within 200 feet of any occupied San Emigdio blue butterfly habitat in Potrero Canyon or other areas, the boundaries of preserved areas of the habitat shall be clearly marked with flagging. The flagging would serve to identify the boundaries of the habitat to construction personnel and to prevent the inadvertent construction-related loss of quail brush or other host plants associated with the habitat. Construction personnel working in the area shall be informed that the removal of or damage to any flagged quail brush or other host plants located outside the disturbance footprint is prohibited.

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- BIO-68 Any common or special-status species bat day roost sites found by a qualified biologist during pre-construction surveys conducted per BIO-61, 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.
- BIO-69 The Newhall Ranch JPA will have overall responsibility for recreation within and conservation of the High Country. The Newhall Ranch JPA and NLMO shall develop and implement a conservation education and citizen awareness program for the High Country SMA informing the public of the special-status resources present within the High Country SMA and providing information on common threats posed by the presence of people and pets to those resources. The NLMO shall install trailhead and trail signage indicating the High Country SMA is a biological conservation area and advising that people and their animals must stay on existing trails at all times and that violators may be cited. The NLMO shall provide quarterly maintenance patrols to remove litter and monitor trail expansion and fire hazards within the High Country SMA, funded by the JPA.
- BIO-70 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 (BIO-71).
 - 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.

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- 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.
- 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.

BIO-71 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

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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 five feet) shall be installed to protect special-status species locations. See BIO-32 for dust control requirements related to spineflower preserves.

- BIO-72 Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and 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, High Country SMA, 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 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).
- BIO-73 Permanent fencing shall be installed along all River Corridor SMA 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.
- BIO-74 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,

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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.

- a. As described in BIO-51, 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.

BIO-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 BIO-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.

BIO-76 For any individual project, or any phase of an individual project, to be located where undescribed everlasting plants may occur (*i.e.*, the sites identified in this EIS/EIR and any new sites discovered by preconstruction surveys, per BIO-75, or other future field surveys), Newhall Land 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

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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% 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.

BIO-77 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 Newhall Land prior to disturbance within 100 feet of flowing water in Middle Canyon Creek and/or 200 feet of Middle Canyon Spring. The plan shall include the following elements: (1) collection of data on existing site conditions; (2) construction monitoring program and a post-development monitoring program; (3) threshold parameters that activate adaptive management measures across a series of potential future scenarios, including water quality and water quantity scenarios, including the potential use of infiltration wells, if these should become necessary to ensure water quantity; (4) measures to exclude unauthorized entry into the spring; and (5) contingency measures in the event that management efforts are not successful. Plan elements are further described below:

Pre-development data collection:

Upon approval of the proposed Project, data collection for Middle Canyon Spring and its biotic community will be initiated. Site assessments will be completed by

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biologists and, as needed, with surveyors, engineers, geologists, and hydrogeologists to collect the following data, subject to limitations on disturbances: (1) inventory of plant species within and adjacent to the spring; (2) percent native and non-native plant cover and percent bare ground within and adjacent to the spring using the relevé method, a visual estimation technique to classify and map large vegetation areas in a limited amount of time (see below); (3) structural description of vegetation communities within each relevé plot; (4) GPS mapping of all trees within core spring area and adjacent 100 feet; (5) GPS mapping of special-status sunflower; (6) census special-status sunflower stem numbers; (7) description of any disturbances to the spring area; (8) establishment of permanent photo points; (9) photo documentation of seasonal changes in the spring; (10) survey and mapping of hydrologic and topographic features in the area adjacent to the spring; (11) population data on the *Pyrgulopsis castaicensis* **n. sp.**, including distribution, abundance, density, size classes and seasonal activity, and microhabitat descriptions; (12) invertebrates survey; (13) amphibian survey; (14) characterization of algal and microbial components; (15) survey of spring inlet and outlets for comparison to piezometer water elevations from monitoring points P-1MS, P-2MS, and P-8B; (16) flow rates of spring outlets at a frequency to record diurnal fluctuations; (17) approximate evapotranspiration rates of the vegetation community; (18) piezometer water elevation data from P-1MS, P-2MS, and P-8B collected at a frequency suitable to determine seasonal variations in groundwater elevations; (19) continuously recorded surface water temperature and depth profile at a spring monitoring location and piezometers P-1MS and P-2MS; (20) water quality/chemistry data in the spring and the three nearby piezometers (P-1MS, P-2MS, and P-8B) (dissolved oxygen [DO, spring only], salinity, pH and alkalinity, nitrates, sulfates, relevant cations and anions [bicarbonate, calcium, chloride, magnesium, nitrate as NO₃, potassium, sodium], total dissolved solids [TDS], turbidity [spring only], and suspended solids [spring only]); (21) soil samples along the margin of the spring to determine soil classification types; and (22) as available, compilation of a record of historical photographs and aerial photographs of the spring and adjacent areas.

Vegetation data will be collected using a non-invasive monitoring method and analyzed in accordance with the California Native Plant Society (CNPS) *Relevé Protocol* (2004), which provides for a visual assessment of vegetation communities instead of the more intrusive point-intercept transect methods. This will ensure that collection of vegetation data will limit damage to the spring vegetation and limit the establishment of trails during monitoring visits.

Additionally, for two years following approval of the proposed Project, the applicant, in consultation with CDFG, shall provide for the collection of seed

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from the undescribed sunflower species by a qualified research institution for long-term seed bank preservation or other conservation purposes. Further, to facilitate additional research of the species, applicant shall allow CDFG access to the spring complex for future conservation purposes.

Prior to establishing the post-development long-term thresholds discussed below, hydrologic and biologic data will be evaluated, and any increase or decrease greater than 10% in monitoring parameters 2, 11 through 16, and 18 through 20, described above, will serve as an interim threshold and will trigger adaptive management measures, such as those described below. Should these thresholds be triggered, CDFG will be notified within 24 hours to determine what actions, if necessary, will be implemented. Biological data collection will contribute to the establishment of habitat criteria necessary for sustaining the *Pyrgulopsis castaicensis* **n. sp.** and the undescribed sunflower.

Construction monitoring program and data collection

Data collection described above will continue during construction near the spring complex (Commerce Center Drive Bridge and development of Middle Canyon (Mission Village planning area)). Monitors will be on site daily when work is conducted within 100 feet of flowing water in Middle Canyon Creek and/or 200 feet of the spring complex, and weekly during mass grading of Middle Canyon, to observe and report on construction activities. Monitors will ensure that appropriate avoidance and minimization measures are implemented, such as the installation and maintenance of perimeter construction fencing and storm water controls, silt fences, and sand bags. During any period where dewatering occurs within 100 feet of flowing water in Middle Canyon Creek and/or 200 feet of the spring complex, biological and hydrologic parameters will be monitored daily. No dewatering activities shall occur in the spring complex. Discharge of any dewatering waters, nuisance irrigation flows, water quality basin, subdrain, backdrain, or toe drain flows shall be directed away from the spring.

Post-development data collection

Biological and hydrologic monitoring will continue post-development. For the first two years after build-out of Middle Canyon (Mission Village), post-construction monitoring will be as frequent as during the pre-construction period. After the two-year period, data collected and the frequency of monitoring may be adjusted, in consultation with CDFG. The post-development monitoring program will continue to collect data on trends and changes in the populations of the *Pyrgulopsis castaicensis* **n. sp.** and undescribed sunflower and document any shift in spring habitat composition or any changes in conditions that would potentially impact the spring system, as detailed above.

Analysis and comparison of collected data will establish long-term thresholds. These thresholds will serve to trigger adaptive management measures during the post-development period.

Adaptive management

As dictated by the thresholds discussed above, the following measures may be implemented after consultation with CDFG in the event a threshold is exceeded. These actions may include, but are not limited to: (1) the addition of supplemental water via an existing deep Saugus well in Middle Canyon; (2) removal of infiltration water by diverting flow from upstream water quality features; (3) implementing invasive species control; and (4) implementing additional controls to prevent unauthorized access to the spring complex.

Monitoring report

Annual monitoring reports will be prepared to summarize the status of the *Pyrgulopsis castaicensis* n. sp. and undescribed sunflower and hydrology within Middle Canyon Spring. These reports will be used to evaluate the significance of impacts and the efficacy of mitigation measures. Reports will include results of biological surveys, flow data, groundwater modeling results, water quality data, mapping of the spring features and biota, photo-documentation from permanent photo points, analysis of field and lab data, conclusions based on ongoing monitoring efforts, and recommendations for future management actions. Annual monitoring reports will be submitted to CDFG and Corps.

BIO-78 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 RMDP development will require initiation of trapping surveys to determine whether re-establishment of the trapping program is necessary.

BIO-79 The status of the Potrero Canyon San Emigdio blue butterfly colony shall be monitored by a qualified biologist for a period of five years after Potrero Canyon Road

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construction completion/operation commencement to evaluate whether the operation of the road may be contributing to a population decline in the colony. Should it be determined that a population decline is occurring, habitat creation for the San Emigdio blue butterfly shall be implemented in suitable locations contiguous to the habitat but away from the road. A habitat creation plan will be prepared that details the location and methods for creating habitat, that specifies success criteria, and that describes measures that will be implemented in the event that the habitat creation does not stabilize the San Emigdio blue butterfly population.

- BIO-80 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. After five years, bi-annual monitoring shall occur in perpetuity to determine if additional control is necessary. The Project applicant will fund an endowment, approved by CDFG, for monitoring in perpetuity. Monitoring will be conducted within sentinel locations along the River Corridor SMA 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.
- BIO-81 The installation of new, or relocation of existing, utility poles and phone and cell towers shall be coordinated with CDFG where located in the High Country SMA and Salt Creek area. The applicant or SCE shall install utility poles, phone, and cell towers in conformance with APLIC standards for collision-reducing techniques as outlined in Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006).
- BIO-82 a. All surfaces on new antennae and phone/utility towers shall be designed and operated with anti-perching devices in conformance with APLIC standards to deter California condors and other raptors from perching. During construction the area shall be kept clean of debris, such as cable, trash, and construction materials. The applicant shall collect all microtrash and litter (anything shiny, such as broken glass), vehicle fluids, and food waste from the Project area on a daily basis. Workers will be trained on the issue of microtrash: what constitutes

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microtrash, its potential effects on California condors, and how to avoid the deposition of microtrash.

- b. The applicant shall retain a qualified biologist with knowledge of California condors to monitor construction activities within the Project area. The resumes of the proposed biologist(s) will be provided to CDFG for concurrence. This biologist(s) will be referred to as the authorized biologist hereafter. During clearing and grubbing of construction areas, the qualified biologist shall be present at all times. During mass grading, construction sites shall be monitored on a daily basis. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. If condors are observed landing in the Project area, the applicant shall avoid further construction within 500 feet of the sighting until the animals have left the area, or as otherwise authorized by CDFG and USFWS. All condor sightings in the Project area will be reported to CDFG and USFWS within 24 hours of the sighting. Should condors be found roosting within 0.5 mile of the construction area, no construction activity shall occur between one hour before sunset to one hour after sunrise, or until the condors leave the area, or as otherwise directed by USFWS. Should condors be found nesting within 1.5 miles of the construction area, no construction activity will occur until further authorization occurs from CDFG and USFWS.
 - c. To further protect California condor potentially foraging in the Project area over the long term from negative interactions with humans and/or artificial structures, the applicant or the JPA or the NLMO shall remove dead cattle that are found or reported within 1,000 feet of a residential or commercial development boundary. Dead cattle shall be relocated to a predetermined location within the High Country SMA or Salt Creek area. The locations where carcasses shall be placed shall be a minimum of 1,000 feet from a development area boundary. Appropriate locations for transfer of carcasses include open grasslands and oak/grassland areas where condors can readily detect carcasses and easily land and take off without encountering physical obstacles such as powerlines and other utility structures. The proposed locations would be selected and approved by the CDFG and USFWS. Pursuant to this measure, a telephone number for reporting dead cattle shall be provided and actively maintained. Any cattle carcasses transferred to the relocation areas shall be reported to the USFWS Condor group.
- BIO-83 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

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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.

BIO-84 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.

BIO-85 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 the following.

- (1) Providing “dry zones” between urban development and spineflower populations, where typical soil moistures are maintained at levels below about 10% soil saturation, which will deter the establishment of nesting colonies of ants; and providing dry zone buffers of sufficient width to reduce the potential for Argentine ant activity within core habitat areas.
- (2) Where feasible, and/or appropriate, dry areas such as parking lots and roadways shall be built next to preserve boundaries. These will be designed to slope away from the preserve to avoid runoff entering the preserve.
- (3) Pedestrian pathways placed next to preserves shall consist of decomposed granite or other gravel to minimize the holding of moisture, thereby preventing establishment of suitable habitat for Argentine ant colonies.
- (4) Ensuring that landscape container plants installed within 200 feet of spineflower preserves are ant free prior to installation, to reduce the chance of colonies establishing in areas close to the preserves.
- (5) Maintaining natural hydrological conditions in the spineflower preserves, including the buffers, through project design features for roadways, French drains, irrigation systems, underground utilities, drainage pipes and fencing,

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storm drains, and any other BMP measures that apply to surface water entering the preserve areas.

- (64) Using drought-resistant plants in FMZs and minimizing irrigation to the extent feasible.

BIO-86 Requires 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.

BIO-87 Upon initiating 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 in perpetuity. The Project applicant will fund an endowment, approved by CDFG, for monitoring in perpetuity.

BIO-88 Any southern California black walnut and mainland cherry trees or shrubs outside riparian areas greater than one 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 one inch in diameter one foot above the base.

BIO-89 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-

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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.

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