

## **Appendix 5.2**

---

### Biological Resources



## **Appendix 5.2a**

---

Entrada South Bio Report



---

# Supplemental Biological Resources Technical Report

# Entrada South Project

---

**AUGUST 2024**

*Prepared for:*

**THE NEWHALL LAND AND FARMING COMPANY**

25124 Springfield Court, Suite 300

Valencia, California 91355

Contact: Alex Herrell

*Prepared by:*

**DUDEK**

605 Third Street

Encinitas, California 92024

Contact: Megan Enright





---

# Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	iii
1 Introduction .....	1
2 Site Description .....	3
2.1 General Project Site Characteristics .....	3
2.2 Geologic and Soil Characteristics .....	3
2.3 Drainage Patterns .....	4
3 Description of Modified Project.....	5
3.1 Disturbance Footprint .....	5
3.2 Land Uses .....	6
4 Methods and Survey Limitations.....	7
4.1 Literature Review.....	7
4.2 Field Reconnaissance Methods .....	7
5 Results of Surveys.....	15
5.1 Botany – Vegetation Communities and Floral Diversity.....	15
5.2 Zoology – Wildlife Diversity .....	17
5.3 Special-Status Biological Resources .....	18
5.3.1 Special-Status Plant Species .....	18
5.3.2 Special-Status Wildlife Species.....	23
5.3.3 Wildlife Corridors and Habitat Linkages .....	37
6 Effects of Modified Project .....	39
6.1 Impacts to Vegetation Communities, Land Covers, and General Wildlife .....	39
6.1.1 Vegetation Communities and Land Covers .....	39
6.1.2 General Wildlife.....	46
6.2 Impacts to Special-Status Species .....	49
6.2.1 Special-Status Plant Species .....	49
6.2.2 Special-Status Wildlife Species.....	59
6.3 Impacts to Wildlife Corridors and Habitat Linkages .....	86
7 Cumulative Impacts .....	89
7.1 Methods of Analysis .....	89
7.2 Crotch’s Bumble Bee.....	93
7.3 California Glossy Snake .....	95
8 Thresholds of Significance .....	97

9	Acknowledgments .....	101
10	Documents Cited.....	103

## TABLES

1	Summary of Additional Biological Surveys Conducted on the Entrada South Project Site .....	9
2	Vegetation Communities and Land Cover Types on Entrada South Project Site .....	15
3	Vegetation Community Impacts – Modified Project Compared to 2017 Approved Project .....	40
4	Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in the Study Area .....	90

## FIGURES

1	Project Location .....	117
2	Modified Project .....	119
3	2017 Approved Project.....	121
4	Project Comparison.....	123
5	Topography.....	125
6	Soils .....	127
7	Drainage Patterns .....	129
8a	2017 Approved Project Vegetation Communities and Land Cover Types.....	131
8b	Modified Project Vegetation Communities and Land Cover Types .....	133
9	Special-Status Plants.....	135
10a	2017 Approved Project Special-Status Wildlife Observations On Site and Within 0.5 Mile of the Entrada South Project Site prior to 2010.....	137
10b	Special-Status Wildlife Observations On Site and Within 0.5 Mile of the Entrada South Project Site Recorded since 2010 .....	139
11	California Condor .....	141
12	South Coast Wildlands Open Space Connectivity and Linkage.....	143
13	RMDP/SCP Existing Regional Wildlife Connectivity Corridors .....	145
14	Oak Tree Impacts .....	147

## APPENDICES

A	Plant Compendium
B	Wildlife Compendium
C	Plant and Wildlife Species Potential to Occur
D	Project Mitigation Measures and Project Design Features

---

# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
BMP	best management practice
CCA	Candidate Conservation Agreement
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Commission
CLAOTO	County of Los Angeles Oak Tree Ordinance
CRPR	California Rare Plant Rank
dbh	diameter at breast height
EIR	environmental impact report
EIS	environmental impact statement
ESA	federal Endangered Species Act
ESU	evolutionarily significant unit
GAP	Gap Analysis Program
HUC	hydrologic unit code
I	Interstate
IPM	Integrated Pest Management
ITP	Incidental Take Permit
LEDPA	least environmentally damaging practicable alternative
NPDES	National Pollutant Discharge Elimination System
NRMP	Natural River Management Plan
ORMP	Oak Resources Management Plan
RMDP	Resource Management and Development Plan
SCP	Spineflower Conservation Plan
SMA	Special Management Area
SOAR	Save Open Space and Agricultural Resources
SR	State Route
USCRW	Upper Santa Clara River Watershed
USFWS	U.S. Fish and Wildlife Service
VCC	Valencia Commerce Center

INTENTIONALLY LEFT BLANK

---

# 1 Introduction

In the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP) Joint Environmental Impact Statement and Environmental Impact Report (2010 EIS/EIR) (Corps and CDFG 2010), the California Department of Fish and Wildlife (CDFW) conducted environmental review of development facilitated by the RMDP/SCP within the Entrada South planning area (Figure 1, Project Location). The 2010 EIS/EIR contained the best available biological information, including vegetation mapping and special-status plant and wildlife surveys current through 2009. In June 2017, after publishing additional environmental analysis of certain impacts addressed in the 2010 EIS/EIR (2017 Final Additional Environmental Analysis), CDFW certified the EIR for the RMDP/SCP (SCH No. 2000011025; “State-Certified EIR”) and adopted findings affirming its approval of the RMDP/SCP and related CDFW permits. This Supplemental Biological Technical Report (“Report”) refers to the Entrada South development analyzed in the State-Certified EIR as the “2017 Approved Project.”

Subsequent to CDFW’s approval, The Newhall Land and Farming Company (“Newhall”), a wholly owned subsidiary of FivePoint Holdings, LLC, proposed minor changes and refinements to the 2017 Approved Project, referred to in this Report as the “Modified Project.” The proposed refinements reduce the permanent impacts of the Modified Project compared to the 2017 Approved Project, particularly in portions of Unnamed Canyon 2 (Figure 2, Modified Project). This Report has been prepared to support the preparation of a supplemental environmental review document that will evaluate the environmental effects of the incremental changes associated with the Modified Project, as well as any relevant new information or changes in circumstances not reflected in the State-Certified EIR.

This Report incorporates, and takes into account, the analysis and mitigation measures related to biological resources in the State-Certified EIR. The State-Certified EIR provided a comprehensive analysis of potential impacts to biological resources, including effects on land cover types and natural vegetation communities, common wildlife species, special status species, and wildlife movement, and provided mitigation measures to mitigate those effects to a less than significant level. To address the long-term nature of the RMDP/SCP and related permits, and the potential for site conditions and resources to exhibit natural variability over time, the State-Certified EIR conservatively assumed that sensitive resources documented to occur on site, or with known potential to occur on site, could be present during authorized development activities.

The State-Certified EIR included mitigation measures requiring assessments for those resources prior to development activities (e.g., pre-construction surveys), avoidance and minimization measures should the resources be present (e.g., construction buffers), and/or compensatory mitigation requirements where applicable. Thus, minor changes in the presence of habitat, plants, or wildlife species documented in this Report that are consistent with the information and/or assumptions contained in the State-Certified EIR are presumed to be adequately addressed by the existing mitigation measures found in the State-Certified EIR. Therefore, these changes are not expected to require changes to the analysis in that document or to result in new or substantially more severe significant impacts to biological resources.

INTENTIONALLY LEFT BLANK

---

## 2 Site Description

### 2.1 General Project Site Characteristics

Both the 2017 Approved Project and the Modified Project involve development within the Entrada South tract map and a small area adjacent to the southwest corner of the tract map where road-related grading and infrastructure associated with the project may occur outside the tract map boundary (Figure 3, 2017 Approved Project). The Modified Project also includes an additional 0.6-acre area immediately south of the Entrada South tract map boundary where a storm drain connection would be located to facilitate avoidance of portions of Unnamed Canyon 2, which was not included in the 2017 Approved Project (Figure 2, Modified Project). For purposes of describing general site characteristics, the 0.6-acre difference is not material, and this Report generically refers to the “Entrada South Project Site” to describe the area comprising both the 2017 Approved Project and the Modified Project. Figure 4, Project Comparison, displays the differences between the two projects.

The Entrada South Project Site supports direct disturbance from past and ongoing oil and natural gas operations, including associated dirt road and oil pad ground clearance, and soil scraping disturbance adjacent to the Six Flags Magic Mountain theme park for fire suppression. Additionally, Southern California Edison and Southern California Gas Company have transmission corridors within easements along the southern portion of the Entrada South Project Site. The easements/transmission lines and access roads are actively maintained. There is significant development influence within the vicinity of the Entrada South Project Site, including Interstate (I) 5, State Route (SR) 126, and secondary road infrastructure to the south, east, and north; medium-density residential housing and an integrated golf course to the south and southeast; and major commercial land use adjacent to the north and east, including the Six Flags Magic Mountain theme park. The Entrada South Project Site is dominated by several north/south-trending ridges. Site elevations range from approximately 1,100 feet above mean sea level in the eastern portion to approximately 1,450 feet above mean sea level on the ridges in the southwestern portion of the Entrada South Project Site (Figure 5, Topography).

### 2.2 Geologic and Soil Characteristics

Geologically, the Entrada South Project Site is located within the Transverse Range geomorphic province of Southern California in the eastern portion of the Ventura depositional basin. This basin “was produced by tectonic downwarping in the geologic past to produce a large-scale synclinal structure in which a thick sequence of Cenozoic sediments has accumulated. These sediments have been lithified into a sequence of sedimentary rock that has subsequently been uplifted, tilted, and tectonically deformed” (Allan E. Seward 2002, 2004). They are cut by segments of the Del Valle and Castaic Creek faults. Bedrock formations found in the area include the Modelo, Towsley, Pico, Saugus, and Pacoima formations, as well as Quaternary Terrace deposits. Surficial deposits include Quaternary alluvium, slopewash, soil, and artificial fill.

Soils on the Project Site include Castaic–Balcom silty clay loams (30% to 50%); Hanford sandy loam (2% to 9% slopes); Metz loam (2% to 5% slopes); Mocho loam (2% to 9% slopes); Saugus loam (30% to 50% slopes); Sorrento loam (2% to 5% slopes); Yolo loam (0% to 2% slopes); and Yolo loam (2% to 9% slopes) (USDA 2019). The locations of the mapped soil polygons are shown on Figure 6, Soils.

## 2.3 Drainage Patterns

The Entrada South Project Site is located within the Santa Clara River basin. The Santa Clara River flows to the north of the Entrada South Project Site from east to west. The watershed of the Santa Clara River basin is 1,634 square miles in area. The portion of the watershed in which the Entrada South Project Site lies is located generally east of the Ventura/Los Angeles County line and is approximately 640 square miles in area, with the remainder of the watershed west of the Ventura/Los Angeles County line. It drains portions of the Los Padres National Forest from the north, the Angeles National Forest from the northeast and east, and the Santa Susana Mountains from the south and southeast. The Entrada South Project Site is located within a smaller, 32.4-square mile (20,724-acre) tributary watershed.

Three unnamed creeks run through the Entrada South Project Site, and runoff generally flows through the drainage areas via sheet flows and natural concentrated flows.<sup>1</sup> All of these tributaries exit the Entrada South Project Site through storm drain systems before eventually discharging to the Santa Clara River (Figure 7, Drainage Patterns).

---

<sup>1</sup> A fourth drainage, Magic Mountain Canyon, formerly ran along the western boundary of the Entrada South Project Site within the RMDP boundary but was filled pursuant to permits issued for the RMDP.



---

## 3 Description of Modified Project

### 3.1 Disturbance Footprint

The Modified Project would incorporate several refinements to the 2017 Approved Project that would reduce the development impacts of the Entrada South Project overall.<sup>2</sup> These revisions include enhancing and restoring the majority of Unnamed Canyon 2, a significant portion of which would have been impacted under the 2017 Approved Project, thereby reducing permanent impacts to certain vegetation communities and jurisdictional stream habitat and retaining additional on-site open space. In addition to these enhancements, preparation of more detailed development plans to implement the conceptual land use plan that was analyzed in the State-Certified EIR has resulted in a more refined identification of areas within the Entrada South Project Site that will be impacted or avoided by development activities, including post-construction maintenance activities within jurisdictional waters. These refinements result in updates to the total acreage of permanent and temporary disturbance associated with the Modified Project but do not reflect changes in the Entrada South Project design or land use plan.

**Additional Avoidance of Stream Impacts.** The Modified Project includes incremental changes to the land use plan to better protect jurisdictional streams, including associated waters of the United States, and related biological resources within the Entrada South Project Site. The Modified Project would reduce permanent impacts to Unnamed Canyon 2, which traverses the Entrada South Project Site (Figure 4). Although portions of the stream will be temporarily impacted during construction, they will be revegetated after construction pursuant to the Modified Project design. This environmentally beneficial modification would result in increased open space with restored drainage areas providing more habitat for species. Under project design feature (“PDF”) ES-PDF-BIO-1, jurisdictional streambeds and riparian habitat within Unnamed Canyon 2 would be permanently conserved following completion of Entrada South Project Site development by recording a conservation easement over these areas. Compensatory mitigation for impacts associated with the Modified Project may occur in the areas conserved pursuant to ES-PDF-BIO-1, consistent with RMDP/SCP Mitigation Measures RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10 and RMDP/SCP-BIO-12 through RMDP/SCP-BIO-16 (these RMDP/SCP mitigation measures will be referred to as simply “RMDP/SCP-BIO-XX” in the remainder of this Report).

**Minor Boundary Adjustments.** The Modified Project also includes a 0.6-acre disturbance area within The Oaks Club at Valencia golf course property, located immediately south of and adjacent to the Entrada South Project Site within the Westridge community, to accommodate the restoration of Unnamed Canyon 2 by providing a necessary storm

---

<sup>2</sup> The 2017 Approved Project described in this Report is defined as that portion of the “Approved Project” described in CDFW’s California Environmental Quality Act (CEQA) Findings of Fact and Statement of Overriding Considerations for the Master Streambed Alteration Agreement and Incidental Take Permits Associated with the RMDP and SCP, dated December 3, 2010 (CEQA Findings) that is located within the 2017 Approved Project site as depicted on Figure 3 of this Report. The Approved Project is further described in the Final RMDP/SCP and is depicted on Figure 8 of the Final RMDP/SCP. As explained in the CEQA Findings, the final Approved Project was consistent with the project analyzed in the RMDP/SCP Draft EIS/EIR with additional refinements to further reduce environmental impacts, which resulted from the U.S. Army Corps of Engineers’ efforts to identify the least environmentally damaging practicable alternative (LEDPA) for the RMDP. With respect to the Entrada South planning area, the 2017 Approved Project is substantially identical to the Draft LEDPA alternative analyzed in the RMDP/SCP Final EIS/EIR. While the overall Proposed Project analyzed in the RMDP/SCP Draft EIS/EIR as Alternative 2 would have had significant and unavoidable impacts to certain biological resources, including San Fernando Valley spineflower, southwestern pond turtle, and San Emigdio blue butterfly, the Draft LEDPA alternative analyzed in the RMDP/SCP Final EIS/EIR, and the final Approved Project, reduced those impacts to less than significant with mitigation.

drain connection. The majority of this area would be revegetated following completion of the storm drain connection associated with Unnamed Canyon 2.

**Overlap with the Mission Village Project.** To maintain a consistent basis for comparison, areas that have been developed as a result of construction of the Mission Village Project are classified as “developed land” in this Report (including when describing the impacts of the 2017 Approved Project) although they may have been mapped as another land cover type in the State-Certified EIR. The State-Certified EIR assumed that these areas would be developed as a result of RMDP activities prior to implementation of the Entrada South Project.

The disturbance footprints of the 2017 Approved Project and the Modified Project are shown on Figures 2 and 3. As the two figures show, the Modified Project has a smaller permanent impact area than does the 2017 Approved Project—316.4 acres, compared to 323.8 acres for the 2017 Approved Project. The Modified Project would have temporary impacts to 11.2 acres that will be revegetated following project construction. Approximately 80.9 acres of the Entrada South Project Site, which is within the disturbance footprint for both the 2017 Approved Project and the Modified Project, has already been subject to development activities as part of the Mission Village Project, as described in the State-Certified EIR, and, as noted above, are classified as developed land.

## 3.2 Land Uses

The State-Certified EIR evaluated the environmental impacts of 1,725 dwelling units, 450,000 square feet of non-residential development, and a potential school site within the Entrada South planning area. The Modified Project includes 1,574 dwelling units, 730,000 square feet of non-residential development, and a potential school site within the Entrada South planning area. Changes in land use under the Modified Project would not materially change the intensity of development for purposes of the biological resources analysis of the Modified Project.

---

## 4 Methods and Survey Limitations

To evaluate whether the natural resources currently found or potentially occurring within the Entrada South Project Site have changed significantly compared to the information presented in the State-Certified EIR, Dudek reviewed various literature sources and databases, as well as the results of field surveys conducted after the surveys presented in the State-Certified EIR, as described in more detail in Sections 4.1 and 4.2.

### 4.1 Literature Review

Dudek initially searched the technical literature and reviewed several available databases that were used to prepare the State-Certified EIR and that have been updated since the State-Certified EIR. Specifically, reports reviewed included the Biota chapter of the Newhall Ranch Specific Plan Program EIR as revised (March 1999), the Newhall Ranch Biota Report (July 1996), and the Newhall Ranch Revised Additional Analysis (May 2003), Section 2.2, Salt Creek Corridor; Section 2.3, Floodplain Modifications; and Section 2.6, Spineflower and Other Sensitive Plant Species. Dudek also reviewed numerous technical reports documenting biological surveys conducted on the Modified Project Site, as shown in Table 1 (provided at the end of this chapter), and other off-site surveys on greater Newhall Ranch lands, as cited in the body of the Report. Dudek also reviewed literature sources specific to the common plants and animals, plant communities, and special-status species occurring in the County of Los Angeles.

In addition, for the previous analysis as well as the current analysis, the most recent versions of the California Natural Diversity Database (CDFW 2024) and the California Native Plant Society Rare Plant Inventory (CNPS 2024) were reviewed for the following U.S. Geological Survey 7.5-minute quadrangle maps: Newhall, Val Verde, Warm Springs Mountain, Whitaker Peak, Green Valley, Mint Canyon, San Fernando, Oat Mountain, and Santa Susana.

### 4.2 Field Reconnaissance Methods

Numerous biological surveys specific to the Entrada South Project Site have been conducted, including surveys conducted between 2002 and 2008 as part of the RMDP/SCP baseline data development in support of preparation of the State-Certified EIR. These included five special-status plants surveys, vegetation mapping, a general wildlife survey, and focused surveys for special-status/regulated plant and wildlife species (Dudek & Associates 2006a; Corps and CDFG 2010).

Additional surveys have been conducted on the Entrada South Project Site since 2011, including vegetation mapping, general plant surveys, and focused surveys for special-status/regulated plant and wildlife species. The surveys conducted on the Entrada South Project Site from 2011 to 2024 provide additional and up-to-date project-specific information. Specifically, surveys were conducted to verify and/or update mapping of vegetation communities and land covers documented in prior reports. Comprehensive surveys for special-status plant species were conducted in 2 years, including 2019 surveys conducted in a year with above-average rainfall. Focused surveys for specific plant species were conducted as well, including annual surveys for San Fernando Valley spineflower (“spineflower”; *Chorizanthe parryi* var. *fernandina*) conducted as part of the SCP, and surveys for slender mariposa lily (*Calochortus clavatus* var. *gracilis*) in 2015 and 2022. The most recent comprehensive plant surveys were conducted in 2019, but since multiple rounds of comprehensive plant surveys have been conducted, including in 2003, 2004, 2012, and 2019, all returning similar results, it is very unlikely that additional surveys would identify any previously unreported special-status plant species; therefore, the 2019 results remain a valid indicator of the occurrence of special-status plants on site. Finally, surveys and/or habitat assessments were conducted for specific

special-status wildlife species known to occur, or with potential to occur, on the Entrada South Project Site to provide up-to-date information relevant to the Modified Project's potential impacts to these species. Table 1 includes surveys that have been conducted on the Entrada South Project Site since 2011.

Note that for this Report no focused surveys were conducted for wildlife species that were not found during previous surveys or that were considered to have low potential to occur (e.g., due to lack of suitable habitat or being outside a species' known range). Also, no focused surveys were conducted for (1) high-mobility species that may occur on the Entrada South Project Site but are unlikely to be directly impacted (e.g., cougar [*Puma concolor*]), or (2) cryptic species that are unlikely to be detected even if present, as such surveys were not likely to produce meaningful data. The analysis regarding such species in the State-Certified EIR remains valid, and that document's avoidance/mitigation measures for such species remain applicable. Several pre-construction surveys conducted for the Mission Village Project that overlapped the Entrada South Project Site are not included in Table 1, but occurrences on the Project Site are discussed in Section 5.3, Special-Status Biological Resources, and analyzed in Section 6.2, Impacts to Special-Status Species. In addition, those sections of the Report discuss wildlife occurrences in the vicinity of the Entrada South Project Site that are known from various surveys within the RMDP/SCP area that do not overlap the Entrada South Project Site.

**Table 1. Summary of Additional Biological Surveys Conducted on the Entrada South Project Site**

Survey Focus	Study Title	Survey Date(s)	Survey Methods
Vegetation map update	2012 Botanical Survey Results for Entrada South Site (Dudek 2012a)	April 2012	The vegetation map was updated by overlaying the existing polygons onto the latest available aerial photography, revised to match current vegetation signatures, and spot-checked in the field to confirm trends (Dudek 2012a). The vegetation map was further revised to reflect the wetlands delineation performed by URS in 2012.
	<i>GIS Data</i>	2015	The vegetation map was updated to match the 2015 jurisdictional delineation conducted on site (Dudek 2015a).
	<i>GIS Data</i>	2017	The vegetation map was updated to include the off-site area for a stormwater connection (Dudek 2017a).
	2019 Botanical Survey Results for the Entrada South Project Site (Dudek 2019a)	May 2019	The entire Modified Project Site was reviewed in the field to determine whether significant changes had occurred since the previous vegetation map update.
General special-status plants/ San Emigdio blue butterfly habitat assessment	2012 Botanical Survey Results for Entrada South Site. (Dudek 2012a)	June 2012	Focused plant surveys were conducted throughout the Entrada South Project Site by Dudek in 2012 and 2019. The surveys were floristic in nature and were conducted according to accepted protocols. The extent of all CRPR 1 and 2 species, as well as mainland cherry and Southern California black walnut, were recorded along with a count of individuals and other relevant information. Host plants for San Emigdio blue butterfly were recorded concurrent with these botanical surveys (Dudek 2012a, 2019a).
	2019 Botanical Survey Results for Entrada South Site. (Dudek 2019a)	May 2019	
San Fernando Valley spineflower ( <i>Chorizanthe parryi</i> var. <i>fernandina</i> )	2011 Sensitive Plant Survey Results for Entrada Site (Dudek 2012b)	July 2011	Focused plant surveys were conducted in areas supporting San Fernando Valley spineflower (spineflower) within the Modified Project Site. The outer perimeter of each spineflower polygon was searched in one continuous direction until return to the starting point, with plants being located within at least every 1 to 4 meters (3 to 13 feet) along the boundary. Points were manually stored with a Trimble GPS (that has submeter accuracy) to form the boundaries of the polygon. Each spineflower polygon was given a unique identifier (i.e., numbers and/or letters). Data were recorded using mobile data collection application for each of the spineflower polygons and included data on plant count or estimate, individual plant size, microhabitat, vegetation composition, and phenology (Dudek 2012b, 2012c, 2013, 2014a, 2015b, 2016, 2017b, 2018a, 2019b).
	2012 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area (Dudek 2012c)	June 2012	
	2013 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area (Dudek 2013)	April 2013	

**Table 1. Summary of Additional Biological Surveys Conducted on the Entrada South Project Site**

Survey Focus	Study Title	Survey Date(s)	Survey Methods
	2014 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area (Dudek 2014a)	May 2014	
	2015 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area (Dudek 2015b)	May and June 2015	
	2016 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area (Dudek 2016)	June 2016	
	2017 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area (Dudek 2017b)	June 2017	
	2018 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2018a)	June 2018	
	2019 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2019b)	June 2019	

**Table 1. Summary of Additional Biological Surveys Conducted on the Entrada South Project Site**

Survey Focus	Study Title	Survey Date(s)	Survey Methods
	2020 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2020a)	June 2020	Focused plant surveys were conducted in areas supporting San Fernando Valley spineflower (spineflower) within the Modified Project Site. Methods were similar to methods used previously but followed the SCP monitoring methods (McGraw 2020; Dudek 2020a, 2021, 2022, 2023a, 2024a).
	2021 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2021)	May 2021	
	2022 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2022)	May 2022	
	2023 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area outside of Actively Managed Preserves (Dudek 2023a)	May 2023	—
	2024 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area outside of	June 2024	—

**Table 1. Summary of Additional Biological Surveys Conducted on the Entrada South Project Site**

Survey Focus	Study Title	Survey Date(s)	Survey Methods
	Actively Managed Preserves (Dudek 2024a)		
Slender mariposa lily ( <i>Calochortus clavatus</i> var. <i>gracilis</i> )	2015 Focused Surveys for Slender Mariposa Lily on the Entrada South Project Site (Dudek 2015c)	April 2015	Surveys focused on identification of slender mariposa lily. Information regarding site-specific characteristics of occurrences was recorded, such as associated species; microhabitat; phenology; and cover of native, non-native, and bare ground for all polygons that had not previously been recorded that included more than 100 individuals. Where additional data was recorded, photos were taken of the species and its habitat (Dudek 2015c). In 2022, all individuals were recorded regardless of the number of plants in the polygon (Dudek 2023b).
	2022 Focused Survey Results for Slender Mariposa Lily on the Entrada South Project Site – Los Angeles County, California (Dudek 2023b)	April–May 2022	
Oak trees	Oak Tree Report (LDC 2011, 2014; Carlberg 2023)	December 2009; June 15 and 18, 2021	In 2009, LDC resurveyed trees that were in the potential encroachment zone of the Project, defined as within 200 feet of proposed development (LDC 2011, 2014). The oak tree inventory and impact analysis was updated in 2021. Two additional trees that were missed previously were added to the oak inventory in 2022 (Carlberg 2023).
Crotch's bumble bee	2024 Crotch's Bumble Bee Reconnaissance Survey Report for the Entrada South Project (Dudek 2024b)	July 2024	The survey method consisted of determining appropriate nectar/pollen resources and focusing survey effort in those locations. Biologists walked meandering transects through these resources with a goal of observing bumble bees and detecting bumble bee nest sites associated with small mammal burrows or other appropriate soil cavities. When a bumble bee was observed, photos were taken to allow for identification (Dudek 2024b).
Coastal California gnatcatcher	Focused California Gnatcatcher Survey, Entrada North and South Projects (Dudek 2012d)	March–June 2012	Dudek conducted and/or supervised focused protocol surveys for the federally listed threatened coastal California gnatcatcher on the Entrada South Project Site. Dudek biologists with federal permits for California gnatcatcher surveys conducted such surveys on site pursuant to the accepted protocol of the U.S. Fish and Wildlife Service's Coastal California Gnatcatcher ( <i>Poliophtila californica californica</i> ) Presence/Absence Survey Protocol (USFWS 1997) (Dudek 2012d, 2015d, 2018b).
	Focused California Gnatcatcher Survey, Entrada South Project Site (Dudek 2015d)	May–July 2015	
	Focused California Gnatcatcher Survey,	May–June 2018	



**Table 1. Summary of Additional Biological Surveys Conducted on the Entrada South Project Site**

Survey Focus	Study Title	Survey Date(s)	Survey Methods
	Entrada South Project Site (Dudek 2018b)		
	Focused California Gnatcatcher Survey, Entrada South Project Site (Compliance Biology 2019)	Spring–Summer 2019	Woodstar Biological LLC conducted focused protocol surveys on behalf of Compliance Biology Inc. for the federally listed threatened coastal California gnatcatcher on the Entrada South Project Site. Biologists with federal permits for conducting California gnatcatcher surveys covered two survey areas on site, pursuant to accepted USFWS (1997) protocol (Compliance Biology 2019).
Grasshopper sparrow and general wildlife	Focused Grasshopper Sparrow and General Wildlife Report for the Entrada South Site (Dudek 2012g)	May and June 2012	Dudek conducted a focused survey for grasshopper sparrow and other wildlife species in 2012. There is no accepted protocol for grasshopper sparrow surveys. Dudek conducted two surveys in late May and June during morning daylight hours (prior to 11:00 a.m.) of all suitable grassland areas within the Project Site. Biologists walked all suitable habitat and listened and watched for grasshopper sparrows. The timing coincided with the period when the species is singing, but after migrants have passed through (Dudek 2012g).
Presence/absence of western spadefoot ( <i>Spea hammondi</i> ) and fairy shrimp	Results of Focused Western Spadefoot Toad and Fairy Shrimp Habitat Surveys on the Entrada South Site (Compliance Biology 2012)	February and April 2012	Compliance Biology conducted a focused survey on the Entrada South Project Site for western spadefoot and fairy shrimp (vernal pool fairy shrimp [ <i>Branchinecta lynchi</i> ], Riverside fairy shrimp [ <i>Streptocephalus woottoni</i> ], and conservancy fairy shrimp [ <i>B. conservatio</i> ]) in winter/spring of 2012. This survey took place during two discrete periods: a visit in February and two visits in April after some late season storms. Environmental conditions for the surveys were not ideal due to rainfall patterns in 2012 (large storms early in the season, an extended dry period in the middle of the rainy season, and storms late in the season). Extended inundation periods are required for the western spadefoot and fairy shrimp to complete the aquatic phases of their life cycles. Therefore, one focus of the survey was to identify potential breeding pool locations based on topography and suitable soils, in addition to surveying sites supporting standing water at the time of the surveys. Biologists systematically walked all the flat areas of the Entrada South Project Site in search of either standing water or larger depressions that appeared to have held standing water in the past. Additionally, biologists surveyed all dirt roads, as western spadefoot toads and fairy shrimp use deep road ruts that fill with rainwater. Finally, biologists inspected areas with standing water for presence of western spadefoot and fairy shrimp.

**Table 1. Summary of Additional Biological Surveys Conducted on the Entrada South Project Site**

Survey Focus	Study Title	Survey Date(s)	Survey Methods
Bat Acoustic Monitoring	Bat Survey, Entrada South Project (Dudek 2012e)	May to August 2012	Acoustic surveys for special-status bats were conducted on the Project Site at four point locations in spring/summer of 2012. Passive acoustic surveys using Anabat SD2 ultrasonic detectors (Titley Electronics, Ballina, Australia) were conducted over a total of 27 detector nights at four point locations within the Entrada South Project Site. The Anabat was set to record bat vocalizations each night starting before dusk from 6:00 p.m. to 6:00 a.m. the following morning to coincide with peak bat activity periods, and data were downloaded at the end of each survey week. After completion of the passive surveys, the acoustic data were sent to bat expert Dr. Michael O'Farrell for species identification. Dr. O'Farrell made the species-level identifications using the methods of O'Farrell et al. (1999) based on frequency characteristics, call shape, and comparison with a comprehensive library of vocal signatures developed by O'Farrell and colleagues. Thus, species richness (number of species verified as present) was obtained for each location. An index of abundance, or the magnitude of each species contribution to spatial use, was obtained using the sum of 1-minute time increments for which a species was detected as present, divided by the number of nights of sampling (Miller 2001).
Special-Status Small Mammals	Results of Small Mammal Trapping, Entrada South Project (Compliance Biology 2013)	August 2012	Compliance Biology Inc. conducted live trapping for special-status small mammals (i.e., rodents) potentially occurring of the Project Site. Five separate traplines were established in representative habitat types and 15 to 20 traps were set on each trapline over a 5-night period in August 2012. Traps were baited with a mixture of rolled oats, birdseed, and dry cat food. Traps were checked each morning and then closed for the day.

**Note:** CRPR = California Rare Plant Rank.

# 5 Results of Surveys

## 5.1 Botany - Vegetation Communities and Floral Diversity

Vegetation mapping conducted for the State-Certified EIR was updated in May 2015 and revised to reflect a wetlands delineation performed by URS in 2014. In 2015, the vegetation mapping nomenclature was revised to reflect the September 2010 update to the List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database (“List of Natural Communities”; CDFG 2010). The vegetation map presented in the State-Certified EIR was generally based on the List of Natural Communities (CDFG 2003, 2007). The vegetation map was updated again in May 2019 to remap any observable changes that had occurred since the previous vegetation map update, but without changing the overall vegetation classification system.

Figure 8a, 2017 Approved Project Vegetation Communities and Land Cover Types, provides the results of the 2006 vegetation mapping for the 2017 Approved Project, and Figure 8b, Modified Project Vegetation Communities and Land Cover Types, provides the results of the 2012 and 2019 updated vegetation mapping for the Modified Project.

Table 2 compares the vegetation community and land cover information for the Entrada South Project Site presented in the State-Certified EIR to the results of the updated vegetation mapping for the site and off-site improvements associated with the Modified Project. This comparison reflects both changes to the Entrada South Project Site footprint proposed by the Modified Project since the State-Certified EIR was prepared, and physical changes in the vegetation communities and land cover types within that footprint. The updated results include new 2019 mapping of three vegetation communities considered sensitive by CDFW (2023a): needle grass grassland, valley oak/grass, and scale broom scrub.

**Table 2. Vegetation Communities and Land Cover Types on Entrada South Project Site**

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance/ Association	State-Certified EIR Acreage <sup>a</sup>	Current Acreage <sup>b</sup>	Overall Change in Acreage <sup>c</sup>
Grass and Herb Dominated Communities	Non-Native Grassland	California annual grassland	53.0	57.5	+4.5
		Wild oat grassland	—	0.6	+0.6
	Native Grassland	Needlegrass grassland	—	0.6	+0.6
	Mustard stand	Short-podded mustard stand	—	1.2	+1.2
	<i>Grass and Herb Dominated Communities Subtotal</i>		53.0	60.0	+7.0
Scrub and Chaparral	Coastal Scrub	California sagebrush scrub (including restored)	56.3	65.1	+8.8
		California sagebrush – Artemisia	2.7	1.6	-1.1

**Table 2. Vegetation Communities and Land Cover Types on Entrada South Project Site**

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance/ Association	State-Certified EIR Acreage <sup>a</sup>	Current Acreage <sup>b</sup>	Overall Change in Acreage <sup>c</sup>
		California sagebrush–California buckwheat scrub	94.6	77.0	–17.6
		California buckwheat (including restored and disturbed forms)	—	3.9	+3.9
		Deer weed scrub	—	3.3	+3.3
	Coastal Scrub Subtotal		153.6	150.8	–2.7
	Undifferentiated Chaparral Scrubs	Not mapped to alliance/association level	21.8	20.8	–1.0
	Other Chaparral	Scrub oak chaparral	—	2.6	+2.6
Chaparral Subtotal			21.8	23.4	+1.6
Broad Leafed Upland Tree Dominated	Oak Woodland and Forest	Valley oak/grass	—	1.7	+1.7
Broad Leafed Upland Tree Dominated Subtotal			—	1.7	+1.7
Riparian and Bottomland Habitat	Other Riparian/Wetland	River wash	4.6	0.7	–3.9
		Alluvial scrub	0.5	0.3	–0.2
		Big sagebrush scrub	14.8	13.6	–1.1
		Cattail marshes	—	<0.05	+<0.05
		Scale broom scrub	—	5.1	+5.1
Riparian and Bottomland Habitat Subtotal			19.9	19.8	–0.1
Man-Made Land Cover Types		Ornamental	—	0.1	+0.1
		Developed land <sup>d</sup>	81.9	82.8	+0.9
		Disturbed land	53.7	46.6	–7.1
Man-Made Land Cover Types Subtotal			135.7	129.5	–6.2
Not mapped <sup>e</sup>			0.4	—	–0.4
Total			384.4	385.2	+0.8

**Notes:**

- <sup>a</sup> Includes all areas within the footprint of the 2017 Approved Project.
- <sup>b</sup> Includes all areas within the footprint of the Modified Project, including <1 acre that was not described in the State-Certified EIR, composed primarily of developed land.
- <sup>c</sup> Changes in acreage may not sum precisely due to rounding.
- <sup>d</sup> To maintain a consistent basis for comparison, areas currently mapped as “developed land” as a result of construction of the Mission Village Project are classified here as developed land for purposes of the State-Certified EIR even if they were mapped as another land cover type in that document. The State-Certified EIR assumed that these areas would be developed as a result of RMDP activities prior to implementation of the Entrada South Project.
- <sup>e</sup> No 2010 vegetation data were available for a small area along the southern boundary of the Entrada South Project Site.

Overall, there are currently 7.4 acres more natural or naturalized vegetation communities and 6.2 acres less man-made land cover types within the area affected by the Modified Project, compared to the communities on the Entrada South Project Site as described in the State-Certified EIR. While 10 new vegetation community and land

cover types have been mapped since the State-Certified EIR was prepared, including wild oat grassland, needlegrass grassland, short-podded mustard stand, California buckwheat scrub (including disturbed and restored forms), deer weed scrub, scrub oak chaparral, valley oak/grass, cattail marshes, scale broom scrub, and ornamental, none of these vegetation communities or land covers introduces a new species that had not been previously identified on site. Further, these vegetation communities and land cover types do not provide suitable habitat for special-status species that were not already identified as having suitable habitat in the State-Certified EIR. These changes are considered within the normal range of variability over time expected in a natural environment due to factors such as wildfire, land use changes, vegetation colonization and succession, and annual weather conditions, such as drought or large storm events that may affect riparian resources. Overall, any given change in a general physiognomic and physical location category is less than 10 acres, which is not significant in the context of a site covering more than 350 acres. Therefore, the vegetation communities and land cover types remain substantially similar to those reported in the State-Certified EIR.

The Entrada South Project Site is situated at the nexus of the Transverse, Coast, and Sierra Nevada ranges; the Mojave Desert; and coastal plains (Hickman 1996). Ecotone areas such as this are often characterized by higher biological diversity than similar-sized areas within the core of a physiographic region (Boyd 1999), and as such, a high diversity of plant species is expected. A cumulative total of 356 plant species was identified within the 2017 Approved Project Site between 2002 and 2006. Of these, 269 species (75%) are native to the region and 87 species (25%) are non-native. From 2011 to 2019, approximately 38 additional species were identified on the Project Site. Of these, 27 species (71%) are native to the region and 11 species (29%) are non-native. None of these newly identified species is special status. Given the relatively few newly identified species, floral diversity on site remains substantially similar to the conditions reported in the State-Certified EIR.

The cumulative list of plant species identified on the Entrada South Project Site in 2002–2006, 2012, 2015, and 2019 is provided as Appendix A, Plant Compendium, to this Report.

## 5.2 Zoology – Wildlife Diversity

The Entrada South Project Site supports habitat for a high diversity of grassland, shrubland, and woodland wildlife species. As of August 2024, a cumulative total of 142 wildlife species have been documented on the Project Site, including 84 bird species, 2 amphibians, 8 reptiles, 28 mammals, 3 bumble bees, and 17 butterflies. The cumulative list of wildlife species identified on the Entrada South Project Site is provided as Appendix B, Wildlife Compendium. Based on the comparative vegetation and land cover types shown in Table 2, the wildlife habitats on the Entrada South Project Site remain substantially similar to those analyzed in the State-Certified EIR.

A direct comparison of results of wildlife surveys since the State-Certified EIR with previous surveys is not possible because of the differences in survey types and methods. The only wildlife survey focused specifically on the Entrada South Project Site prior to 2010 was a general wildlife survey conducted in 2005. Other surveys focusing on specific wildlife resources on Newhall Ranch lands covered portions of the Entrada South Project Site, including small mammal surveys and raptor surveys. Focused surveys for several species have been conducted since 2010, including bat acoustic surveys, several years of coastal California gnatcatcher (*Polioptila californica californica*) surveys, and grasshopper sparrow (*Ammodramus savannarum*) surveys. In addition, several pre-construction surveys for the Mission Village Project overlapped the Entrada South Project Site. Therefore, more intensive wildlife surveys have been conducted since 2010. As a result, it would not be appropriate to draw the conclusion that the status of biological resources on the Entrada South Project Site has changed, compared to conditions described in the State-Certified EIR, based solely on a comparison of the number and diversity of

the wildlife species on the Entrada South Project Site reported in the State-Certified EIR and those observed since then. However, the survey data do provide useful information for evaluating whether wildlife species previously documented to occur, or assumed to occur, within the Entrada South Project Site continue to be present or have a high likelihood of occurring. In some cases, more recent surveys confirm the occurrence of a species that was previously only assumed to occur.

As described in Section 5.1, Botany – Vegetation Communities and Floral Diversity, the Entrada South Project Site currently supports vegetation communities similar to those mapped on the site prior to the State-Certified EIR at the level of General Physiognomic and Physical Location. As shown in Table 2, natural and naturalized land covers have increased overall by only 7.4 acres, while man-made land covers have decreased by 6.2 acres. Based on this comparison, the wildlife habitats within the Entrada South Project Site remain substantially similar to those analyzed in the State-Certified EIR.

## 5.3 Special-Status Biological Resources

### 5.3.1 Special-Status Plant Species

The State-Certified EIR reported the following special-status plant species as occurring on the Entrada South Project Site: San Fernando Valley spineflower (spineflower), slender mariposa lily, Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Peirson's morning-glory (*Calystegia peirsonii*), Southern California black walnut (*Juglans californica*), and island mountain-mahogany (*Cercocarpus betuloides* var. *blancheae*). The Coulter's goldfields were likely introduced as part of a hydroseed mix for erosion control and have not been observed since 2006; therefore, this subspecies is not further addressed in this Report. Parish's sagebrush (*Artemisia tridentata* ssp. *parishii*) also has potential to occur (Dudek & Associates 2006a). Mainland cherry (*Prunus ilicifolia* ssp. *ilicifolia*) has also been recorded on the Project Site. Based on the several botanical surveys conducted on the Entrada South Project Site, no other special-status plant species are considered to have moderate or high potential to occur. The locations of California Rare Plant Rank (CRPR) 1 and 2 special-status plants on the Entrada South Project Site are shown on Figure 9, Special-Status Plants.<sup>3</sup> Appendix C, Plant and Wildlife Species Potential to Occur, lists all species observed in the RMDP/SCP area, according to the State-Certified EIR, and notes species included or not included in this analysis.

#### 5.3.1.1 San Fernando Valley Spineflower

Spineflower is state listed as endangered and is a CRPR 1B.1 species. Spineflower occurs within the Entrada South Project Site, as well as the adjacent Newhall Ranch Specific Plan (Specific Plan) area and the Valencia Commerce Center (VCC) Project Site, as described in the RMDP/SCP EIS/EIR. All of these areas are within the area covered by the approved SCP.

Surveys for spineflower were conducted throughout the Entrada South Project Site, as well as the Specific Plan area and VCC Project Site, annually from 2002 through 2007. As reported in the State-Certified EIR, population counts and estimates for spineflower have varied widely over survey years on the Entrada South Project Site, as well as

<sup>3</sup> The California Native Plant Society provides a ranking system for rare plants. Those with a CRPR of 1A are extirpated or extinct. Those plants with a CRPR of 1B are considered rare, threatened, or endangered in California or elsewhere. Of those, species with a threat rank of 0.1 (1B.1 plants) are "seriously threatened" in California and species with a threat rank of 0.2 (1B.2 plants) are moderately threatened in California. Plants with a CRPR of 2 are rare, threatened, endangered, or extirpated in California, but common elsewhere. CRPR 2A plants are presumed extirpated in California, while CRPR 2B plants are rare, threatened, or endangered in the state.



throughout the SCP area. Estimates of the number of spineflower individuals on the Entrada South Project Site ranged from a low of 20 individuals in 2002 to a high of 1,183,504 individuals in 2003 for the period reported in the State-Certified EIR.

Surveys conducted in 2011–2024, pursuant to the SCP, generally reflect spineflower populations that vary within the range recorded prior to 2011, despite a multi-year drought from 2012 to 2016 and in 2021. Estimates of the number of spineflower individuals on the Entrada South Project Site ranged from a low of 790 individuals in 2013 to a high of 87,200 individuals in 2015 for the period from 2011 to 2019. Methods used to record spineflower in 2020 through 2024 did not provide an estimated number of individuals. Similar magnitudes of population fluctuations, largely related to the amount of annual rainfall, have been observed throughout the SCP area over the same period.

Under the SCP and the associated Incidental Take Permit (ITP), Newhall is required to undertake a number of conservation activities for spineflower, including permanently conserving seven areas containing approximately 75% of the existing spineflower occurrences within the SCP area, funding the long-term management of those areas, and funding the long-term management of the spineflower population at the former Ahmanson Ranch (also called Laskey Mesa). Newhall has already carried out many of these activities, including granting conservation easements over all seven spineflower preserves (including the spineflower preserve within the Entrada South Project Site), providing approximately \$4 million in endowments for management of spineflower preserves, and providing an additional \$1.15 million for management of the Laskey Mesa spineflower population.

Newhall has also entered into a Candidate Conservation Agreement (CCA) for spineflower with the U.S. Fish and Wildlife Service (USFWS), as contemplated in the State-Certified EIR. Under the CCA, Newhall has committed to conserving six additional areas within the species' historical range that contain potentially suitable habitat for spineflower, and introducing spineflower to the additional areas, with the goal of establishing new, self-sustaining spineflower populations to increase the number and geographic distribution of such populations. To date, Newhall has completed spineflower seeding trials within four of the six spineflower introduction areas and has begun full-scale spineflower introduction in all four of those locations. Although these activities are not required as mitigation for impacts of the Modified Project or of SCP-authorized development, they provide additional benefits to spineflower and enhance the status of the species.

When the State-Certified EIR was prepared, spineflower was a candidate for listing under the federal Endangered Species Act (ESA). In September 2016, USFWS issued a proposed rule to list the spineflower as threatened under the ESA. However, in March 2018, USFWS withdrew the proposed rule and found that listing of spineflower was not warranted, taking into account ongoing conservation measures for the species, including the SCP, as well as the CCA entered into with Newhall.

Overall, taking into account SCP-required measures and the voluntary conservation activities under the CCA, the status of spineflower remains the same or improved compared to its status as analyzed in the State-Certified EIR. Its regulatory status is also similar, as it remains listed as endangered under the California Endangered Species Act (CESA).

### 5.3.1.2 Slender Mariposa Lily

Slender mariposa lily is a CRPR List 1B.2 plant but is not listed federally or by the state. This species is typically found in chaparral, coastal scrub, and grasslands (CNPS 2024). Populations of this species were documented in

the vicinity and mapped throughout the Entrada South Project Site in 2003, 2004, and 2005. Within the Entrada South Project Site, the slender mariposa lily was found primarily on south-facing slopes, and to a lesser extent on southeast-facing slopes in California grasslands, and California sagebrush and California buckwheat scrub. The plants were mapped on a variety of soil types (e.g., silty loam, sandy loam, clay loam). This species is locally abundant within the Project Site. As reported in the State-Certified EIR, the documented population varied from a low of 202 individuals in 2004 to a high of 4,344 individuals in 2003. The mapped acreage of this species within the Entrada South Project Site as reported in the State-Certified EIR was 33.0 acres.

In 2012, botanical surveys were conducted on the Entrada South Project Site, but no slender mariposa lily were found, likely due to below-average rainfall that year (Dudek 2012a). In 2015, focused surveys for slender mariposa lily were conducted on the Entrada South Project Site (Dudek 2015c). In 2015, a total of 19.3 acres of slender mariposa lily was mapped, numbering approximately 3,140 to 4,530 individuals. In 2019, botanical surveys were conducted over the entire Entrada South Project Site (Dudek 2019a). In 2019, a total of 1.2 acres of slender mariposa lily was recorded, numbering approximately 452 individuals. In 2022, focused surveys for slender mariposa lily were conducted over all of the undeveloped portions of the Entrada South Project Site (Dudek 2023). In 2022, a total of 4.2 acres of slender mariposa lily was recorded, numbering approximately 4,567 individuals. Surveys conducted in 2015, 2019, and 2022 increased the total cumulative occupied footprint within the Entrada South Project Site by 16.3 acres, for a total cumulative occupied acreage of 49.3 acres.<sup>4</sup>

Overall, the 2012, 2015, 2019, and 2022 survey results are consistent with expectations based on the information presented in the State-Certified EIR and the known life history of the species in the vicinity of the Entrada South Project Site, and do not provide evidence of a material change in the status of slender mariposa lily within the Entrada South Project Site compared to the analysis in the State-Certified EIR.

### 5.3.1.3 Peirson's Morning-Glory

Peirson's morning-glory is a CRPR 4.2 plant but has no state or federal status. This species is typically found in chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, and grasslands (CNPS 2024). While never abundant, Peirson's morning-glory is widespread in the general Entrada South Project area, where it has been observed on ridges and slopes, weakly climbing over mixed chaparral, California sagebrush, California buckwheat, and in annual grasslands. This species was recorded on the Entrada South Project Site in 2005. Given the low sensitivity status of the species, observations were not mapped.

No Peirson's morning-glory were observed on the Entrada South Project Site during surveys in 2011–2019, including during comprehensive surveys in 2012 and 2019.

Suitable habitat for Peirson's morning-glory includes chaparral, coastal scrub, and grassland vegetation communities. Suitable habitat for Peirson's morning-glory under the 2017 Approved Project was 228.4 acres, compared to 234.2 acres under the Modified Project, a 3% increase. Overall, the status of Peirson's morning-glory in the Entrada South Project Site has not changed significantly compared to the information presented in the State-Certified EIR.

---

<sup>4</sup> As noted in the State-Certified EIR, detection of individuals emerged from bulbs is related to annual environmental conditions such as rainfall amounts, timing, and extent of browsing by rodents, deer, and rabbits prior to flowering. By definition, cumulative acreage of occupied habitat increases when the species is observed in a new location but does not decrease even when the species is no longer observed in a location where it was formerly known.



#### 5.3.1.4 Mainland Cherry

Mainland cherry has no state or federal sensitivity status, but it is locally protected through the County of Los Angeles (“the County”). This large shrub to tree was incidentally observed from 2002 to 2006 within the Entrada South Project Site and is known in the vicinity. Given the low sensitivity status of the species, individual mainland cherry trees were not mapped.

More recent surveys have mapped locations of mainland cherry with a minimum diameter at breast height (dbh) and outside of jurisdictional areas. During surveys in 2012 and 2019, five mainland cherries were documented on the Entrada South Project Site (Dudek 2012a).

Overall, the status of mainland cherry in the Entrada South Project Site has not changed significantly compared to the information presented in the State-Certified EIR.

#### 5.3.1.5 Southern California Black Walnut

Southern California black walnut (“California black walnut” in the State-Certified EIR) is a CRPR 4.2 plant but has no state or federal status. This perennial deciduous tree occurs in alluvial chaparral, cismontane woodland, coastal scrub, and riparian woodland in Southern California (CNPS 2024). Southern California black walnut was observed during surveys in 2002 to 2007 for the Entrada South Project Site in support of the State-Certified EIR. However, given the low sensitivity status of the species, the exact locations of all individual Southern California black walnut trees were not mapped. Impacts in the State-Certified EIR focused on impacts to California walnut woodland, which does not occur on the Entrada South Project Site.

More recent surveys have mapped locations of individual Southern California black walnut trees with a minimum dbh of 1 inch. No Southern California black walnuts were observed on the Entrada South Project Site during surveys in 2011 to 2019, including during comprehensive surveys in 2012 and 2019.

#### 5.3.1.6 White Rabbit-Tobacco (Undescribed Everlasting)

White rabbit-tobacco is a CRPR List 2B.2 plant but is not listed federally or by the state. This species is typically found in chaparral, cismontane woodland, coastal scrub, or riparian woodland with sandy or gravelly substrates (CNPS 2024). White rabbit-tobacco in the vicinity of the Entrada South Project Site was originally reported as undescribed everlasting (*Gnaphalium* sp. *nova*). It was believed that plants in Southern California are distinct from those farther east and should be considered a separate species due to several differences in plant structure (stature, pubescence, and phyllary characters; Dudek & Associates 2004) and its geographic distribution. However, the plants more recently have been described as white rabbit-tobacco by David Keil, the curator of vascular plants at California Polytechnic State University, San Luis Obispo, and author of the Asteraceae treatment in the Jepson Flora Project (2019).

As reported in the State-Certified EIR, white rabbit-tobacco was not documented on the Entrada South Project Site but was documented in the vicinity (Dudek & Associates 2003, 2004, 2006b; Dudek 2007; FLx 2004, as cited in Dudek 2006a).

Since the fieldwork conducted for the State-Certified EIR, comprehensive botanical surveys have been conducted on the site in both 2012 and 2019. No white rabbit-tobacco has been observed and it is not expected to occur due to lack of suitable secondary alluvial bench habitat.

#### 5.3.1.7 Island Mountain-Mahogany

Island mountain-mahogany is a CRPR 4.3 plant, but it has no federal status. It is an evergreen shrub that is typically found in chaparral and closed-cone coniferous forests in Los Angeles and Ventura counties, as well as on several of the Channel Islands. Within the Entrada South Project Site, island mountain-mahogany occurs as an occasional component of chaparral communities at the base of north-facing slopes. Given the low sensitivity status of the species, individual island mountain-mahogany plants have not been mapped.

A single individual of island mountain-mahogany was observed on the Entrada South Project Site during surveys in 2019 within California sagebrush scrub in the southeastern portion of the Entrada South Project Site.

Suitable habitat for island mountain-mahogany also includes chaparral communities. Suitable habitat for island mountain-mahogany under the 2017 Approved Project was 21.8 acres, compared to 23.4 acres under the Modified Project, a 7% increase. Overall, the status of island mountain-mahogany on the Entrada South Project Site has not changed significantly from the information presented in the State-Certified EIR.

#### 5.3.1.8 Parish's Sagebrush

Parish's sagebrush is considered special status by the County of Los Angeles, but it has no federal, state, or CRPR. This species grows intermixed with the big sagebrush scrub community within the Salt Creek watershed (Dudek & Associates 2003), co-occurring with the more common big sagebrush (*Artemisia tridentata* ssp. *tridentata*). Parish's sagebrush occurs from southeastern San Diego County north through Los Angeles County where most records are found, to Mono County (CCH 2019). Parish's sagebrush was observed within the Specific Plan area in the vicinity of Landmark Village. Parish's sagebrush (*A. t.* ssp. *parishii*) blooms October to November and would not be identifiable during the time of focused surveys for plants conducted on site. Where big sagebrush scrub occurs along the outer margins of Magic Mountain Canyon, Parish's sagebrush may also be present.

Surveys from 2011 to 2019 were conducted outside of the blooming period for Parish's sagebrush. Therefore, it has a moderate potential to occur within the big sagebrush scrub on site.

Suitable habitat for Parish's sagebrush includes big sagebrush scrub. Suitable habitat for Parish's sagebrush under the 2017 Approved Project was 14.8 acres, compared to 13.6 acres under the Modified Project, an 8% decrease. Overall, the status of suitable habitat for Parish's sagebrush in the Entrada South Project Site has not changed significantly from the information presented in the State-Certified EIR.

#### 5.3.1.9 Oak Trees

The County of Los Angeles Oak Tree Ordinance (CLAOTO), Sections 22.56.2050–22.56.2260, protects oak trees that are at least 8 inches in diameter, as well as trees that have two trunks totaling at least 12 inches in diameter, as measured 4.5 feet above natural ground (i.e., at breast height). A heritage oak, as defined by CLAOTO, is any species in the genus *Quercus* that measures 36 inches or more dbh, or any oak of 36 inches dbh or less that has a significant historical or cultural importance to the community. CLAOTO requires that all potential impacts to oak trees regulated

by this ordinance be preceded by an application to the County that includes a detailed oak tree report. Mitigation for impacts to oak trees is usually required as a condition of an Oak Tree Permit issued by the County.

During 2005 and 2006, an oak tree survey was conducted of the on-site oak trees on the Entrada South Project Site occurring within 200 feet of the proposed grading limits under the 2017 Approved Project. This survey data was updated in December 2009 (LDC 2011, 2014). An updated oak inventory that supersedes the previous oak inventories was conducted on June 15 and 18, 2021, and amended in 2022 (Carlberg 2023).

A total of 58 oak trees, including 5 heritage oaks, were on the 2017 Approved Project, including 53 valley oaks (*Quercus lobata*) and 5 scrub oaks (*Q. berberidifolia*). Given updates to the oak tree inventory in 2021 and 2022, a total of 51 oak trees, including 2 heritage oaks, occur on the Modified Project. Of the 51 oak trees recorded on and adjacent to the Entrada South Project Site tract boundary, 28 are valley oaks, 19 are scrub oaks, 2 are coast live oaks (*Q. agrifolia*), and 2 are hybrid oaks (*Q. lobata* × *Q. berberidifolia*) (Carlberg 2023). According to Carlberg (2023), numerous dead ordinance-sized oak trees on the Entrada South Project Site were noted but not included in the inventory. Despite fewer oak trees being recorded, overall the status of oaks in the RMDP/SCP area relative to the Entrada South Project Site has not changed in a way that would invalidate the analysis in the State-Certified EIR.

### 5.3.2 Special-Status Wildlife Species

This section discusses the status of special-status wildlife species that have been documented to occur on or in the vicinity of the Entrada South Project Site or have the potential to occur on site. Special-status species meet at least one of the following criteria for the purpose of this report: (1) the species is state and/or federally listed as threatened or endangered; (2) the species has been listed, proposed for listing, or petitioned for listing as threatened or endangered since its analysis in the State-Certified EIR; or (3) updated scientific studies suggest that the species may be more sensitive than it was considered in the State-Certified EIR or the species is otherwise considered to have heightened sensitivity. Species meeting these criteria include arroyo chub (*Gila orcutti*), Santa Ana sucker (*Catostomus santaanae*), southern steelhead (*Oncorhynchus mykiss irideus*), unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), arroyo toad (*Anaxyrus californicus*), western spadefoot (*Spea hammondi*), California legless lizard (*Anniella* spp.), southwestern pond turtle (*Actinemys pallida*), burrowing owl (*Athene cunicularia*), California condor (condor; *Gymnogyps californianus*), coastal California gnatcatcher, least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), tricolored blackbird (*Agelaius tricolor*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), cougar, Crotch's bumble bee (*Bombus crotchii*), and California glossy snake (*Arizona elegans occidentalis*). With two exceptions, all of these species were analyzed in the State-Certified EIR. The two exceptions are Crotch's bumble bee, which was recently designated a candidate for listing as endangered under the CESA, and California glossy snake, which was designated as a California Species of Special Concern by CDFW in 2016.

As shown in Table 1, focused surveys were conducted within the Entrada South Project Site for grasshopper sparrow, American badger (*Taxidea taxus*), and small mammals, in addition to surveys for the species listed above. Surveys for grasshopper sparrow and small mammals were negative and therefore are not discussed further in this Report (Dudek 2012g; Compliance Biology 2013). Surveys for American badger were also negative, although sign of this highly mobile and somewhat transient species was detected incidentally during other surveys. Four species of special-status bats were detected during acoustic surveys: western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus blossevillii*), Yuma myotis (*Myotis yumanensis*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*). All but Yuma myotis are California Species of Special Concern. Yuma myotis is included on the Special Animals list. The State-Certified EIR assumes that American badger, the four above-

mentioned bat species, and several other special-status bat species were present; therefore, their detection does not change the expected occurrence on site. In addition, the regulatory status of these species has not changed since the analysis for the State-Certified EIR. These species are not discussed further in this Report.

The total acreages of suitable habitat on the Entrada South Project Site for most of the species listed above have changed somewhat compared to the information presented in the State-Certified EIR, mostly due to naturally occurring changes in the vegetation communities on site due to factors such as climate and succession. Section 5.1 describes these vegetation changes and Table 2 compares the acreages of vegetation communities and land covers analyzed in the State-Certified EIR with the current acreages.

The following subsections discuss the status of two new species—Crotch’s bumble bee and California glossy snake—and whether the status of any other special-status species has changed since the analysis for the State-Certified EIR, including noting any new occurrences on the Entrada South Project Site. To inform the discussion of each species’ potential to occur, the subsections also include occurrences outside the tract boundary when relevant to updating the potential to occur on the Entrada South Project Site. Figure 10a, Special-Status Wildlife on Site and within 0.5 Miles of the Entrada South Project Site prior to 2010, shows the special-status wildlife species recorded in the vicinity of the Entrada South Project Site according to the information presented in the State-Certified EIR. Figure 10b, Special-Status Wildlife on Site and within 0.5 Miles of the Entrada South Project Site Recorded since 2010, shows the special-status wildlife species recorded in the vicinity of the Entrada South Project Site since the analysis for the 2017 Approved Project.<sup>5</sup> Appendix C includes tables for special-status wildlife species observed and special-status wildlife species considered to have potential to occur, in the State-Certified EIR, with explanations of why each species was included or was not included in this analysis.

### 5.3.2.1 Crotch’s Bumble Bee

Crotch’s bumble bee recently became a candidate for listing as endangered under CESA. It formerly ranged throughout much of Central and Southern California, along the Central and Southern California coasts, through the Central Valley, and in the surrounding foothills. However, it now appears to be absent from much of its former range, and its population appears to have declined drastically, especially in its former stronghold in the Central Valley (Xerces Society et al. 2018; CDFW 2019). The Xerces Society, Defenders of Wildlife, and the Center for Food Safety petitioned the California Fish and Game Commission to list Crotch’s bumble bee and three other species in the genus *Bombus* under CESA in October 2018, citing a “significant reduction in both the range and relative abundance” of the four species (Xerces Society et al. 2018). In April 2019, CDFW (2019) concluded that the petition provided sufficient scientific information to indicate that the petition action may be warranted, and CDFW recommended that the California Fish and Game Commission accept the petition for further evaluation. In June 2019, the Fish and Game Commission officially accepted this recommendation, making Crotch’s bumble bee and the three other species candidate species for listing as endangered. Subsequent to the Commission’s determination, a consortium of agricultural and pesticide industry interests mounted a legal challenge to the species’ candidacy that led to a November 2020 court ruling that insects could not be listed under CESA. But this ruling was overturned on appeal to the Third District Court of California in May 2022, a decision upheld when the state supreme court elected not to review the decision in September 2022. Therefore, Crotch’s bumble bee and three other bumble bee species were restored to state candidate status.

---

<sup>5</sup> Figures 10a and 10b include wildlife occurrences in areas previously developed under the State-Certified EIR. These occurrences represent observations prior to development of these areas, including during pre-construction surveys for the Mission Village Project. The locations are included to provide context for species status in the vicinity, but do not represent extant occurrences.

Crotch's bumble bee is a habitat generalist. In general, the species has the potential to occur in any native vegetation community or non-native grassland supporting suitable nesting microhabitats and floral resources (CDFW 2021). Queens emerge first from hibernation and are active from February to early October (Thorp et al. 1983). The peak flight period for workers is from March through August (Thorp et al. 1983; CDFW 2023b). Daughter queens (gynes) usually leave the nest by September and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to other suitable areas beyond that have suitable hibernacula resources.

Because of its short tongue, Crotch's bumble bee is best suited to foraging at open flowers with short corollas. Data from a variety of resources included observations most commonly associating the species with plants, in descending order based on number of observations, from the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae (Richardson et al., as cited in Xerces Society et al. 2018). Williams et al. (2014) cited the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* as example food plants. The species nests in microhabitats that include small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, rock walls, and brush piles. Little is known about winter hibernacula, but the species is presumed to rely on microhabitats for overwintering similar to those of other bumble bees, including loose, disturbed soil; leaf litter; and other debris (Xerces Society et al. 2018; CDFW 2019). The decline of Crotch's bumble bee population has been attributed to several factors, including habitat modifications, pesticides, and herbicides. Much of Crotch's bumble bee's former habitat has been converted to agricultural and urban uses. The conversion of much of the Central Valley to agriculture and the associated use of pesticides and herbicides are thought to have reduced available habitat and lowered the diversity of flowering plants on which the species depends, as well as causing direct mortality and sublethal effects (CDFW 2019). Competition with managed bees used for agricultural purposes may also have affected Crotch's bumble bee populations (Xerces Society et al. 2018; CDFW 2019). The petitioners for the listing estimated a 97.7% decline in the abundance of the species in California from the historical period (1805–2001) to the recent period (2002–2012), and Koch et al. (2012, as cited in CDFW 2019) consider the species to be uncommon. However, many recent occurrences have been added to CNDDDB since 2019.

The State-Certified EIR did not address Crotch's bumble bee, as the species had no special status at the time the document was prepared and did not become a candidate for state listing until June 2019. For the same reason, no focused surveys were conducted for the species prior to 2010. Dudek conducted a preliminary assessment and survey for Crotch's bumble bee floral resources and for Crotch's bumble bees in 2024. Although the species was identified on the Entrada South Project Site in 2024, biologists conducting other wildlife surveys in the RMDP/SCP area, including spineflower insect pollinator surveys and focused butterfly surveys, did not report Crotch's bumble bee in the area, including on the Entrada South Project Site or in the RMDP/SCP area in conjunction with other wildlife surveys (Jones et al. 2004; Dudek 2012h, 2020b; RECON 1999; Compliance Biology 2004b, 2004c, 2004d, 2005). However, bumble bee species, including Crotch's bumble bee, can be difficult to visually identify to species level in the field, so it is possible the species was observed but not identified. The CNDDDB includes an occurrence for Crotch's bumble bee from 1970, mapped generally and with an accuracy of only 1 mile, south of the RMDP/SCP area, approximately at the edge of the Legacy Village Project Site, along Pico Canyon Road (CDFW 2024). A second occurrence, from 1962 and mapped generally as "Castaic," was from as near as 1.4 miles north of the RMDP/SCP area. However, a more recent occurrence involved a female photographed 4.2 miles south southeast of the Project Site in 2017. A cluster of four occurrences from 2020 are from approximately 9.0 miles southwest of the Project Site. The CNDDDB includes two additional occurrences prior to 1970 and between 7.0 and 10.0 miles from the Entrada South Project Site (CDFW 2024). Crotch's bumble bee was first identified on the Entrada South Project Site during focused surveys on July 11 and 12, 2024, when a total of 14 were observed at two general locations. All were foraging on or near blue elderberry (*Sambucus mexicana*), California buckwheat



(*Eriogonum fasciculatum*), Mexican whorled milkweed (*Asclepias fascicularis*), or purple sage (*Salvia leucophylla*) (Figure 10b; Dudek, 2024b). No nests were found. The Crotch's bumble bees were found in disturbed land just north of California sagebrush–California buckwheat and in California sagebrush scrub.

The Entrada South Project Site supports 253,7 acres of native vegetation communities and non-native grassland that may be suitable for Crotch's bumble bee, depending on the presence of suitable nesting microhabitats and floral resources. Entrada South Project Site foraging is likely be limited to areas supporting adequate floral resources that include plant species suitable for feeding by this species. Several common species in the genera cited as potential food plants have been documented on site, including milkweed species (*Asclepias californica*, *A. eriocarpa*, *A. fascicularis*), pincushion species (*Chaenactis artemisiifolia*, *C. glabriuscula*), lupine species (*Lupinus bicolor*, *L. excubitus* var. *hallii*, *L. formosus* var. *formosus*, *L. hirsutissimus*, *L. microcarpus* var. *densiflorus*, *L. microcarpus* var. *microcarpus*, *L. microcarpus*, *L. sparsiflorus*, *L. succulentus*, *L. truncatus*), burclover (*Medicago polymorpha*), phacelia species (*Phacelia cicutaria*, *P. distans*, *P. imbricata* var. *imbricata*, *P. minor*, *P. ramosissima*, *P. tanacetifolia*), deerweed (*Acmispon glaber*), California buckwheat, and sage species (*Salvia apiana*, *S. columbariae*, *S. leucophylla*, *S. mellifera*). Specific mapping of these common potential food plants has not been conducted, although general locations of floral resources were noted during reconnaissance surveys in 2024 (Dudek 2024b). More importantly, microhabitats that could support nesting, described above, have not been mapped, and may occur at different locations from year to year, and these microhabitats could occur in any non-developed land cover occurring on site.

Although Crotch's bumble bee was not analyzed in the State-Certified EIR, and its life cycle is different from those of other invertebrate species analyzed in the EIR, it likely occupies vegetation communities similar to those occupied by several special-status terrestrial vertebrate species addressed. These include a reptile species, Blainville's horned lizard (*Phrynosoma blainvillii*) (=coast horned lizard [*Phrynosoma coronatum*]), that occupies scrub and grassland communities, and two bird species, burrowing owl and grasshopper sparrow; all three of these are California Species of Special Concern that occupy grasslands and some other relatively open scrub habitats that support potential food plants for Crotch's bumble bee.

### 5.3.2.2 Arroyo Chub

Arroyo chub is a California Species of Special Concern and Los Angeles County (LA County) sensitive species that is native to several streams from San Diego County north to Los Angeles County, and is introduced in other Southern California streams, including the Santa Clara River. It occurs in slow-moving or backwater segments of warm to cool streams with mud or sand substrates. Prior to the analysis for the State-Certified EIR, the species was recorded throughout the reach of the Santa Clara River within the RMDP/SCP area, where it is considered introduced, prior to preparation of the State-Certified EIR. The most recent surveys (in 2005) at the time of the State-Certified EIR preparation found the arroyo chub to be the most dominant fish species throughout the area (ENTRIX 2009). Surveys in 2014 found it still to be common, present at 9 of 27 sample locations in the Santa Clara River within the Specific Plan area (Cardno 2015a). No aquatic habitat that could support arroyo chub occurred within the Entrada South Project Site at the time the State-Certified EIR was prepared. This remains true, and arroyo chub does not occur within the Modified Project Site. Overall, the status of arroyo chub relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.

### 5.3.2.3 Santa Ana Sucker

Santa Ana sucker is a federally listed threatened fish species within its range in the San Gabriel, Santa Ana, and Los Angeles River basins (50 CFR 17.11), but is a California Species of Special Concern elsewhere in its current range. It is also an LA County sensitive species. At the time of the analysis for the State-Certified EIR, the species was not believed to be native to the Santa Clara River. However, an unpublished study recently found that the population in the Santa Clara River east of the Dry Gap near the Piru Creek confluence is genetically distinct from known native populations, suggesting the species was not introduced in the vicinity of the Entrada South Project Site and nearby reaches of the Santa Clara River in the past century, as previously thought (Richmond et al. 2016a, 2016b). In the most recent recovery plan for the species, USFWS acknowledged the unpublished Richmond et al. (2016a, 2016b) study, but noted that the current listing applies only to the previously listed populations, and that the listing of the Santa Clara River population in Los Angeles County would have to be evaluated through a separate rulemaking process under the federal ESA (USFWS 2017). Therefore, where the species occurs in the Santa Clara River in the vicinity of the Entrada South Project Site, as described below, it is not listed under the ESA, although it retains the California and LA County sensitivity designations. Santa Ana sucker had been documented throughout the Santa Clara River within the RMDP/SCP area. In 2005, ENTRIX (2009) found that the Santa Ana sucker was common within the Specific Plan area of the RMDP. Surveys from Salt Creek Canyon upstream to The Old Road Bridge along the Santa Clara River, for example, collected approximately 100 Santa Ana suckers (ENTRIX 2009). Since the analysis in the State-Certified EIR, the species was found widely distributed in the River throughout the Specific Plan area in 2015 (Cardno 2015a). No aquatic habitat that could support Santa Ana sucker occurred within the Entrada South Project Site at the time the State-Certified EIR was prepared. This remains true, and Santa Ana sucker does not occur within the Modified Project Site. Overall, the status of Santa Ana sucker relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.

### 5.3.2.4 Southern Steelhead

Southern steelhead refers to a distinct population segment (DPS) of steelhead (an oceangoing, or anadromous, form of rainbow trout) that is federally listed as endangered and is an LA County sensitive species. In addition, California Trout (2021) petitioned the California Fish and Game Commission (CFGF) in June 2021 to list southern steelhead, or “Southern California steelhead,” as endangered under the CESA. If the CFGF determines that listing may be warranted and accepts the petition for further consideration, the species will be considered a CESA candidate species until CFGF issues its finding on whether listing is warranted. Southern steelhead spends most of its life at sea but breeds in streams throughout Southern California north to Santa Barbara County. Critical habitat was designated for the species in 2005 (70 FR 52488–52627). Critical habitat included the Santa Clara River from the confluence with Piru Creek (west of the Specific Plan area) westward to the Pacific Ocean. In 2000, the National Marine Fisheries Service, the agency responsible for recovery of southern steelhead, had clarified the species’ status in the Santa Clara River, stating that “the Santa Clara River basin upstream from its confluence with Piru Creek is unlikely to be occupied or accessible to steelhead,” providing the justification for excluding the upper part of the basin from critical habitat (Lecky, pers. comm., 2000). No additional evidence since 2010 has suggested that steelhead occurs in the Santa Clara River upstream of Piru Creek. In addition, no aquatic habitat that could support southern steelhead occurred within the Entrada South Project Site at the time the State-Certified EIR was prepared. This remains true, and southern steelhead does not occur within the Modified Project Site. Overall, the status of southern steelhead relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.

### 5.3.2.5 Unarmored Threespine Stickleback

Unarmored threespine stickleback is a state-listed and federally listed endangered fish species, a state fully protected species, and an LA County sensitive species. The species generally may occur anywhere in the Santa Clara River within the RMDP/SCP area. It was observed during surveys within the Santa Clara River portion of the Specific Plan area in 1988, 1995, 2000, 2002–2005, and 2007 (Aquatic Consulting Services 2002a, 2002b, 2002c, 2002d; ENTRIX 2009; Haglund 1989; Haglund and Baskin 2000; SMEA 1995; Impact Sciences 2003a, 2003b, 2003c). The State-Certified EIR did not quantify the species habitat, which occupies a small portion of the wetland/riparian habitat in the Santa Clara River and has high temporal variability. No aquatic habitat that could support unarmored threespine stickleback occurred within the Entrada South Project Site at the time the State-Certified EIR was prepared. This remains true, and unarmored threespine stickleback does not occur within the Modified Project Site. Overall, the status of unarmored threespine stickleback relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.

### 5.3.2.6 Arroyo Toad

The arroyo toad is an amphibian species that is listed as endangered under the ESA, is a California Species of Special Concern, and is an LA County sensitive species. It occurs along low-gradient streams in coastal and desert drainages as well as high-elevation valleys. It uses aquatic, riparian, and upland habitats to different degrees depending on an individual's stage of development, the time of year, and the weather. When not occupying aquatic breeding habitat, most individuals remain on sandy terraces adjacent to breeding habitat. Smaller numbers of juveniles and adults range widely into surrounding upland habitats and may move up to 1 kilometer (0.6 miles) or more from breeding sites (Holland and Sisk 2001; Bloom 2007).

As reported in the State-Certified EIR, arroyo toad tadpoles were observed in the Specific Plan area during surveys conducted in 2000, within the Santa Clara River, upstream and downstream of the proposed Commerce Center Drive Bridge site and near the Valencia Water Treatment Plant (Aquatic Consulting Services 2002a, 2002b, 2002c, 2002d). Farther upstream of the Specific Plan area, arroyo toads were known from various locations along the Santa Clara River and its tributaries east of I-5, including an arroyo toad adult that was captured and released in the Santa Clara River just east of I-5 in 1994 (CDFW 2024). Additional occurrences were from Castaic Creek both above and below the Castaic Lake Reservoir, observations of adults and eggs near the confluence of the Santa Clara River and San Francisquito Creek from 2001 to 2003, several locations along San Francisquito Creek, and a report from Soledad Canyon in 2001 (70 FR 19562–19633; unpublished notes sent to USFWS; Impact Sciences 2002; Sandburg 2001). Surveys in other portions of the RMDP/SCP area since 2010 have resulted in no additional observations of arroyo toad (Compliance Biology 2014; Dudek 2012f, 2014b). Although arroyo toad tadpoles were detected in the RMDP/SCP area, the State-Certified EIR, based on the Impact Sciences (2002) habitat suitability analysis, determined that no areas of suitable habitat occurred on the Entrada South Project Site, which is separated from the Santa Clara River and suitable aquatic habitat at its closest point by approximately 0.24 miles (approximately 1,250 feet). Extensive intervening development associated with The Old Road and Magic Mountain Parkway, as well as disturbed lands, occupy most of the upland areas between the Entrada South Project Site and the Santa Clara River, likely precluding arroyo toads from accessing the Entrada South Project Site for aestivation during the non-breeding season. Therefore, arroyo toad is not expected to occur within the Modified Project Site. Overall, the status of arroyo toad relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.



### 5.3.2.7 Western Spadefoot

The western spadefoot is a California Species of Special Concern and LA County sensitive species that is also proposed for listing under the ESA (88 FR 84252–84278). It occurs in lowlands and some foothill and mountain habitats across much of Central and Southern California. As described in the State-Certified EIR, the species is known to be present in the RMDP/SCP area. Although the species was not recorded on the Entrada South Project Site, it was considered likely in the State-Certified EIR that western spadefoot occurred at locations in the RMDP/SCP area other than where they had been observed at the time, including the Entrada South Project Site. Because western spadefoot is associated with specific microhabitats, their total suitable habitat on site was not quantified in the State-Certified EIR. Since 2010, focused surveys of the entire area within the Entrada South tract boundary failed to confirm presence of western spadefoot in 2012, a year of low rainfall (Compliance Biology 2012). However, western spadefoot egg masses and tadpoles were observed at the western boundary of the Entrada South Project Site during pre-construction surveys for the adjacent Mission Village Project, in an area since developed as a result of that project, with mitigation provided under requirements of the State-Certified EIR (Compliance Biology 2017b). Western spadefoot was assumed to be present in the State-Certified EIR and is still assumed to be present. Overall, therefore, the status of western spadefoot on the Entrada South Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.8 California Glossy Snake

The California glossy snake was designated as a California Species of Special Concern by CDFW in 2016 (Thomson et al. 2016), after the analysis for the State-Certified EIR. Because of its lack of regulatory status in 2010, it was not analyzed in the State-Certified EIR. The California glossy snake occurs primarily in grasslands, fields, coastal scrub, and chaparral. It is largely nocturnal and preys mostly on lizards and small mammals, but also on small birds and other snakes (Rodriguez-Robles et al. 1999). No focused surveys have been conducted for this species in the RMDP/SCP area, and no focused terrestrial reptile surveys were conducted on the Entrada South Project Site prior to 2010. In addition, the mostly daytime surveys conducted to record other resources were unlikely to result in observations of California glossy snake, even if present, due to its primarily nocturnal activity. However, pitfall surveys for terrestrial reptiles, which are designed to capture a variety of reptile species, were conducted in the Specific Plan area in September and October 2004 and August 2006. More recently, pre-construction special-status reptile pitfall surveys for the Mission Village Project (Impact Sciences 2015b, 2017) overlapped a portion of the Entrada South Project Site and had the potential to result in captures of this species if it were present, but none were captured. The California Natural Diversity Database (CDFW 2024) includes five occurrences within 5.0 miles east and north of the Entrada South Project Site, but none since 1946. Therefore, the species likely is not common on the Entrada South Project Site or in the vicinity. However, the Entrada South Project Site supports 234.2 acres of suitable grassland, coastal scrub, and chaparral habitat, and thus the species has the potential to occur in these areas. Although California glossy snake was not analyzed in the State-Certified EIR, the other special-status reptile species analyzed in the State-Certified EIR occur in some or all of the habitats potentially occupied by California glossy snake, including San Bernardino ringneck snake (*Diadophis punctatus modestus*), San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), and Blainville's horned lizard. The latter three of these species, like California glossy snake, are California Species of Special Concern. Because the State-Certified EIR assumed that these species were likely present in suitable habitats on the Entrada South Project Site, California glossy snake should similarly be assumed to be present in the grassland, coastal scrub, and chaparral communities on the Entrada South Project Site.

### 5.3.2.9 California Legless Lizard

The California legless lizard (*Anniella* spp.) refers to several species that were formerly known as “silvery legless lizard” (*Anniella pulchra*). All legless lizard species are California Species of Special Concern, and those occurring in Los Angeles County are considered LA County sensitive species. The State-Certified EIR analyzed the then-recognized subspecies *A. pulchra pulchra*. After the RMDP/SCP EIS/EIR was prepared in 2010, Papenfuss and Parham (2013) proposed a taxonomic revision for legless lizards that named four new species, which was later accepted by CDFW. While it is unknown which of these four new species occurs in the RMDP/SCP area because discrete geographic boundaries have not been established, it is likely either the Southern California legless lizard (*Anniella stebbinsi*) or the Northern California legless lizard (*Anniella pulchra*). In any case, the species present is special status and arguably more sensitive than was recognized in 2010 due to a splitting of the species, smaller geographic ranges, and possibly a higher threat of habitat loss. Legless lizards occur primarily in areas with sandy or loose soils, where they typically are found beneath leaf litter. They occur in a variety of sparsely vegetated habitats, including stabilized dunes, beaches, dry washes, chaparral, scrubs, and pine, oak, and riparian woodlands. Prior to preparation of the State-Certified EIR, limited focused surveys for legless lizards were conducted, and none were conducted within the Entrada South Project Site. However, legless lizards are known to be present in riparian, scrub, and woodland habitats in the vicinity of the Entrada South Project Site. Suitable habitat in the RMDP/SCP area was considered to include upland woodlands (i.e., valley oak woodland, California walnut woodland), river wash, riparian scrub (i.e., arrow weed scrub, big sagebrush scrub, mulefat scrub, southern willow scrub, alluvial scrub, big sagebrush–California buckwheat, blue elderberry, and shrub tamarisk), riparian woodland (i.e., southern cottonwood–willow riparian forest, southern coast live oak riparian forest), chaparral (i.e., undifferentiated chaparral, chamise chaparral, scrub oak chaparral), and California sagebrush scrub habitats (i.e., California sagebrush scrub and associations, California sagebrush–black sage, California sagebrush–California buckwheat scrub, California sagebrush scrub–undifferentiated chaparral). While no legless lizards were detected within the Entrada South Project Site prior to 2010, the site supported approximately 195.3 acres of habitat that was potentially suitable for legless lizard. Since the analysis for the State-Certified EIR, legless lizards have been observed on the Entrada South Project Site and at additional locations in the RMDP/SCP area. During focused terrestrial reptile surveys conducted for the Mission Village Project, one California legless lizard was observed in Magic Mountain Canyon, within the Entrada South Project disturbance footprint, in 2015, and two were observed at different locations within the Entrada South Project Site in 2017 (Impact Sciences 2015b; Compliance Biology 2017a). California legless lizards were also observed elsewhere in the RMDP/SCP area. Based on current vegetation mapping, the Entrada South Project Site supports 195.8 acres of habitat potentially suitable for California legless lizard, which is essentially the same (an increase of 0.5 acres) as mapped previously. Although the number and distribution of occurrences within the RMDP/SCP area has increased substantially since the analysis for the State-Certified EIR, and the species has been confirmed on the Entrada South Project Site, the State-Certified EIR assumed that the species was present, which the new observations confirm. Therefore, the status of California legless lizard in the RMDP/SCP area relative to the Entrada South Project Site has not changed significantly from that described in the State-Certified EIR.

### 5.3.2.10 Southwestern Pond Turtle

When the State-Certified EIR was prepared in 2010, the southwestern pond turtle (*Actinemys marmorata pallida*) was a recognized subspecies of the western pond turtle (*A. marmorata*). Although CDFW considers this former subspecies and the northwestern pond turtle (*Actinemys marmorata*) to be a single species, the western pond turtle, USFWS recently has designated both as species, and both are now proposed for listing as threatened under ESA (88 FR 68370–68399). Therefore, it will be referred to as southwestern pond turtle in this discussion. The

southwestern pond turtle is also a California Species of Special Concern. The southwestern pond turtle requires aquatic habitat, but also requires adjacent upland habitat for nesting, for overwintering, and as refuge during severe flooding. Suitable wetland/riparian habitat in the RMDP/SCP area for this species is located along the Santa Clara River. Also, the State-Certified EIR identified areas of both wet refugia (within the 100-year floodplain) and dry refugia (upland areas adjacent to the 100-year floodplain that would be available for pond turtles to escape severe flood events). The State-Certified EIR specifically identified the Homestead South, Landmark Village, and Mission Village Project Sites as supporting upland habitats, but did not quantify these habitats for these villages or elsewhere within the RMDP/SCP area. At the time of the analysis for the State-Certified EIR, southwestern pond turtles had been observed at locations along the Santa Clara River and in Salt Creek (Aquatic Consulting Services 2002a, 2002c, 2002d; Impact Sciences 2001, 2002; Compliance Biology 2004a; Ecological Sciences 2004; Dudek & Associates 2006c; Carpenter, pers. comm., 2009). No southwestern pond turtles had been observed in upland habitat that was not immediately adjacent to aquatic habitat. Since 2010, additional southwestern pond turtles have been observed in these same areas. In addition, a study was conducted in 2014 in which turtles occupying aquatic habitats along the Santa Clara River were fitted with GPS transmitters to determine the upland movements of these turtles during potential nesting forays. The study recorded relatively limited use of upland habitat, with only three of nine turtles nesting in upland habitat, and none of these three apparently nesting more than approximately 80 meters (about 260 feet) from aquatic habitat (Cardno 2015b). At the time of the analysis for the State-Certified EIR, the Entrada South Project Site was separated from the Santa Clara River and suitable aquatic habitat at its closest point by approximately 0.24 miles (approximately 1,250 feet). Extensive intervening development associated with The Old Road and Magic Mountain Parkway, as well as disturbed lands, occupied most of the upland areas between the Project Site and the Santa Clara River, precluding southwestern pond turtles from accessing the Entrada South Project Site. This remains true, and southwestern pond turtle is not expected to occur within the Modified Project Site. Overall, the status of southwestern pond turtle relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.

### 5.3.2.11 Burrowing Owl

Burrowing owl is a federal Bird of Conservation Concern, a California Species of Special Concern, and an LA County sensitive species. In California, it typically inhabits annual and perennial grasslands and scrublands characterized by low-growing vegetation and may occur in areas that include trees and shrubs if the cover is less than 30% (CBOC 1993). Burrowing owls also require the availability of mammal burrows of suitable size, which they use for nesting and shelter (Coulombe 1971). Although breeding burrowing owls in the Entrada South Project region are typically non-migratory, most burrowing owls in the more northerly parts of their breeding range vacate breeding areas for the winter, and some of these winter in California. At the time of the analysis for the State-Certified EIR, the Entrada South Project Site supported 106.7 acres of habitat suitable for burrowing owl breeding or wintering. Although no focused burrowing owl surveys had been conducted in the RMDP/SCP area at the time of analysis for the State-Certified EIR, the species is readily detected when present, and numerous biological surveys had been conducted in upland communities across the RMDP/SCP area. No burrowing owls were observed on the Entrada South Project Site prior to analysis for the State-Certified EIR. Since 2012, focused burrowing owl surveys have been conducted on several occasions for the Mission Village Project, with each of these surveys including a large area of overlap with the Entrada South Project Site (Dudek 2012h, 2014c; Impact Sciences 2015a; Compliance Biology 2017a). No burrowing owls and no burrows with sign (evidence of use) of burrowing owl were observed during any of these surveys. In addition, although burrowing owl is a species readily detected when aboveground, as well as easily identified, no burrowing owls have been detected during other biological surveys conducted on the Entrada South Project Site. The State-Certified EIR assumed that burrowing owl could occasionally occur in the RMDP/SCP area, including the Entrada South Project Site, for wintering and migration, but because the site is within its breeding

range, the analysis also assumed that burrowing owl could nest on the Entrada South Project Site. The results cited above for the RMDP/SCP area, including the Entrada South Project Site, generally reinforce these assumptions. The tract boundary has not changed since the analysis for the State-Certified EIR, and vegetation data has changed only minimally, with 106.6 acres of suitable habitat now occurring within the Entrada South Project Site according to the most recent data, compared to 106.7 acres in 2010 (Table 2). Therefore, the overall status of burrowing owl relative to the Entrada South Project Site has not changed significantly from that reported in the State-Certified EIR.

### 5.3.2.12 California Condor

California condor is federally and state listed as endangered, is a state fully protected species, and is an LA County sensitive species. California condors require vast expanses of open savanna, grasslands, and foothill chaparral, with cliffs, large trees, and snags for roosting and nesting (Zeiner et al. 1990a). As opportunistic scavengers, California condors travel up to 225 kilometers (140 miles) per day (Koford 1953; Wilbur 1978; Meretsky and Snyder 1992; Snyder and Snyder 2000). The California condor requires an adequate food supply, open habitat in which food can readily be found and accessed, and reliable air movements that allow extended soaring flight (Finkelstein et al. 2015). The State-Certified EIR concluded that California condors were not likely to nest in the RMDP/SCP area, including on the Entrada South Project Site, because of the absence of suitable nesting habitat (cliffs and large trees), but acknowledged that they may occasionally forage in the RMDP/SCP area, and that the use of the area by the species was likely to increase. The State-Certified EIR determined that suitable foraging habitat was present in the upper regions of the High Country Special Management Area (SMA) and the Salt Creek area, where suitable carrion (cattle, deer) may occur. Although the species was considered unlikely to forage on the Entrada South Project Site, it was determined that condors could forage opportunistically for large mammal carcasses anywhere in the RMDP/SCP area, including the Entrada South Project Site. No California condors had been observed on the Entrada South Project Site at the time of the analysis for the State-Certified EIR, but California condors had been observed in Potrero Canyon twice, in April 2008 and January 2009. Five condors were observed feeding on a dead calf on the latter date (Niemela, pers. comm., 2009). Also, several condors fitted with GPS transmitters had been recorded landing on Newhall Ranch between April and July 2008 (Root 2008). USFWS supplied flight data from GPS transmitters in 2009 showing that condors flew frequently over the RMDP/SCP area while moving between the Sespe Wilderness and the San Gabriel Mountains. Flight data for the 2005–2021 period also show regular condor flights over the RMDP/SCP area, when the species moves between the Sespe Wilderness area and the San Gabriel Mountains. However, few of those fitted with transmitters flew over the Entrada South Project Site. None flew directly over the site in 2015, 2017, 2018, or 2019, or 2021, but one flew over the site in April 2020 (USGS 2023). In addition, flights in the vicinity are generally at high altitude and not for the purpose of foraging in the vicinity of the Project Site. However, condors landed in the RMDP area on several occasions west of the Entrada North Project Site in 2017, once in 2018, and at least once in 2019, reconfirming their opportunistic use of the area (Figure 11, California Condor). Nonetheless, the potential for California condors to forage opportunistically in the RMDP/SCP area, including on the Entrada South Project Site, when large mammal carcasses are available remains unchanged. Overall, the status of California condor relative to the Entrada South Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.13 Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally listed threatened species, a California Species of Special Concern, and an LA County sensitive species. The northern limit of the species' range is in Ventura and northern Los Angeles counties. Coastal California gnatcatcher occurs in or near sage scrub habitat that is composed of relatively low-growing, dry-season deciduous and succulent plants. Characteristic plants of this community include California

sagebrush (*Artemisia californica*), various species of sage (*Salvia* spp.), California buckwheat, lemonade berry (*Rhus integrifolia*), California brittle bush (*Encelia californica*), and cactus. Coastal California gnatcatchers also occur in chaparral, grassland, and riparian habitats where sage scrub is adjacent (Bontrager 1991). Numerous surveys for upland birds were conducted from 1995 to 2008, and focused surveys for coastal California gnatcatchers were conducted in several locations. At the time of the analysis for the State-Certified EIR, coastal California gnatcatchers had been recorded only twice in the RMDP/SCP area, both during construction monitoring, in the VCC planning area on October 5, 2007, and along Del Valle Road in Chiquita Canyon from August 8 to August 15, 2008. No coastal California gnatcatchers were observed on the Entrada South Project Site prior to 2010, although suitable habitat occurs on the site and elsewhere in the RMDP/SCP area. Approximately 153.6 acres of suitable coastal scrub communities occurred on the Entrada South Project Site at the time of the State-Certified EIR analysis, according to vegetation data at the time. Since 2010, focused protocol surveys for coastal California gnatcatcher have been conducted at several RMDP/SCP villages, including on the Entrada South Project Site in 2012, 2015, 2018, 2019, and 2022 (Dudek 2012i, 2015d, 2018b; Compliance Biology 2019, 2022a). A juvenile coastal California gnatcatcher was observed along the southern edge of the Entrada South Project Site on May 6, 2015. This individual was observed on only one of the six survey visits and was believed to be moving through the Entrada South Project Site (Dudek 2015d). One was also observed during surveys for Southern California Edison work within the Entrada South Project Site in June 2024 (Knight, pers. comm., 2024). No coastal California gnatcatchers were observed on the Entrada South Project Site during surveys in 2012, 2018, 2019, and 2022 (Dudek 2012i, 2018b; Compliance Biology 2019, 2022a). Although surveys elsewhere have resulted in no evidence of nesting by coastal California gnatcatchers, focused surveys in 2012 resulted in observations of a pair in the northern part of the Mission Village Project Site, approximately 0.7 miles north-northwest of the Entrada South Project Site, including an observation of a single male on June 1, 2012, and both the male and female June 13, June 20, and June 29, 2012 (Dudek 2012i). During all observations, the pair foraged together, but did not exhibit breeding behavior. A juvenile coastal California gnatcatcher was also observed on June 11, 2015, on the Legacy Village Project Site, approximately 0.25 miles southwest of the Entrada South Project Site, and about 0.8 miles southwest of where a juvenile had been observed on the Entrada South Project Site the previous month (Dudek 2015e). Like the juvenile on the Entrada South Project Site, the one on the Legacy Village Project Site was detected during only one of the six surveys. An individual observed in the west-central part of the Entrada South Project Site in late June 2024 was also observed only once (Knight, pers. comm., 2024). These results indicate that, although the Entrada South Project Site is considered to have potential to support coastal California gnatcatchers on occasion, it does not currently support a population or breeding pairs of the species. Suitable habitat occurs on the Entrada South Project Site, based on the most recent vegetation mapping, with 150.8 acres of habitat available to coastal California gnatcatchers. This constitutes a minor decrease of 2.7 acres of suitable habitat. However, the status of the species remains approximately the same as prior to 2010, with the Entrada South Project Site supporting suitable habitat but no resident population of the species, although the occurrence from 2015 confirms that the species occurs there on occasion. Overall, the status of coastal California gnatcatcher relative to the Entrada South Project Site has not changed significantly from the information presented in the State-Certified EIR.

#### 5.3.2.14 Least Bell's Vireo

Least Bell's vireo is federally and state listed as endangered, is a California Species of Special Concern, and is an LA County sensitive species. As a breeding migrant, it is present in the RMDP/SCP area, primarily along the Santa Clara River and Castaic Creek, during the breeding season from approximately March through August or the first part of September. Least Bell's vireos primarily nest in riverine riparian habitats along water, including dry portions of intermittent streams, that typically provide dense cover within 1 to 2 meters (3.3 to 6.6 feet) of the ground, often adjacent to a complex, stratified canopy. In addition to nesting and foraging in riparian habitats, they



may also forage in adjacent upland habitats. USFWS designated critical habitat for the least Bell's vireo on February 2, 1994 (59 FR 4845–4867). The Santa Clara River critical habitat unit includes all land within a 3,500-foot-wide zone along the Santa Clara River south of SR-126, from near Piru east to the intersection of SR-126 and The Old Road. Critical habitat does not occur on the Entrada South Project Site.

Since riparian bird surveys have been conducted along the Santa Clara River and Castaic Creek dating back to the 1988, the RMDP/SCP area has sustained a substantial breeding population of least Bell's vireo, particularly with a significant expansion in the 1990s. For example, the 1998 Biological Opinion (USFWS 1998) for the Natural River Management Plan (NRMP), which overlaps the eastern portion of the RMDP/SCP area east of the Castaic Creek confluence, noted that numbers of least Bell's vireos along the Santa Clara River in the NRMP area had risen steadily from 1991 (12 pairs) to 1997 (40 pairs). After the Biological Opinion was issued in 1998 through surveys in 2008, a consistently large least Bell's vireo breeding population was present in the RMDP/SCP area in the Santa Clara River extending west to the Ventura County line. Based on the protocol surveys from 2011 through 2024, as well as the many surveys before 2011, breeding least Bell's vireos have remained consistently common along the Santa Clara River west of I-5 in both the NRMP and RMDP/SCP areas. However, the Entrada South tract boundary is 0.24 miles (approximately 1,250 feet) from suitable nesting habitat in the Santa Clara River at its nearest point. As shown in Table 2, the Entrada South Project Site does not support suitable breeding habitat for the species, and no least Bell's vireos have been detected on the Entrada South Project Site, so the species is not expected to occur on site. Overall, the status of least Bell's vireo in the RMDP/SCP area relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.

### 5.3.2.15 Southwestern Willow Flycatcher

Southwestern willow flycatcher is federally and state listed as endangered and is an LA County sensitive species. Migrating willow flycatchers, presumably including subspecies other than the southwestern willow flycatcher that do not nest in the region, arrive in the RMDP/SCP area in May and early June, primarily occurring along the Santa Clara River and Castaic Creek. Willow flycatchers migrating through the RMDP/SCP area may use a greater variety of habitats than riparian habitat where breeding occurs, but non-breeding individuals vacate the area by the end of June. Breeding pairs are present on their breeding grounds until August. Any breeding pairs in the RMDP/SCP area would be the southwestern willow flycatcher subspecies. Willow flycatchers have been detected almost every year during surveys of suitable habitat in the RMDP/SCP area and NRMP area through 2008, but none stayed beyond this migratory period. In surveys conducted between 1988 and 2008 prior to the analysis for the State-Certified EIR, no observations of nesting, paired, or territorial southwestern willow flycatchers had been documented within the RMDP/SCP area, or immediately upstream in the NRMP area, which extends well east of I-5 along the Santa Clara River, San Francisquito Creek, and South Fork. Based on protocol surveys conducted since the State-Certified EIR, numbers of willow flycatchers detected varied greatly between 2011 and 2024, with none observed in 2011 and high numbers of migrants observed in other years, such as 2012, when 15 migrants were observed, and 2018, when 14 migrants were observed (Bloom Biological 2011, 2012; Woodstar Biological 2018). Overall, based on the protocol surveys from 2011 through 2024, the numbers of migrating willow flycatchers in any given year have remained fairly consistent along the Santa Clara River and other surveyed areas compared to numbers during surveys from 1988 to 2008.

Prior to 2010, critical habitat for southwestern willow flycatcher had not been designated in the RMDP/SCP area. However, the USFWS revised critical habitat for the southwestern willow flycatcher on January 3, 2013 (78 FR 343–534). Critical habitat in the Coastal California Recovery Unit and within the 14,525-acre Santa Clara Management Unit included 3 miles of Castaic Creek and 46.7 miles of Santa Clara River, including all of the Santa Clara River

within the RMDP/SCP area and east to I-5 (78 FR 363). Although suitable habitat in the RMDP/SCP area and east within the NRMP area to I-5 is designated critical habitat for southwestern willow flycatchers, none have been confirmed to nest anywhere in this portion of the River. Critical habitat for southwestern willow flycatcher does not occur on the Entrada South Project Site.

At the time of the analysis for State-Certified EIR, no suitable nesting habitat for southwestern willow flycatcher occurred on the Entrada South Project Site, and no willow flycatchers had been observed there. This remains true, so the status of this species has not changed, and it is not expected to occur on site. Overall, the status of southwestern willow flycatcher in the RMDP/SCP area relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.

### 5.3.2.16 Tricolored Blackbird

Tricolored blackbird is a state-listed threatened species, a federal Bird of Conservation Concern, a California Species of Special Concern, and an LA County sensitive species that is nearly endemic to California. It is under review for listing under the ESA (80 FR 56423–56432). The species was listed under CESA on April 19, 2018, so it was not listed at the time of the analysis of the State-Certified EIR. The tricolored blackbird usually breeds in freshwater marshes with dense growths of emergent vegetation dominated by cattails (*Typha* spp.) or bulrushes (*Schoenoplectus* spp.), but breeding colonies also occur in willows (*Salix* spp.), blackberries (*Rubus* spp.), thistles (*Cirsium* and *Centaurea* spp.), nettles (*Urtica* spp.), and triticale fields and other irrigated grain fields. It forages in open habitats such as grassland, woodland, and croplands, with most foraging within 3.1 miles of breeding colonies (County of Riverside 2008). During the breeding season, the species depends on large insect prey (e.g., grasshoppers, beetles) to feed young. In other seasons, it relies on plant material, primarily seeds of rice, other grains, and weeds. At the time of the State-Certified EIR analysis, tricolored blackbird breeding colonies had been observed at two locations in 1994: approximately 200 breeding pairs in a small marsh area along the side of the Santa Clara River at the Castaic Junction east of the RMDP/SCP area, and a colony of about 20 breeding pairs beside Castaic Creek within the VCC Project Site, nesting in what appeared to be an old borrow pit left over from work on the flood control dikes (Guthrie 1994). No tricolored blackbirds had been observed on the Entrada South Project Site. Although the Entrada South Project Site included 106.7 acres of foraging habitat (grasslands, disturbed land, agriculture, herbaceous wetland) for tricolored blackbird at the time of the State-Certified EIR analysis, no nesting habitat was present. Since 2010, no focused surveys have been conducted for tricolored blackbird, although numerous bird surveys in the RMDP/SCP area have been conducted. No nesting, foraging, or wintering tricolored blackbirds have been observed at the Entrada South Project Site during these surveys. Despite the extensive annual biological surveys throughout the area, the only observation in the RMDP/SCP area was of a male perched in the Santa Clara River in Ventura County in June 2018. As the tract boundary for the Modified Project is the same as for the 2017 Approved Project, habitat availability is essentially unchanged on the Project Site. However, the most recent vegetation data show that the Project Site now supports a very small area of cattail marsh, approximately 0.04 acres (approximately 1,700 square feet) in size. Because of the small size of this area, and because larger areas of suitable nesting habitat are available in the vicinity of the Project Site, the likelihood of the species nesting here is low. In addition, tricolored blackbirds now have the potential to forage within 106.6 acres of the Entrada South Project Site, a minor decrease of 0.2 acres from the previous total. Although no focused surveys have been conducted for this species, it is highly visible when nesting and therefore would have been detected at this location if it nested here regularly. Additionally, because the species has not been observed on the Entrada South Project Site prior to 2010 or since, its status on site as a potential forager has not changed substantially. Overall, the status of tricolored blackbird in the RMDP/SCP area relative to the Entrada South Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.17 Western Yellow-Billed Cuckoo

Western yellow-billed cuckoo is federally listed as threatened and state listed as endangered, is a federal Bird of Conservation Concern, and is an LA County sensitive species. It was federally listed as threatened on October 3, 2014 (79 FR 59992–60038), after the analysis for the State-Certified EIR. Critical habitat for the western yellow-billed cuckoo was proposed on August 15, 2014 (79 FR 48548–48652), but final critical habitat has not been designated. The western yellow-billed cuckoo breeds in isolated locations around California, in large blocks of riparian habitat, particularly cottonwood–willow riparian woodlands (Laymon and Halterman 1989; 66 FR 38611–38626). No focused surveys were conducted prior to the analysis for the State-Certified EIR, but annual riparian bird surveys were conducted in the Specific Plan area, encompassing all parts of the Santa Clara River within the RMDP/SCP area, from 1988 to 2008. Only single individuals, thought to be migrants, were occasionally observed along the Santa Clara River in the RMDP/SCP area and vicinity during surveys for other riparian birds; these locations were not mapped. During surveys in 2011, 2012, 2014, 2015, 2016, 2017, 2019, 2021, 2022, and 2024, no western yellow-billed cuckoos were observed in the RMDP/SCP area or the NRMP area (Bloom Biological 2011, 2012, 2014, 2015, 2016; Woodstar Biological 2017, 2019a, 2019b, 2019c, 2021; Compliance Biology 2022b, 2022c, 2024). Using the 2015 USFWS survey protocol (Halterman et al. 2015), as modified by CDFW for a 2018 inventory for the Santa Clara River, no western yellow-billed cuckoos were observed in the RMDP/SCP area or the NRMP area, the Ventura survey area, or Castaic Creek (Woodstar Biological 2018). One western yellow-billed cuckoo was detected incidentally by observation during a non-protocol riparian bird survey in 2018, in the Santa Clara River east of I-5. At the time of analysis for the State-Certified EIR, the Entrada South Project Site supported no suitable habitat for western yellow-billed cuckoo, and no western yellow-billed cuckoos had been observed there. This remains true, and the species is not expected to occur on site. Overall, the status and likelihood of occurrence for western yellow-billed cuckoo in the RMDP/SCP area relative to the Entrada South Project Site has not changed from the information presented in the State-Certified EIR.

### 5.3.2.18 Cougar

The cougar (or mountain lion) is currently a regulated species in California and a candidate for listing under CESA. In June 2019 the Center for Biological Diversity and the Mountain Lion Foundation submitted a petition to the CFGC to list cougars of the Southern California/Central Coast Evolutionarily Significant Unit (ESU) as threatened under CESA (CBD and MLF 2019). On April 20, 2021, the CFGC found that listing may be warranted, and cougars within the ESU encompassing the Entrada South Project Site became a candidate species. This affords cougars the protections of a state endangered species until a final determination is made. Home ranges of cougars are quite variable in relation to season, sex, and resources. The home ranges of adult male cougars often span well over 100 square miles (e.g., Loft 1996). Cougars prefer habitats that provide cover, such as thickets in brush and timber in woodland vegetation (Zeiner et al. 1990b). They also use caves and other natural cavities for cover and breeding.

Cougars and their sign were observed on several occasions during surveys of the RMDP/SCP area prior to the analysis for the State-Certified EIR. No locations were provided for some observations, but the species was observed in the High Country SMA and in Middle Canyon, on the Mission Village Project Site (Impact Sciences 2005; Dudek & Associates 2006c; Huntley, pers. comm., 2008). The State-Certified EIR assumed that cougars could occur anywhere in the vicinity of the Entrada South Project Site where deer occur. A total of 195.3 acres of scrub, chaparral, riparian, oak woodland, and oak/grass were considered to be suitable for cougars on the Entrada South Project Site. However, the entire RMDP/SCP area (about 22 square miles) was considered not large enough to support a single individual's entire home range or more than two or three cougars with overlapping home ranges at any one time. Since 2010, cougar has been detected on the Entrada South Project Site through sign (tracks, scat)



during coastal California gnatcatcher surveys in 2012, and through a direct observation in 2019 (Dudek 2012i; Feenstra, pers. comm., 2019b). While unlikely to be essential to a cougar's home range, the Entrada South Project Site appears to be used on occasion. As noted in Section 5.3.3, Wildlife Corridors and Habitat Linkages, the Project Site has limited value as a wildlife corridor or habitat linkage for cougar. Based on current vegetation mapping, 195.8 acres of suitable habitat are present on the Entrada South Project Site. The tract boundary has not changed, the area of suitable habitat has changed minimally (an increase of 0.5 acres), and the State-Certified EIR assumed that the species could occur virtually anywhere on site. Therefore, despite the confirmation of the species on site, the status of cougar on the Entrada South Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.3 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear landscape elements that provide for species movement and dispersal between two or more habitats but do not necessarily contain sufficient habitat for all life history requirements of a species, particularly reproduction (Rosenberg et al. 1995, 1997). The main prerequisite for corridors is that they increase animal movement between habitat patches. This includes larger-scale movement of individuals of more mobile species. Also, while birds may use vegetated parts of these corridors to move across the landscape, they also may fly over any part of the landscape during migration, or even as part of more local movements. Corridors also provide opportunities for diffusion by smaller, less mobile species. "Diffusion" is the gradual movement or expansion of populations (as opposed to individuals) across a landscape over several generations and may be applicable, for instance, to nonmigratory small mammals, reptiles, or birds reoccupying recovering burned sites. Landscape habitat linkages (or simply linkages) are relatively large open space areas that contain natural habitat and provide connection between at least two larger adjacent open spaces that can provide for both diffusion and dispersal of many species. According to analysis in the State-Certified EIR, the High Country SMA and Salt Creek area within the RMDP/SCP area comprise an important part of the least-cost path linkage design identified by Penrod et al. (2006) (Figure 12, South Coast Wildlands Open Space Connectivity and Linkage). These areas are not within or adjacent to the Entrada South Project Site. The State-Certified EIR also identified 13 potential wildlife corridors, including the Santa Clara River and 12 additional corridors, that provided connections with the Santa Clara River and the High Country SMA and the Salt Creek area. These included Magic Mountain Canyon, which extended south from the Santa Clara River corridor along the west edge of the Entrada South Project Site and was identified as one of several "tributary corridors" that connect undeveloped uplands with the Santa Clara River (Figure 13, RMDP/SCP Existing Regional Wildlife Connectivity Corridors). The State-Certified EIR stated that, under then-existing conditions, Magic Mountain Canyon and other tributary corridors likely were used by most of the high- and moderate-mobility species for movement throughout the RMDP/SCP area, perhaps except for American black bear (*Ursus americanus*), but were subject to greater anthropogenic disturbances, such as cattle grazing, agriculture, and film production activities. Due to the development for the Mission Village Project, which was analyzed in the State-Certified EIR, Magic Mountain Canyon no longer serves as a corridor for high- and moderate-mobility species presumed to use this location in analysis for the EIR. This impact was identified in the State-Certified EIR as an effect of RMDP development. Thus, there are no identified habitat linkages or wildlife corridors within or in the vicinity of the Entrada South Project Site under current conditions. In addition, the potential value of the Entrada South Project Site for wildlife movement is limited because of existing development elsewhere adjacent to the Entrada South Project Site, including residential and golf course development to the south; The Old Road, I-5, and the City of Santa Clarita immediately to the east; the Six Flags Magic Mountain theme park immediately to the north; and the RMDP Mission Village Project development to the west. Because of this existing development, the Entrada South Project Site does not connect wildlife habitats. Given the substantial constraints on the site's ability to provide significant wildlife

movement opportunities, wildlife movement studies have not been conducted within the Entrada South Project Site subsequent to preparation of the State-Certified EIR.

In summary, the value of the Entrada South Project Site as a wildlife corridor or habitat linkage was already limited at the time of the State-Certified EIR analysis. Its value for wildlife movement has been reduced further compared to the existing condition described in the State-Certified EIR because of development associated with the Mission Village Project, which was analyzed in the State-Certified EIR and authorized under the RMDP and SCP permits. Thus, the current condition of the Entrada South Project Site with respect to wildlife movement value is consistent with the State-Certified EIR.

---

## 6 Effects of Modified Project

This chapter evaluates whether there would be any new significant environmental impacts to biological resources, or a substantial increase in the severity of previously identified significant effects, resulting from the incremental changes to the Modified Project (summarized in Chapter 3, Description of Modified Project), and/or from any new information or changed circumstances summarized in Chapters 4 and 5 of this Report.<sup>6</sup>

### 6.1 Impacts to Vegetation Communities, Land Covers, and General Wildlife

#### 6.1.1 Vegetation Communities and Land Covers

The State-Certified EIR included an analysis of the direct impacts of the 2017 Approved Project to vegetation communities and land covers. That analysis was a function of the vegetation community/land cover types mapped on the Entrada South Project Site and the development footprint of the 2017 Approved Project. The changes incorporated in the Modified Project would achieve a net reduction of 7.4 acres in the overall permanent disturbance footprint on the Entrada South Project Site compared to the 2017 Approved Project. This net reduction includes the elimination of permanent impacts within 2.1 acres that would have been impacted by the 2017 Approved Project, and new permanent impacts to 2.6 acres that would not have been impacted under the 2017 Approved Project. Specifically, the Modified Project would reduce the permanent development footprint compared to the 2017 Approved Project in the vicinity of Unnamed Canyon 2 by approximately 4.0 acres, which would result in temporary impacts rather than permanent impacts to riparian scrub (3.2 acres of scale broom scrub, 0.2 acres of river wash, and 0.6 acres of big sagebrush scrub). Under ES-PDF-BIO-1, jurisdictional streambeds and riparian habitat within Unnamed Canyon 2 would be permanently conserved following completion of Entrada South Project development. In addition to permanent impact avoidance along Unnamed Canyon 2, another 4.0 acres that would have been permanently impacted under the 2017 Approved Project would only be temporarily impacted under the Modified Project. These areas are mainly located in slivers throughout the Project Site and consist of California annual grassland, coastal scrub, and disturbed land. Another 2.1 acres of mostly coastal scrub would be completely avoided, mainly along the utility corridor and the revegetated slope along the eastern portion of the Project Site. Small additional permanent and temporary impacts would occur to other native vegetation communities. Permanent impacts under the Modified Project would occur to 2.0 acres of coastal scrub, 0.4 acres of riparian habitat, and 0.1 acres of developed land that were not impacted by the 2017 Approved Project (Figures 2 and 3). These changes will not create any new significant effects, or substantially increase the severity of previously identified significant effects, to vegetation communities or land covers.

Table 3 shows the changes in impacts to vegetation communities for the Modified Project compared to the 2017 Approved Project. The table includes both changes in impacts and changes in the vegetation map.

---

<sup>6</sup> This Report's references to "direct impacts" include what were referred to as "indirect impacts" associated with the development facilitated by the State-Certified EIR, including the development of the Entrada South planning area. The "indirect impacts" referred to in this Report are equivalent to what were referred to as "secondary impacts" in the State-Certified EIR.

**Table 3. Vegetation Community Impacts - Modified Project Compared to 2017 Approved Project**

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance/ Association	2017 Approved Project Permanent Impacts	Modified Project (acres)		Changes in Permanent Impacts (acres) <sup>a</sup>
				Permanent Impacts	Temporary Impacts	
Grass and Herb Dominated Communities	Non-Native Grassland	California annual grassland	26.4	33.4	0.9	+7.0
		Wild oat grassland	—	0.1	0.1	+0.1
	Native Grassland	Needle grass grassland	—	—	—	—
	Mustard stand	Short-podded mustard stand	—	1.2	—	+1.2
	<i>Grass and Herb Dominated Communities Subtotal</i>		26.4	34.6	0.9	+8.3
Scrub and Chaparral	Coastal Scrub	California sagebrush scrub (including restored)	38.6	47.3	2.5	+8.7
		California sagebrush - <i>Artemisia</i>	2.7	1.6	—	-1.1
		California sagebrush - California buckwheat scrub	87.4	67.8	0.8	-19.5
		California buckwheat (including restored and disturbed forms)	—	1.6	0.1	+1.6
		Deer weed scrub	—	3.3	—	+3.3
	<i>Coastal Scrub Subtotal</i>		128.7	121.7	3.5	-7.0
	Undifferentiated Chaparral Scrubs	Not mapped to alliance/association level	21.8	20.8	—	-1.0
	Other Chaparral	Scrub oak chaparral	—	2.6	—	+2.6
	<i>Chaparral Subtotal</i>		21.8	23.4	—	+1.6
	<i>Broad Leafed Upland Tree Dominated Subtotal</i>		—	1.7	—	+1.7
Broad Leafed Upland Tree Dominated	Oak Woodland and Forest	Valley oak grassland	—	1.7	—	+1.7
<i>Broad Leafed Upland Tree Dominated Subtotal</i>			—	1.7	—	+1.7

**Table 3. Vegetation Community Impacts - Modified Project Compared to 2017 Approved Project**

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance/ Association	2017 Approved Project Permanent Impacts	Modified Project (acres)		Changes in Permanent Impacts (acres) <sup>a</sup>
				Permanent Impacts	Temporary Impacts	
Riparian and Bottomland Habitat	Other Riparian/Wetland	River wash	4.2	0.4	0.3	-3.8
		Alluvial scrub	0.5	0.3	—	-0.2
		Big sagebrush scrub	13.2	11.6	1.3	-1.6
		Cattail marshes	—	<0.05	<0.05	+<0.05
		Scale broom scrub	—	1.9	3.2	+1.9
Riparian and Bottomland Habitat Subtotal			18.0	14.3	4.8	-3.7
Man-Made Land Cover Types	Ornamental	—	—	—	—	
	Developed land	81.1	80.3	1.8	-0.9	
	Disturbed land	47.9	40.4	0.1	-7.5	
Man-Made Land Cover Types Subtotal			129.0	120.7	2.0	-8.3
Total <sup>a</sup>			323.8	316.4	11.2	-7.4

**Notes:**<sup>a</sup> Changes may not sum precisely due to rounding.<sup>b</sup> Totals may not sum precisely due to rounding.

Overall, net permanent impacts to natural and naturalized communities would increase by approximately 0.9 acres under the Modified Project compared to the 2017 Approved Project, while impacts to some specific vegetation communities would increase or decrease by a few acres. The Modified Project would permanently impact 8.3 acres more of grass- and herb-dominated communities compared to the 2017 Approved Project. The Modified Project would impact 7.0 acres less coastal scrub compared to the 2017 Approved Project. Impacts to chaparral communities overall would increase under the Modified Project by 1.6 acres. Impacts to 1.7 acres of newly mapped oak woodland would occur under the Modified Project, compared to no impacts under the 2017 Approved Project; these impacts to oak woodland are discussed in this section. Permanent impacts to riparian communities would decrease by 3.7 acres overall. Impacts to newly mapped cattail marshes (<0.05 acres) are described in this section. These changes in impacts are within the range of natural variability expected to occur over time in an undeveloped environment. The State-Certified EIR contemplated such change and included mitigation measures that account for this variability by requiring compensatory mitigation for impacts to sensitive vegetation communities that is proportional to actual project impacts, as described below.

New impacts would occur to oak woodlands, including to valley oak grassland, which is sensitive per CDFW (2022). The impacts to oak woodlands would be potentially significant absent mitigation. However, because impacts to oak woodlands are analyzed in the State-Certified EIR, mitigation is provided that would be applicable to permanent impacts to the 1.7 acres of valley oak grassland. Specifically, to mitigate the effects of the Entrada South Project on oak woodlands, oak trees would be replaced in or adjacent to existing oak woodlands and savannas per the Oak Resources Management Plan (ORMP) required by RMDP/SCP Mitigation Measure BIO-22 (these RMDP/SCP mitigation measures will be referred to as “RMDP/SCP-BIO-XX” in the remainder of this Report). See Appendix D, Project Mitigation Measures and Project Design Features, for the complete text of measures that are applicable to the Entrada South Project. Maintenance of the oak woodland restoration sites is required for a period of no less than 5 years total and no less than 2 years after removal of irrigation (if any). During the maintenance period, maintenance measures will be provided to ensure that the oak trees become successfully established and are ultimately able to survive under natural conditions beyond the completion of the maintenance period. While many county and city oak tree protection ordinances focus on individual trees, the functional unit that should be considered for restoration is the oak woodland. Mitigation such as restoration and compensation should focus on oak woodlands rather than a certain number or size of individual trees (Light and Pedroni 2002). Protecting trees only over a certain size results in loss of woodlands as the younger components of the woodland are removed, and structural complexity is lost. RMDP/SCP-BIO-22 does consider the community as a whole. This mitigation measure will replace the lost habitat and provide for the long-term preservation of oak communities in the Modified Project area. The ORMP would be implemented and includes measures to create, enhance, and/or restore oak woodlands within lands owned by the Applicant. These oak woodlands will be subject to the performance criteria established in the ORMP. For example, successful completion of each woodland creation or enhancement site must be without active manipulation by irrigation, planting, or reseedling for a minimum of 3 years; oak trees must be within 5% of the plan target density of surviving, healthy oak trees; and non-native grass cover must not exceed the target woodland non-native grass cover. The plan shall be subject to the requirements of CLAOTO and will address impacts to oak resources including oak trees of the sizes regulated under CLAOTO. Therefore, while there would be new potentially significant impacts to oak woodlands from the Modified Project, the mitigation already provided by the State-Certified EIR would reduce this impact to a level that is less than significant.

Impacts to scale broom scrub (1.9 acres of permanent impacts and 3.2 acres of temporary impacts) are separately identified in this Report for the first time. Scale broom scrub is ranked G3S3 by CDFW (2022) and is therefore considered a sensitive natural community. While scale broom individuals were present on the Entrada South Project Site prior to the 2012 vegetation map update (i.e., within the river wash mapped in the 2017 Approved Project),

scale broom scrub was not included as a separate mapped vegetation community in the 2017 Approved Project. The vegetation mapping nomenclature for the current vegetation map reflects the most recent List of Natural Communities (CDFG 2010), in which this vegetation community is described. Because scale broom was already known to be present on site, there is likely no material change in disturbance to this vegetation community from the 2017 Approved Project to the Modified Project.

Mitigation for direct and indirect impacts to jurisdictional resources described for the 2017 Approved Project would mitigate impacts to scale broom scrub for the Modified Project to a level that is less than significant. For indirect impacts, mitigation measures have been designed to limit the amount of particulate matter (dust) that leaves the Modified Project construction area and include actions such as daily watering of disturbed areas and the use of chemical tackifiers. The Applicant will use best management practices (BMPs) to reduce the off-site transport of sediment or sediment-laden water during storm events, including per RMDP/SCP-BIO-49 (construction stormwater measures). In order to reduce direct impacts to this vegetation community due to the removal of vegetation, the Applicant will implement a set of mitigation measures designed to restore the functions and services/values provided by riparian vegetation communities lost as a result of development. These impacts would be reduced through the implementation of RMDP/SCP-BIO-1 (requirements for riparian/wetland mitigation plans), RMDP/SCP-BIO-2 (mitigation ratios for impacts to waters), RMDP/SCP-BIO-3 (mitigation site selection), RMDP/SCP-BIO-3 (mitigation site selection), RMDP/SCP-BIO-4 (requirements for replacement vegetation), RMDP/SCP-BIO-5 (plant spacing for mitigation sites), RMDP/SCP-BIO-6 (revegetation success criteria), RMDP/SCP-BIO-7 (replanting after acts of God), RMDP/SCP-BIO-8 (temporary irrigation for mitigation sites), RMDP/SCP-BIO-9 (exotic plant control), RMDP/SCP-BIO-10 (mitigation credit for exotic plant control), RMDP/SCP-BIO-12 (mitigation monitoring reports), RMDP/SCP-BIO-15 (replacement of riparian trees), and RMDP/SCP-BIO-16 (revegetation of temporary impacts). The permanent removal of existing habitats in U.S. Army Corps of Engineers and/or CDFW-jurisdictional areas shall be replaced by creating habitats of similar functions and values/services (see RMDP/SCP-BIO-4) on the Entrada South Project Site or within lands owned by the Applicant, or as allowed under RMDP/SCP-BIO-10. The Applicant will also provide buffers around waters and wetlands to minimize disturbance. A qualified biologist will monitor the construction perimeter to limit the potential for the contractor to disturb vegetation outside the proposed construction footprint. Therefore, while there would be impacts to scale broom scrub from the Modified Project, the mitigation already provided by the State-Certified EIR would reduce this impact to a level that is less than significant.

There are some other newly identified direct impacts to certain vegetation communities resulting from the Modified Project, including cattail marshes, restored California sagebrush scrub, restored California buckwheat scrub, deer weed scrub, scrub oak chaparral, short-podded mustard stand, and wild oat grassland. These vegetation communities were not included in the vegetation map for the 2017 Approved Project, but rather were included after vegetation map updates. Newly identified direct impacts to these vegetation communities would not be considered significant; therefore, there is no material change in disturbance to natural vegetation communities overall from the Modified Project, as compared to the 2017 Approved Project. Direct permanent and temporary impacts to these vegetation communities would not be considered significant because they are not regulated as sensitive natural communities by CDFW (2023a). Similarly, an increase in impacts to California annual grassland, California sagebrush scrub, and developed land, which were mapped on the site for the 2017 Approved Project, would not be considered significant because these vegetation communities and land covers are not considered sensitive (CDFW 2023a). Nonetheless, similar to scale broom scrub, impacts to 0.04 acres of cattail marshes (a wetland/riparian community) would be mitigated through the implementation of RMDP/SCP-BIO-1, RMDP/SCP-BIO-10, RMDP/SCP-BIO-12, RMDP/SCP-BIO-15, and RMDP/SCP-BIO-16.



As described in Chapter 5, Results of Surveys, and shown in Table 2, the updated vegetation mapping of the Entrada South Project Site shows that vegetation communities and land cover types present on the site are consistent overall with those reported in the State-Certified EIR, and there was a net increase of 7.4 acres in natural vegetation communities overall on the Entrada South Project Site. The overall impacts include impacts to newly mapped sensitive oak woodlands and scale broom scrub, as well as vegetation communities not considered sensitive, such as deer weed scrub, California buckwheat scrub, and scrub oak chaparral. The minor changes in impacts to vegetation communities largely reflect small shifts in the types and locations of vegetation communities present within the Entrada South Project Site, which are within the range of natural variability expected to occur over time in an undeveloped environment, as well as changes in survey and reporting methods. The observed differences do not represent a material or substantial change in the types, quantity, and quality of biological functions and values provided by the Entrada South Project Site. The State-Certified EIR contemplated such change and included mitigation measures that account for this variability by requiring compensatory mitigation for impacts to sensitive vegetation communities that is proportional to actual project impacts, as described below. The mitigation provided by the State-Certified EIR would mitigate for newly identified impacts to oak woodlands and scale broom scrub.

Moreover, the Modified Project would reduce permanent impacts to jurisdictional waters compared to the 2017 Approved Project by avoiding development of much of Unnamed Canyon 2. The Modified Project design will retain most of Unnamed Canyon 2 as an open, riparian-vegetated channel, whereas the 2017 Approved Project would have converted Unnamed Canyon 2 to underground storm drain from the southernmost Entrada South Project Site boundary upstream to the northernmost boundary at Magic Mountain Parkway. With this design, the mainstem of the Unnamed Canyon 2 channel will be regraded and stabilized to prevent both long-term erosion and deposition and will be revegetated to allow the drainage to support ephemeral river wash and associated riparian and upland habitats. In addition, to minimize adverse hydromodification effects (erosion and scour) to the Unnamed Canyon 2 channel associated with anthropogenic alterations of the stream's hydrology and ensure a more natural hydrologic regime, most run-on originating from existing development upstream will bypass the restored Unnamed Canyon 2 channel in an underground pipe. This design will allow the drainage to function as an intact and functioning riparian and upland habitat system. Under ES-PDF-BIO-1, jurisdictional streambeds and riparian habitat within Unnamed Canyon 2 will be permanently conserved following completion of the Entrada South Project. With the changes in Unnamed Canyon 2 under the Modified Project, permanent impacts to the following natural communities would be avoided: 0.6 acres of big sagebrush scrub, 0.2 acres of river wash, and 3.2 acres of scale broom scrub.

Taking into account the Modified Project changes and the updated information regarding vegetation communities and land cover types on the Entrada South Project Site—as well as the reduced impacts to vegetation communities from avoiding permanent disturbance along Unnamed Canyon 2 and the permanent conservation of jurisdictional areas within Unnamed Canyon 2 under ES-PDF-BIO-1—the Modified Project would not result in any new significant unmitigated impacts compared with those evaluated in the State-Certified EIR. In addition, the Modified Project would not substantially increase the severity of any previously identified significant effects to vegetation communities that were evaluated in the State-Certified EIR.

The following Specific Plan (i.e., “SP-4.6-XX”) and RMDP/SCP (i.e., “RMDP/SCP-BIO-XX”) mitigation measures, all of which were adopted in the State-Certified EIR, would address direct and indirect impacts to sensitive natural communities on the Entrada South Project Site:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** through **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)



- **SP-4.6-6** through **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** through **SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-47a** (mitigation banking)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-25** (preserve restoration and enhancement)
- **RMDP/SCP-BIO-26** (response to wildfire/landslide damage in spineflower preserves)
- **RMDP/SCP-BIO-27** (construction avoidance measures for spineflower preserves [fencing])
- **RMDP/SCP-BIO-28** (construction avoidance measures for spineflower preserves [worker education, trespass])
- **RMDP/SCP-BIO-29** (construction avoidance measures for spineflower preserves [erosion control, stormwater, etc.])
- **RMDP/SCP-BIO-30** (construction avoidance measures for spineflower preserves [review of construction plans, BMPs])
- **RMDP/SCP-BIO-31** (construction avoidance measures for spineflower preserves [fencing])

- **RMDP/SCP-BIO-32** (construction avoidance measures for spineflower preserves [dust control])
- **RMDP/SCP-BIO-33** (construction monitoring adjacent to spineflower preserves)
- **RMDP/SCP-BIO-34** (plant palettes for landscaped areas within 200 feet of spineflower preserves)
- **RMDP/SCP-BIO-35** (restricted access to spineflower preserves)
- **RMDP/SCP-BIO-36** (permanent fencing along spineflower preserve boundaries)
- **RMDP/SCP-BIO-37** (signage at spineflower preserve boundaries)
- **RMDP/SCP-BIO-42** (construction avoidance of preserved oak trees)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-80** (exotic Wildlife Species Control Plan)
- **RMDP/SCP-BIO-85** (Argentine ant controls)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

## 6.1.2 General Wildlife

In evaluating impacts to general wildlife, the State-Certified EIR assumed that wildlife species with the potential to occur on the Entrada South Project Site, based on suitable habitat conditions and other relevant factors, would be present and would be affected by the 2017 Approved Project. The State-Certified EIR included measures to avoid, minimize, and mitigate effects to such species and reached conclusions about the significance of the 2017 Approved Project's impacts that took into account those potential effects and mitigation measures. Thus, in the absence of incremental project changes that could trigger new or substantially increased effects to wildlife, or new information or changed circumstances bearing on the Modified Project's effects to wildlife and their habitat, the analysis and conclusions presented in the State-Certified EIR would continue to apply.

Specifically, the State-Certified EIR found that potential effects to non-special-status wildlife species and their habitat from implementation of the RMDP/SCP, including buildout of the Entrada South Project Site, would include injury or mortality to individuals from activities such as vegetation clearing and grading; permanent and temporary loss of habitat; exposure to construction-related dust and ground vibration; and water quality impacts such as sedimentation, erosion, and pollution that could affect some aquatic species. Additional long-term effects to wildlife from implementation of the RMDP/SCP could include habitat fragmentation; increased human activity; increased activity by pet, stray, and feral cats and dogs; risk of vehicle collisions; pesticide use; altered wildfire regimes; invasive plant species and non-native wildlife species, including Argentine ants (*Linepithema humile*); disruption of behaviors and increased predation due to nighttime lighting; and increased noise. Given the common and widespread nature of the species and their adaptability, the State-Certified EIR found these effects would be adverse but not significant prior to mitigation, with one exception (impacts to nesting birds from construction activities, discussed below). Although mitigation for these effects was not required, the State-Certified EIR found that mitigation measures already applied under that document would further reduce and offset impacts to common

wildlife. With respect to habitat fragmentation, isolation, and edge effects from development facilitated by the RMDP/SCP, the State-Certified EIR found that these effects would be minimized and mitigated by conservation of large intact areas of habitat within the High Country SMA, Salt Creek area, and River Corridor SMA, which would also maintain landscape-level habitat connectivity as discussed in Section 6.3, Impacts to Wildlife Corridors and Habitat Linkages, of this Report. Other direct and indirect effects described above would be reduced by construction-related and post-construction mitigation measures that apply to the Entrada South Project, as listed below, including RMDP/SCP-BIO-64 (Integrated Pest Management Plan), RMDP/SCP-BIO-73 (fencing to protect open space), and RMDP/SCP-BIO-87 (monitoring for Argentine ants), and RMDP/SCP-WQ-2 (Landscape and Integrated Pest Management Plan). The State-Certified EIR found that potential loss of the nests, eggs, nestlings, and fledglings of various native bird species due to construction activities, which would violate the Migratory Bird Treaty Act, would be significant absent mitigation. However, impacts to nesting birds would be avoided and rendered less than significant through application of RMDP/SCP-BIO-56 (which requires pre-construction surveys for nesting birds for construction activities occurring during the nesting/breeding season of native bird species potentially nesting on site, with avoidance of active nests required if found) and RMDP/SCP-BIO-52 (which requires biological monitoring during vegetation clearing and grading activities).

As discussed in Section 6.1.1, Vegetation Communities and Land Covers, some relatively small changes have occurred in the total acreages of certain vegetation communities on the Entrada South Project Site since the analysis for the State-Certified EIR. These incremental changes likely reflect natural vegetation changes due to succession or colonization and/or climate effects. The changes associated with the Modified Project do not increase the Entrada South Project Site's permanent impact footprint affecting natural vegetation communities overall compared to the 2017 Approved Project and, in fact, will result in additional avoidance of permanent direct impacts to riparian communities in the vicinity of Unnamed Drainage 2. The reduction of the area of permanent impacts to Unnamed Canyon 2 under the Modified Project will provide benefits to wildlife, and the permanent conservation of jurisdictional streambeds and riparian habitat under ES-PDF-BIO-1 will ensure that this area remains available for potential use by wildlife. Some native bird species displaced by temporary impacts during construction will be able to reoccupy the area (for nesting, foraging, or wintering) once it is restored. Other terrestrial vertebrate species, such as some reptiles and small mammals, will also be able to return to the restored areas from adjacent open space along the southern boundary of the Entrada South Project Site. Some species reoccupying the site may include special-status species addressed in the State-Certified EIR, such as San Diegan tiger whiptail, Blainville's horned lizard, and Costa's hummingbird (*Calypte costae*). The land uses associated with the Modified Project also remain largely unchanged. Minor changes in land use do not alter the Entrada South Project's effects on wildlife, as the State-Certified EIR assumed that all wildlife habitat within the development footprint would be directly impacted, and the residential and non-residential uses are expected to have similar indirect impacts on wildlife.

Because the vegetation communities and land cover types on the Entrada South Project Site remain substantially similar to those analyzed in the State-Certified EIR, the Entrada South Project Site continues to provide similar habitat value for common wildlife species. For example, there are no new or greatly expanded vegetation communities that would provide substantially different habitat values that would increase the likelihood of the presence of particular wildlife species. As discussed in Chapter 3, there is also no other substantially new information or changed circumstances relevant to the presence of such wildlife on the Entrada South Project Site. Therefore, the potential for common wildlife to be present on the Entrada South Project Site and potentially affected by project activities remains substantially similar to that analyzed in the State-Certified EIR. Because the Modified Project would decrease permanent impacts to natural habitats for common wildlife species, it is not likely to result in any new significant direct or indirect impacts to these common species.

The following Specific Plan and RMDP/SCP mitigation measures would further reduce impacts to non-special-status wildlife:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** through **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** through **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** through **SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-58** (compliance with all required National Pollutant Discharge Elimination System [NPDES] permits and water quality permits)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (Supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)

- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-78** (cowbird trapping)
- **RMDP/SCP-BIO-82** (condor protection measures)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

## 6.2 Impacts to Special-Status Species

The State-Certified EIR contained an extensive analysis of direct and potential indirect impacts to special-status species resulting from the 2017 Approved Project, taking into account both special-status species documented on the Entrada South Project Site and other special-status species considered to have moderate to high potential to occur on site. Because the Modified Project would reduce the permanent impact footprint of the Entrada South Project, and because permanent impacts to much of Unnamed Canyon 2 would be avoided, and only small additional permanent and temporary impacts would occur to native vegetation communities elsewhere, adverse effects on special-status species compared to the 2017 Approved Project generally would be reduced. The proposed construction activities and post-construction land uses would remain substantially similar to those analyzed in the State-Certified EIR; therefore, the Modified Project would not result in new or increased impacts to special-status species absent material new information or changed circumstances regarding the presence of such species on site, their status, or their vulnerability related to the Entrada South Project. This section evaluates the potential for any such changes, based on the updated survey results and other information presented in Chapter 4, Methods and Survey Limitations.

### 6.2.1 Special-Status Plant Species

The following subsections address special-status plant species that were detected on the Entrada South Project Site during surveys prior to preparation of the State-Certified EIR in 2010. Other special-status species that were analyzed in the State-Certified EIR, but that do not occur on the Entrada South Project Site, are not addressed here. No additional special-status species have been identified on the Entrada South Project Site since 2010.

#### 6.2.1.1 San Fernando Valley Spineflower

As discussed in Chapter 5, the current presence and status of San Fernando Valley spineflower (“spineflower”) remains substantially similar to that analyzed in the State-Certified EIR. Focused surveys of the Entrada South Project Site have been conducted under the CDFW-approved SCP. Survey results are included in Dudek (2012b, 2012c, 2013, 2014a, 2015b, 2016, 2017b, 2018a, 2019b, 2020, 2021, 2022a, 2023a, 2024a) and the abundance and area occupied by spineflower in the years since 2007 have been within the expected range of variability expected for this annual species. The SCP and associated ITP authorize take of all spineflower within the Entrada South Project Site, outside of the spineflower preserve within the Entrada South Project Site. Given that the status of spineflower within the Entrada South Project Site has not changed materially, and the Modified Project would impact portions of the on-site spineflower population as authorized by the SCP ITP, impacts to spineflower would remain consistent with the analysis provided in the State-Certified EIR.

The Modified Project would be consistent with the SCP. It would not involve take of any spineflower not already authorized under the ITP issued for the SCP and evaluated in the State-Certified EIR. All authorized impacts to spineflower from the Modified Project would be fully mitigated through implementation of the SCP and compliance with the SCP ITP. Taking into account the absence of any material change in the current status of spineflower within the Entrada South Project Site or overall, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following RMDP/SCP mitigation measures would address direct and indirect impacts to spineflower on the Entrada South Project Site:

- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-23** (Adoption and implementation of SCP, protection of spineflower preserves)
- **RMDP/SCP-BIO-24** (Management of spineflower preserves)
- **RMDP/SCP-BIO-25** (preserve restoration and enhancement)
- **RMDP/SCP-BIO-26** (response to wildfire/landslide damage in spineflower preserves)
- **RMDP/SCP-BIO-27** (construction avoidance measures for spineflower preserves [fencing])
- **RMDP/SCP-BIO-28** (construction avoidance measures for spineflower preserves [worker education, trespass])
- **RMDP/SCP-BIO-29** (construction avoidance measures for spineflower preserves [erosion control, stormwater, etc.])
- **RMDP/SCP-BIO-30** (construction avoidance measures for spineflower preserves [review of construction plans, BMPs])
- **RMDP/SCP-BIO-31** (construction avoidance measures for spineflower preserves [fencing])
- **RMDP/SCP-BIO-32** (construction avoidance measures for spineflower preserves [dust control])
- **RMDP/SCP-BIO-33** (construction monitoring adjacent to spineflower preserves)
- **RMDP/SCP-BIO-34** (plant palettes for landscaped areas within 200 feet of spineflower preserves)
- **RMDP/SCP-BIO-35** (restricted access to spineflower preserves)
- **RMDP/SCP-BIO-36** (permanent fencing along spineflower preserve boundaries)
- **RMDP/SCP-BIO-37** (signage at spineflower preserve boundaries)
- **RMDP/SCP-BIO-38** (storm drain outfalls near spineflower preserves)
- **RMDP/SCP-BIO-39** (stormwater discharges to spineflower preserves)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-85** (Argentine ant controls)



- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

### 6.2.1.2 Slender Mariposa Lily

As discussed in Chapter 5, the current presence and status of slender mariposa lily remains substantially similar to that analyzed in the State-Certified EIR, which concluded that the species occupied 33.0 acres within the Entrada South Project Site. Updated surveys for slender mariposa lily in 2012, 2015, 2019, and 2022 determined that the species' cumulative occupied footprint within the Entrada South Project Site is 49.3 acres, an increase of 16.3 acres. This increase likely reflects variable emergence from bulbs in relation to environmental factors, as discussed in Section 5.3.1.2, Slender Mariposa Lily, and is within the normal range of variability expected for this bulbiferous species and anticipated by the State-Certified EIR. Consistent with the increased cumulative footprint, impacts to the cumulative occupied footprint of slender mariposa lily have increased from 31.2 acres of permanent impacts for the 2017 Approved Project to 46.9 acres of permanent and 0.2 acres of temporary impacts for the Modified Project. While permanent impacts to the cumulative occupied slender mariposa lily habitat have increased by 15.7 acres and temporary impacts have increased by 0.2 acres, these increases are expected, and would not be substantial given the mitigation provided. Specifically, this increased impact would be mitigated under RMDP/SCP-BIO-40, which provides for habitat replacement/enhancement at a 1:1 ratio, as well as other mitigation measures listed below.

The status of slender mariposa lily therefore remains essentially the same compared to its status as analyzed in the State-Certified EIR. The slender mariposa lily is not listed under the ESA or the CESA and is still a CRPR 1B.2 species. As noted above, population abundance and the distribution of documented occupied habitat has varied over the years, likely in relation to annual weather conditions (as opposed to changed vegetation communities and land covers), but its status on the Entrada South Project Site since 2010 is within the range recorded before 2010.

Taking into account the absence of any material change in the current status of slender mariposa lily within the Entrada South Project Site or overall, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase the severity of any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to slender mariposa lily on the Entrada South Project Site:

- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-25** (preserve restoration and enhancement)
- **RMDP/SCP-BIO-40** (RMDP Slender Mariposa Lily Mitigation and Monitoring Plan revision and implementation)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)

### 6.2.1.3 Peirson's Morning-Glory

As discussed in Chapter 5, the current presence and status of Peirson's morning-glory remains substantially similar to that analyzed in the State-Certified EIR. Based on focused surveys of the Entrada South Project Site conducted for the State-Certified EIR, Peirson's morning-glory was widespread in the general 2017 Approved Project area and was observed on the Entrada South Project Site in 2005 but not mapped. No Peirson's morning-glory have been observed during surveys since 2010. Given that 2005 is the only year in which this species was recorded on the Entrada South Project Site despite surveys from 2002 to 2007, the lack of observations since 2010 is generally consistent with observations made in support of the State-Certified EIR. The State-Certified EIR described impacts to Peirson's morning-glory, and other species with low sensitivity that were not mapped, in terms of impacts to suitable habitat. The Entrada South Project Site currently supports approximately 234.2 acres of suitable habitat for Peirson's morning-glory, an increase of 5.8 acres compared to that described in the State-Certified EIR. The Modified Project would result in 179.7 acres of permanent impacts and 4.4 acres of temporary impacts (184.1 acres total) to Peirson's morning-glory suitable habitat, compared to 176.9 acres of permanent impacts under the 2017 Approved Project, an increase of 7.3 acres overall, and an increase of 2.9 acres of permanent impacts. Given the slight overall increase of impacts to suitable habitat, mainly due to temporary impacts, the changes incorporated in the Modified Project would not change the findings of the State-Certified EIR with regard to Peirson's morning-glory.

The status of Peirson's morning-glory remains essentially the same compared to its status as analyzed in the State-Certified EIR. The Peirson's morning-glory is not listed under the ESA or CESA and is still a CRPR 4.2 species.

Because the status of Peirson's morning-glory within the Entrada South Project Site has not materially changed, and because the species has not been observed on site in recent years, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to Peirson's morning-glory on the Entrada South Project Site:

- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)

### 6.2.1.4 Mainland Cherry

As discussed in Chapter 5, the current presence and status of mainland cherry remains substantially similar to that analyzed in the State-Certified EIR. Mainland cherry was noted, but not mapped, during surveys of the Entrada South Project Site conducted for the State-Certified EIR; five mainland cherries have been documented since 2010



within the Entrada South Project Site. Mainland cherry was not mapped for the State-Certified EIR. The five mainland cherries identified during surveys in support of the Modified Project would be permanently impacted under the Modified Project. Given application of RMDP/SCP-BIO-88, which provides for replacement of mainland cherry trees, the difference in impacts to mainland cherry would not be substantial and would not change the findings of the State-Certified EIR.

The status of mainland cherry remains the same compared to its status as analyzed in the State-Certified EIR. The mainland cherry is not listed under the ESA or CESA and is not assigned a CRPR, but it is considered sensitive by the County of Los Angeles.

Because the status of mainland cherry within the Entrada South Project Site has not materially changed, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to mainland cherry on the Entrada South Project Site:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** (revegetation plans)
- **SP-4.6-3** (revegetation plans)
- **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** (revegetation plans)
- **SP-4.6-7** (revegetation plans)
- **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** (revegetation plans)
- **SP-4.6-14** (revegetation plans)
- **SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-47a** (mitigation banking)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)

- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-88** (replacement of California black walnut and mainland cherry trees)

### 6.2.1.5 Southern California Black Walnut

As discussed in Chapter 5, the current presence and status of Southern California black walnut remains substantially similar to that analyzed in the State-Certified EIR. Based on focused surveys of the Entrada South Project Site conducted for the State-Certified EIR, Southern California black walnut was present, but given the low sensitivity status of the species, the exact locations of all individual Southern California black walnut trees were not mapped. No Southern California black walnuts have been observed during surveys since 2010. Given that this species was not mapped for the State-Certified EIR, the lack of observations since 2010 is generally consistent with the analysis in the State-Certified EIR.

The status of Southern California black walnut remains the same compared to its status as analyzed in the State-Certified EIR. The Southern California black walnut is not listed under the ESA or CESA and is still a CRPR 4.2 species.

Taking into account the absence of any material change in the current status of Southern California black walnut within the Modified Project area or overall, and the fact that Southern California black walnut has not been observed on site in recent years, the Modified Project would not result in any new significant impacts, or substantially increase any previously identified significant impact, to this species.

Given the absence of Southern California black walnut during recent surveys, no direct or indirect impacts are expected to occur to Southern California black walnut with implementation of the Modified Project, and no mitigation measures apply.

#### 6.2.1.6 White Rabbit-Tobacco (Undescribed Everlasting)

As discussed in Chapter 5, white rabbit-tobacco is not expected to occur on the Entrada South Project Site. Prior to 2010, individuals in the vicinity of the Entrada South Project Site, but off site, had been identified as undescribed everlasting, which was analyzed in the State-Certified EIR. Its status has changed from undescribed everlasting to being described as white rabbit-tobacco since the 2017 Approved Project was analyzed. Based on focused surveys of the Entrada South Project Site conducted for the 2017 Approved Project, this species is not expected to occur due to lack of suitable secondary alluvial bench habitat. Updated surveys in support of the Modified Project lend support to the lack of suitable habitat for white rabbit-tobacco. Because white rabbit-tobacco has not been observed on site during any surveys and suitable habitat is not present, the Modified Project is not expected to result in any direct or indirect impacts to this species.

Given the absence of white rabbit-tobacco during surveys, no direct or indirect impacts are expected to occur to white rabbit-tobacco with implementation of the Modified Project and no mitigation measures apply.

#### 6.2.1.7 Island Mountain-Mahogany

As discussed in Chapter 5, the current presence and status of island mountain-mahogany on the Entrada South Project Site remains substantially similar to that analyzed in the State-Certified EIR. Based on focused surveys of the Project Site conducted for the State-Certified EIR, island mountain-mahogany occurs as an occasional component of chaparral communities at the base of north-facing slopes, but given the low sensitivity status of the species, the exact locations of all individual island mountain-mahogany individuals were not mapped. Only a single island mountain-mahogany individual has been observed during recent surveys. Given that this species was not mapped on the Entrada South Project Site during surveys in support of the State-Certified EIR, the single observation since 2010 is generally consistent with observations made in support of the State-Certified EIR. The State-Certified EIR described impacts to island mountain-mahogany, and other species with low sensitivity that were not mapped, in terms of impacts to suitable habitat. The Entrada South Project Site supports approximately 23.4 acres of suitable habitat for island mountain-mahogany, an increase of 1.6 acres compared to that described in the State-Certified EIR for the 2017 Approved Project. The Modified Project would result in 23.4 acres of permanent impacts to island mountain-mahogany suitable habitat, compared to 21.8 acres of permanent impacts under the 2017 Approved Project, an increase of 1.6 acres. This increase is a result of additional mapping of scrub oak chaparral in the vegetation map update since the 2017 Approved Project, rather than an actual increase in the extent of permanent impacts where chaparral was previously mapped. Given the small increase in permanent impacts to suitable habitat, the changes incorporated in the Modified Project would not change the findings of the State-Certified EIR with regard to island mountain-mahogany.

The status of island mountain-mahogany remains the same compared to its status as analyzed in the State-Certified EIR. The island mountain-mahogany is not listed under the ESA or CESA and is still a CRPR 4.3 species.

Because the status of island mountain-mahogany within the Entrada South Project Site has not materially changed, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to island mountain-mahogany on the Entrada South Project Site:

- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)

### 6.2.1.8 Parish's Sagebrush

As discussed in Chapter 5, the current presence and status of Parish's sagebrush on the Entrada South Project Site remains substantially similar to that analyzed in the State-Certified EIR. Based on focused surveys of the Project Site conducted for the State-Certified EIR, Parish's sagebrush was not positively identified because it blooms later in the year than when rare plant surveys typically are conducted, but it may occur along the outer margins of Magic Mountain Canyon. Compared to the State-Certified EIR, reduction of permanent impacts in Unnamed Canyon 2 would reduce the permanent impacts to big sagebrush scrub that would be considered suitable habitat for this species (13.2 acres of permanent impacts for the 2017 Approved Project, compared to 11.6 acres of permanent impacts and 1.3 acres of temporary impacts for the Modified Project). Under ES-PDF-BIO-1, avoided streambeds and riparian habitat within Unnamed Canyon 2 would be permanently conserved. Given the small reduction in impacts to suitable habitat for this species, including along Unnamed Canyon 2, the changes incorporated in the Modified Project would not change the findings of the State-Certified EIR with regard to Parish's sagebrush.

The status of Parish's sagebrush remains the same compared to its status as analyzed in the State-Certified EIR. Parish's sagebrush is not listed under the ESA or CESA and does not have a CRPR, but it is considered sensitive by the County of Los Angeles.

Because the status of Parish's sagebrush within the Entrada South Project Site has not materially changed, and because the species still has potential to occur on site, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to Parish's big sagebrush on the Entrada South Project Site:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** (revegetation plans)
- **SP-4.6-3** (revegetation plans)
- **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** (revegetation plans)

- **SP-4.6-7** (revegetation plans)
- **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** (revegetation plans)
- **SP-4.6-14** (revegetation plans)
- **SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-47a** (mitigation banking)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)

#### 6.2.1.9 Oak Trees

As discussed in Chapter 5, the current presence and status of oak trees on the Entrada South Project Site remains substantially similar to that analyzed in the State-Certified EIR. A total of 42 oak trees were considered permanently

impacted in the State-Certified EIR, including 1 heritage oak. As shown on Figure 14, a total of 34 oak trees would be removed by the Modified Project, and 1 heritage oak tree would be encroached upon (Carlberg 2023). Therefore, the Modified Project would impact fewer oak trees than expected under the 2017 Approved Project. Impacts to oak trees would be mitigated per the ORMP (see RMDP/SCP-BIO-22 in Appendix D). Maintenance of the oak restoration sites is required for a period of no less than 5 years total and no less than 2 years after removal of irrigation (if any). During the maintenance period, maintenance measures would be provided to ensure that the oak trees become successfully established and are ultimately able to survive under natural conditions beyond the completion of the maintenance period. Oak restoration would be subject to the performance criteria established in the ORMP. Successful completion of each woodland creation or enhancement site must be without active manipulation by irrigation, planting, or reseedling for a minimum of 3 years; oak trees must be within 5% of the plan target density of surviving, healthy oak trees; and non-native grass cover must not exceed the target non-native grass cover. The plan would be subject to the requirements of CLAOTO and would address impacts to oak resources, including oak trees of the sizes regulated under CLAOTO.

The status of oak trees remains substantially similar compared to its status as analyzed in the State-Certified EIR. Oak trees are protected under CLAOTO, Sections 22.56.2050–22.56.2260.

Taking into account the absence of any material change in the current status of oak trees within the Entrada South Project Site or overall, and the incremental reduction in impacts to protected oak trees, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to oak trees.

The following Specific Plan and RMDP/SCP mitigation measures would address direct impacts to oak trees on the Entrada South Project Site:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** (revegetation plans)
- **SP-4.6-3** (revegetation plans)
- **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** (revegetation plans)
- **SP-4.6-7** (revegetation plans)
- **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** (revegetation plans)
- **SP-4.6-14** (revegetation plans)
- **SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)

- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-47a** (mitigation banking)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-62** (changes to approved oak tree permit)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-42** (construction avoidance of preserved oak trees)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)

## 6.2.2 Special-Status Wildlife Species

### 6.2.2.1 Crotch's Bumble Bee

As discussed in Chapter 5, Crotch's bumble bee first became a candidate species for listing under CESA in June 2019 and was reinstated as a candidate in September 2022 after a legal challenge. Thus, it was not analyzed in the State-Certified EIR. Because it was only recently elevated to candidate status, no focused surveys for the species have been conducted on the Entrada South Project Site or elsewhere in the RMDP/SCP area. The CNDDB includes only historical occurrences in the immediate vicinity of the Entrada South Project Site, dating from 1970 and earlier, but it includes more recent occurrences between 4.0 and 9.0 miles from the site (CDFW 2024). Additionally, as described in Section 5.3.2.1, Crotch's bumble bee is now considered uncommon (CDFW 2019).



Crotch's bumble bee was not recorded on the Entrada South Project Site prior to 2024, but 14 individuals of the species were observed in two general areas in July 2024 during focused reconnaissance surveys. The exact extent of suitable nesting microhabitats is unknown. The Entrada South Project Site supports 253.7 acres of native vegetation communities and non-native grassland that could be suitable for Crotch's bumble bee, compared to 243.7 acres at the time of the analysis for the State-Certified EIR. However, both before and since the analysis for the State-Certified EIR, the suitability of these areas would be limited, in part, by the availability of the flowering plant species the bumble bee uses for food. Potentially suitable flowering plants include those from the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae. The Entrada South Project Site supports a high diversity of floral resources and all of these plant families are represented on site. The reconnaissance surveys in July 2024 identified potential floral resources for this species at several locations on the site. The Entrada South Project Site also likely includes microhabitats suitable for nesting. While the vegetation communities have been mapped and general locations of some potential floral resources have been described, the individual plant species and genera were not mapped. Therefore, Crotch's bumble bee is known to occur on the VCC Project Site, floral resources are sufficient to support foraging, and nesting habitat is likely present. The exact area of suitable habitat is not known.

Although not dependent on suitable floral resources, as the Crotch's bumble bee is, several special-status vertebrate wildlife species analyzed in the State-Certified EIR potentially occupy vegetation communities that may support Crotch's bumble bee. Blainville's horned lizard may occur in scrub (coastal scrub, chaparral) and grassland on the Entrada South Project Site; two bird species (burrowing owl and grasshopper sparrow) may occur in grasslands and areas of sparse shrub cover that support potential food plants for Crotch's bumble bee. Burrowing owl also potentially occurs in disturbed lands that could support Crotch's bumble bee, and the presence of small mammal burrows is likely important for both burrowing owl and Crotch's bumble bee. Therefore, while the discussion of impacts to Crotch's bumble bee is different from the discussions for these species, the mitigation approaches developed for these species can provide mitigation for direct and indirect impacts to Crotch's bumble bee habitat and potentially for future indirect impacts to Crotch's bumble bee individuals on the Entrada South Project Site.

### **Direct Impacts to Crotch's Bumble Bee Habitat**

Based on the evidence cited in Section 5.3.2.1 and summarized in this section, Crotch's bumble bee is known to occur on the Entrada South Project Site. The Modified Project would result in direct impacts to habitat potentially supporting suitable floral resources and nesting microhabitats for the species, where Crotch's bumble bee could occur. The Modified Project would result in permanent direct impacts to 194.1 acres and temporary direct impacts to 8.9 acres of vegetation communities (201.3 acres of overall direct impacts) potentially supporting Crotch's bumble bee, including impacts to each native vegetation communities present on the site and to non-native grassland, compared to 190.6 of permanent impacts under the 2017 Approved Project. This represents an increase of 3.5 acres in permanent impacts and an increase of 10.5 acres, although temporary impact areas would be restored to communities potentially supporting Crotch's bumble bee. The actual area occupied by specific floral resources with potential to support the species is likely much less (as noted earlier in this section, floral resources are not mapped). In addition, nesting microhabitats, such as small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, and brush piles, likely occur on site in limited areas. Although Crotch's bumble bees are generally mobile and able to avoid construction equipment when foraging, they are vulnerable around the nest. Young hibernating females (gynes) may also be vulnerable outside the nesting season, although those originating from nests on the Entrada South Project Site may choose hibernation sites several miles away. Impacts to both habitat and microhabitats that could be used by Crotch's bumble bee would be potentially significant absent



mitigation, because they would include permanent impacts to habitat and microhabitats for an uncommon species that has substantially declined throughout its range in California. Impacts to nesting Crotch's bumble bees could reduce the species' ability to persist in the Entrada South Project vicinity.

Potentially significant direct impacts to Crotch's bumble bee suitable habitat and microhabitats, and to Crotch's bumble bee nests, would be reduced to less than significant by the following Specific Plan and RMDP/SCP mitigation measures, which are applicable to the Entrada South Project, as well as a new mitigation measure (ES/VCC-MM-BIO-2) specific to the Modified Project that will result in avoidance of nests of the species, if detected (Appendix C):

- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (preservation of 1,900 acres of coastal scrub on site and within the High Country SMA/SEA, the Salt Creek area, and other open space areas within lands owned by the Applicant)
- **RMDP/SCP-BIO-22** (ORMP identifying areas suitable for oak woodland enhancement and creation)
- **RMDP/SCP-BIO-52** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **ES/VCC-MM-BIO-2** (habitat assessment and pre-construction surveys and avoidance of Crotch's bumble bee nests)

Although Crotch's bumble bees are mobile when away from the nest and foraging and generally can avoid construction equipment, nests are vulnerable to potential destruction during vegetation removal, grading, and other construction activities. Any destruction of a nest would reduce the potential for the species to persist in the vicinity and would be a significant impact. Implementation of ES/VCC-MM-BIO-2 would result in surveys for Crotch's bumble bee, if ground-disturbing activities occurred during the colony active period for the species. Avoidance measures would ensure that, if any active nest were found, the nesting event would be completed undisturbed, unless CDFW authorizes the relocation or removal of the nest, so that any young females (gynes) would have the opportunity to disperse and potentially become queens and establish nests the next year. If Crotch's bumble bee is found during surveys, a Crotch's Bumble Bee Avoidance and Minimization Plan would also be prepared for CDFW review and approval, containing additional, site-specific measures to avoid take of Crotch's bumble bee during Project ground-

disturbing activities. If take of the species could not be avoided, an incidental take permit under CESA would be required, which would ensure that the impacts of the authorized taking would be minimized and fully mitigated, in accordance with CESA.

The permanent loss of suitable habitat, including microhabitats, for Crotch's bumble bee through implementation of the Modified Project would be mitigated by habitat preservation, enhancement and restoration, and management within a large open space system. This habitat would provide substantial areas that support potential floral resources and microhabitats for the species, similar to those found within the vegetation communities on the Entrada South Project Site that support such resources. Specifically, RMDP/SCP-BIO-20 and RMDP/SCP-BIO-22 will result in habitat mitigation within a large open space system that would be established in the High Country SMA/SEA, the Salt Creek area, and the Santa Clara River SMA/SEA, as part of RMDP/SCP implementation. The protection and management of approximately 1,900 acres of suitable coastal scrub habitat within this open space system are included under RMDP/SCP-BIO-20. Restoration and management in the open space system is expected to improve the availability of habitat for Crotch's bumble bee, were it to occur in the region in the future. RMDP/SCP-BIO-52 would reduce potential inadvertent impacts to adjacent off-site habitat during construction. Under RMDP/SCP-BIO-52, all construction/contractor personnel would complete a worker environmental awareness program to ensure compliance with environmental/permit regulations and mitigation measures. Construction-limits staking and biological monitoring would prevent inadvertent impacts to suitable habitat for the species.

Based on the foregoing analysis, the Modified Project may cause potentially significant direct impacts to Crotch's bumble bee and to potential suitable habitat and microhabitats for Crotch's bumble bee. These impacts could be potentially significant absent mitigation, but such impacts would be reduced to less than significant with application of the mitigation measures recommended herein. The State-Certified EIR did not address impacts to Crotch's bumble bee, but this finding is consistent with the mitigation approach and significance conclusions for other invertebrate species addressed in that document.

### Indirect Impacts to Crotch's Bumble Bee

Use of herbicides and pesticides are considered to be among the primary factors for the decline of Crotch's bumble bee, resulting in a loss of habitat supporting floral resources, as well toxins causing mortality or sublethal effects (CDFW 2019c). Development of the Modified Project could result in short-term indirect impacts to off-site suitable habitat during construction and potentially long-term indirect impacts to the species from these factors. Other potential short-term and long-term indirect impacts include construction-related dust that could affect off-site habitat; increased human, pet, and feral cat and dog activity that could degrade habitat and/or disturb microhabitats; increased wildfire risk; increased invasive species, including Argentine ants; and a risk of vehicle collisions. Potentially significant indirect impacts would be reduced to less than significant with implementation of the following Specific Plan and RMDP/SCP mitigation measures:

- **RMDP/SCP-BIO-20** (preservation of 1,900 acres of coastal scrub on site and within the High Country SMA/SEA, the Salt Creek area, and other open space areas within lands owned by the Applicant)
- **RMDP/SCP-BIO-22** (ORMP identifying areas suitable for oak woodland enhancement and creation)
- **RMDP/SCP-BIO-52** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities)
- **RMDP/SCP-BIO-63** (control of pet, stray, and feral cats and dogs in or near open space)
- **RMDP/SCP-BIO-64** (Integrated Pest Management [IPM] plan)

- **RMDP/SCP-BIO-71** (dust control measures to protect vegetation communities and special-status aquatic wildlife species)
- **RMDP/SCP-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)
- **RMDP/SCP-BIO-73** (permanent fencing along trails in the Santa Clara River SMA/SEA)
- **RMDP-SCP-BIO-85** (Argentine ant controls)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

RMDP/SCP-BIO-64 would be implemented to prevent loss or degradation of habitat, introduction of non-native predators, and direct poisoning. Because pesticides and herbicides are considered a main threat to Crotch's bumble bee, both to habitat and individuals, RMDP/SCP-BIO-64 is particularly pertinent. RMDP/SCP-BIO-64 requires preparation of an IPM plan that addresses the use of pesticides on site and ensures that BMPs are used to avoid and minimize adverse effects on the natural environment, including vegetation communities and special-status species and their food resources. The IPM plan addresses monitoring to determine when management thresholds have been exceeded and to identify the most appropriate and efficient control method that avoids and minimizes risks to natural resources. For common area landscaping, RMDP/SCP-WQ-2 requires preparation of a Landscape and Integrated Pest Management Plan that addresses application guidelines for integrated pest management.

RMDP/SCP-BIO-71 would be implemented to control for construction-related dust impacts to special-status species. Dust control would comply with South Coast Air Quality Management District Rule 403d (SCAQMD 2005). Where determined necessary by a qualified biologist, a screening fence (i.e., a 6-foot-high chain-link fence with green fabric up to a height of 5 feet) would be installed to protect special-status species locations.

As described above, habitat mitigation would be implemented within a large open space system that would be protected and managed to minimize impacts from increased long-term human activity, including harassment and collection. By reducing habitat fragmentation, this landscape-level management would also reduce vehicle collisions. Additional RMDP/SCP measures that would also provide protection from increased human activity include RMDP/SCP-BIO-63, RMDP/SCP-BIO-64 and RMDP/SCP-WQ-2, described above, and RMDP/SCP-BIO-73.

RMDP/SCP-BIO-63 requires each homeowners' association to supply educational information to future residents regarding pets, wildlife, and open space areas, specifying that pets must remain leashed while on designated trail systems and/or in any areas within or adjacent to open space. This measure also requires as-needed control of stray and feral cats and dogs in open space areas. RMDP/SCP-BIO-73 provides for fencing along trails in the Santa Clara River SMA/SEA. RMDP/SCP-BIO-72, RMDP/SCP-BIO-85, and RMDP/SCP-BIO-87 would be implemented to reduce and control Argentine ants in open space areas where they could affect Crotch's bumble bees.

#### 6.2.2.2 Arroyo Chub

As discussed in Chapter 5, the current presence and status of arroyo chub on the Entrada South Project Site and in the Santa Clara River within the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. No habitat for this species occurs on the Entrada South Project Site, and the Modified Project would result in no direct impacts to arroyo chub.

Arroyo chub was a California Species of Special Concern and an LA County sensitive species at the time of the analysis for the State-Certified EIR. The status of the species remains unchanged.

The State-Certified EIR identified potential significant indirect impacts to arroyo chub resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP, which were reduced to less than significant with application of mitigation measures. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to arroyo chub.

The following RMDP/SCP mitigation measures would address potential indirect impacts to arroyo chub from development of the Entrada South Project, which would be limited to impacts that could occur off site, such as those related to water quality, dust from construction, pets, and introduction of non-native species:

- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)

### 6.2.2.3 Santa Ana Sucker

As discussed in Chapter 5, the current presence and status of Santa Ana sucker on the Entrada South Project Site and in the Santa Clara River within the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. No habitat for this species occurs on the Entrada South Project Site, and the Modified Project would result in no direct impacts to Santa Ana sucker.

The Santa Ana sucker was a California Species of Special Concern throughout its range in California and was an LA County sensitive species at the time of the analysis for the State-Certified EIR. Non-introduced populations were also federally listed as threatened, but this status did not apply to the population in the Santa Clara River, which was considered to be introduced. The state and local status of the Santa Ana sucker has not changed since the analysis for the State-Certified EIR. USFWS has confirmed that threatened status does not apply to the Santa Clara River population.

The State-Certified EIR identified potential significant indirect impacts to Santa Ana sucker resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP, which were reduced to less than significant with application of mitigation measures. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to Santa Ana sucker.

The following RMDP/SCP mitigation measures would address potential indirect impacts to Santa Ana sucker from development of the Entrada South Project, which would be limited to impacts that could occur off site, such as those related to water quality, dust from construction, pets, and introduction of non-native species:

- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)

- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)

#### 6.2.2.4 Southern Steelhead

As discussed in Chapter 5, the current presence and status of southern steelhead on the Entrada South Project Site and in the Santa Clara River within the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. No habitat for this species occurs on the Entrada South Project Site, and the Modified Project would result in no direct impacts to southern steelhead.

Southern steelhead was a federally listed endangered species, a California Species of Special Concern, and an LA County sensitive species at the time of the analysis for the State-Certified EIR. The status of the species remains unchanged, but the CFGC is reviewing a petition to list the Southern California/Central Coast ESU, and the species would be considered a candidate if the commission finds that listing may be warranted.

The State-Certified EIR analyzed the potential for indirect impacts to southern steelhead resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP and concluded that no indirect impacts would occur. The Modified Project would not result in any new indirect impacts to southern steelhead.

Because the State-Certified EIR identified no significant direct or indirect impacts to southern steelhead, no mitigation is required.

#### 6.2.2.5 Unarmored Threespine Stickleback

As discussed in Chapter 5, the current presence and status of unarmored threespine stickleback on the Entrada South Project Site and in the Santa Clara River within the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. No habitat for this species occurs on the Entrada South Project Site, and the Modified Project would result in no direct impacts to unarmored threespine stickleback.

Unarmored threespine stickleback was a federally listed endangered, state listed endangered, state fully protected, and LA County sensitive species at the time of the analysis for the State-Certified EIR. The regulatory status of the species remains the same.

The State-Certified EIR identified potential significant indirect impacts to unarmored threespine stickleback resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP, which were reduced to less than significant with application of mitigation measures. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to unarmored threespine stickleback.

The following RMDP/SCP mitigation measures would address potential indirect impacts to unarmored threespine stickleback from development of the Entrada South Project:

- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)

- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)

#### 6.2.2.6 Arroyo Toad

As discussed in Chapter 5, the current presence and status of arroyo toad on the Entrada South Project Site and in the Santa Clara River within the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. No aquatic habitat for this species occurs on the Entrada South Project Site, and as shown in the habitat suitability analysis in Impact Sciences (2002), no upland habitat occurs that is accessible to arroyo toads breeding in the nearest suitable habitat in the Santa Clara River. The Modified Project would result in no direct impacts to arroyo toad.

Arroyo toad was a federally listed endangered species, California Species of Special Concern, and LA County sensitive species at the time of the analysis for the State-Certified EIR. The regulatory status of the species remains the same.

The State-Certified EIR identified potential significant indirect impacts to arroyo toad resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP, which were reduced to less than significant with application of mitigation measures. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to arroyo toad.

The following RMDP/SCP mitigation measures would address potential indirect impacts to arroyo toad from development of the Entrada South Project, which would be limited to impacts that could occur off site, such as those related to water quality, dust from construction, pets, and introduction of non-native species:

- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)

#### 6.2.2.7 Western Spadefoot

As discussed in Chapter 5, the overall status of western spadefoot on the Entrada South Project Site and elsewhere in the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. While surveys since 2010 confirmed western spadefoot at the edge of the Entrada South tract boundary, this occurrence location was developed as a result of the Mission Village Project, and mitigation has been provided under the requirements of the State-Certified EIR. Western spadefoot has not been detected elsewhere on the Entrada South Project Site. However, the State-Certified EIR assumed the presence of the species on the Entrada South Project Site and elsewhere in the RMDP/SCP area, and it is still assumed to be present. Because western spadefoot is associated with specific microhabitats, their total suitable habitat on site was not quantified in the State-Certified EIR. However, the availability of suitable habitat is assumed to remain similar as at the time of analysis for the State-Certified EIR.



Western spadefoot was a California Species of Special Concern and an LA County sensitive species at the time of the analysis for the State-Certified EIR, and its state and local status remain the same. In 2015, USFWS issued a finding on a petition to federally list western spadefoot, determining that the petition presented substantial scientific or commercial information indicating that the petitioned actions may be warranted (80 FR 37568–37579). In December 2023, USFWS published a proposed rule to list both the Northern DPS and Southern DPS of the western spadefoot as threatened (88 FR 84252–84278). No final rulemaking had been published as of August 2024.

If the western spadefoot were to be federally listed, it would increase its sensitivity rangewide; however, because both direct and indirect impacts were determined to be potentially significant in the State-Certified EIR, avoidance, minimization, and mitigation measures have already been adopted for the species on the Entrada South Project Site and the larger RMDP/SCP area. The State-Certified EIR would result in an open space system that would result in preservation of suitable habitat for western spadefoot through preservation of suitable upland communities in the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, SP-4.6-27, and RMDP/SCP-BIO-20, the Entrada South Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved areas of the Entrada South Project Site, which would provide suitable habitat to support western spadefoot in the vicinity of the Entrada South Project Site. The Entrada South Project also includes requirements for pre-construction surveys for breeding western spadefoot and replacement of occupied aquatic breeding habitat at a 2:1 ratio, if breeding pools are found. In addition, project design and minimization measures would reduce direct and indirect impacts to western spadefoot, including long-term impacts. The Modified Project would be consistent with the 2017 Approved Project. Taking into account the absence of any material change in the current status of western spadefoot on the Entrada South Project Site and overall, the Modified Project would not result in new direct or indirect significant impacts to western spadefoot, or substantially increase the severity of any previously identified significant direct or indirect impact to the species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to western spadefoot on the Entrada South Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)



- RMDP/SCP-BIO-12 (mitigation monitoring reports)
- RMDP/SCP-BIO-15 (replacement of riparian trees)
- RMDP/SCP-BIO-16 (revegetation of temporary impacts)
- RMDP/SCP-BIO-20 (coastal scrub preservation in RMDP areas)
- RMDP/SCP-BIO-21 (supplemental restoration of coastal scrub)
- RMDP/SCP-BIO-49 (construction stormwater measures)
- RMDP/SCP-BIO-52 (Worker Environmental Awareness Training for construction personnel)
- RMDP/SCP-BIO-53 (pre-construction surveys for western spadefoot)
- RMDP/SCP-BIO-63 (homeowner educational information)
- RMDP/SCP-BIO-64 (Integrated Pest Management Plan; CC&Rs)
- RMDP/SCP-BIO-70 (construction BMPs for protection of water quality, plant/wildlife species)
- RMDP/SCP-BIO-71 (construction dust control)
- RMDP/SCP-BIO-72 (planting restrictions within 200 feet of native vegetation)
- RMDP/SCP-BIO-80 (Exotic Wildlife Species Control Plan)
- RMDP/SCP-BIO-85 (Argentine ant controls)
- RMDP/SCP-BIO-87 (Argentine ant monitoring)

### 6.2.2.8 California Glossy Snake

As discussed in Chapter 5, the California glossy snake, which was designated as a California Species of Special Concern in 2016, was not a special-status species at the time of analysis for the State-Certified EIR. Therefore, no focused surveys were conducted for the species and the State-Certified EIR did not analyze impacts to California glossy snake. The lack of known occurrences at the time is not an indication that the species was absent. In fact, the species' status was likely the same prior to the analysis for the State-Certified EIR as it is now. Currently, California glossy snake is known to occur in the vicinity of the Entrada South Project Site elsewhere in the RMDP/SCP area. It has the potential to occur in 235.9 acres of grassland (including valley oak/grass), chaparral, coastal scrub habitats on the Entrada South Project Site. The same habitats are potentially occupied by other special-status terrestrial reptiles, including San Bernardino ringneck snake, which is a CDFW Special Animal, and three species that, like California glossy snake, are California Species of Special Concern: San Diegan tiger whiptail, coast patch-nosed snake, and Blainville's horned lizard. The analysis of impacts to California glossy snake should be most similar to the analysis for Blainville's horned lizard ("coast horned lizard" in the State-Certified EIR), which also occurs in grasslands, disturbed, coastal scrub, and chaparral habitats, as well as valley oak grasslands and the drier riparian and other riparian/wetland communities occurring on the Entrada South Project Site.

#### Direct Impacts to California Glossy Snake

Project construction would result in direct impacts to suitable habitat for California glossy snake and could directly affect individuals. The Modified Project would result in permanent direct impacts to 181.5 acres and temporary direct impacts to 4.4 acres of suitable on-site habitat for California glossy snake. For comparison, the 2017 Approved Project would permanently impact 176.9 acres of suitable habitat for California glossy snake. Individuals are typically belowground during the daytime and are relatively slow moving when aboveground. Therefore, they are highly vulnerable to injury and mortality during construction. These impacts would be potentially significant because they would permanently impact 77% and temporarily impact 2% of the suitable habitat on site for an uncommonly occurring

California Species of Special Concern that has experienced substantial habitat loss and fragmentation from urban and agricultural development throughout its range, and individuals could be injured and killed during construction.

Potentially significant direct impacts to California glossy snake would be reduced to less than significant by the following Specific Plan and RMDP/SCP mitigation measures, and one measure specific to the Modified Project (ES/VCC-MM-BIO-1) to address impacts not previously addressed:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-54** (relocation plan for certain reptile species)
- **ES/VCC-MM-BIO-1** (relocation plan for California glossy snake)

California glossy snakes are not very mobile, and usually only move short distances at a time, as well as typically remaining underground during the day, when construction activities are likely to occur. Large-scale construction and/or grading activities causing permanent and temporary impacts likely would result in entombment or direct contact with grading equipment, either during the spring and summer, when this species is more active, or in winter, when they may remain inactive and belowground throughout the day. Those individuals aboveground during construction would be subject to injury or death as a result of direct contact with or crushing by construction equipment used for vegetation clearing and grading.

ES/VCC-MM-BIO-1 ensures the capture and relocation of California glossy snake in conjunction with the requirements for other special-status reptiles addressed under RMDP/SCP-BIO-54. RMDP/SCP-BIO-52 provides for pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities. Under RMDP/SCP-BIO-52, all construction/contractor personnel would complete a worker environmental awareness program to ensure compliance with environmental/permit regulations and

mitigation measures. Construction-limits staking and biological monitoring would prevent inadvertent impacts on California glossy snake and other low-mobility reptile species and their habitat.

The permanent loss of suitable habitat for California glossy snake through implementation of the Modified Project would be mitigated by preservation, enhancement and restoration, and management of suitable habitat within a large open space system that will be conserved under the RMDP within the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22 the Entrada South Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved areas of the Entrada South Project Site, which would provide suitable habitat to support California glossy snake in the vicinity of the Entrada South Project Site and offset impacts of the Entrada South Project. In addition, streambeds and riparian habitat within Unnamed Canyon 2 would be permanently conserved under ES-PDF-BIO-1. These areas would preserve additional suitable habitat for California glossy snake beyond the conservation implemented under the RMDP. Implementation of these measures would permit California glossy snake to persist in the vicinity of the Entrada South Project Site.

Based on the foregoing analysis, the Modified Project may cause potentially significant direct impacts to California glossy snake, but such impacts can be reduced to less than significant with application of the mitigation measures recommended herein. This finding is consistent with the significance determination and mitigation findings of the State-Certified EIR for impacts to other special-status terrestrial reptile species with similar life histories.

### Indirect Impacts to California Glossy Snake

The Modified Project could result in short-term and long-term indirect impacts to California glossy snake such as construction-related dust; human-caused habitat degradation; harassment and collection; predation by pet, stray, and feral cats and dogs; invasive species; use of pesticides; and increased roadkill. Short-term and long-term indirect impacts to California glossy snake would be potentially significant, absent mitigation. Indirect impacts to California glossy snake would be reduced to less than significant with implementation of the following Specific Plan and RMDP/SCP mitigation measures contained in the State-Certified EIR:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-85** (Argentine ant controls)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)

RMDP/SCP-BIO-71 would be implemented to control for construction-related dust impacts to special-status species. Dust control would comply with South Coast Air Quality Management District Rule 403d (SCAQMD 2005). Where determined necessary by a qualified biologist, a screening fence (i.e., a 6-foot-high chain-link fence with green fabric up to a height of 5 feet) would be installed to protect special-status species locations.

SP-4.6-26a, SP-4.6-63, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-21 would be implemented to mitigate impacts from increased long-term human activity, including harassment and collection and habitat fragmentation, through protection, restoration and enhancement, and management of habitat. By reducing habitat fragmentation, these measures would also reduce vehicle collisions and roadkill. RMDP/SCP measures that also would provide protection from increased in human activity include RMDP/SCP-BIO-63, RMDP/SCP-BIO-64, and RMDP/SCP-WQ-2.

RMDP/SCP-BIO-63 requires each homeowners' association to supply educational information to future residents regarding pets, wildlife, and open space areas, specifying that pets must remain leashed while on designated trail systems and/or in any areas within or adjacent to open space. This measure also requires as-needed control of stray and feral cats and dogs in open space areas.

RMDP/SCP-BIO-72, RMDP/SCP-BIO-85, and RMDP/SCP-BIO-87 would be implemented to reduce and control Argentine ants in open space areas. RMDP/SCP-BIO-72 specifies that container plants for use within 2,100 feet of the open space areas be inspected for pests, including Argentine ants. Plant palettes also would include non-invasive species that do not require high irrigation rates, which would help keep moisture levels low at the open space-urban interface. Except as required for fuel modification, perimeter landscaping irrigation is to be temporary. RMDP/SCP-BIO-85 lists the following project design features and management measures to prevent invasion of Argentine ants into the spineflower preserves: (1) providing "dry zones" between urban development and spineflower populations; (2) building dry areas such as parking lots and roadways next to preserve boundaries, and sloping these areas away from the spineflower preserves; (3) constructing pedestrian pathways next to preserves out of decomposed granite or other gravel to minimize the holding of moisture; (4) ensuring that landscape container plants installed within 200 feet of spineflower preserves are ant free; (5) maintaining natural hydrological conditions in the spineflower preserves; and (6) using drought-resistant plants in fuel management zones and minimizing irrigation to the extent feasible. RMDP/SCP-BIO-87 requires monitoring for Argentine ants along the urban-open space interface. RMDP/SCP-BIO-64 would be implemented to prevent loss of prey and secondary poisoning and requires preparation of an IPM plan controlling the use of pesticides on site prior to the issuance of building permits. RMDP/SCP-WQ-2 requires preparation of a Landscape and Integrated Pest Management Plan, which addresses application guidelines for integrated pest management for common area landscaping.

Based on the foregoing analysis, the Modified Project may cause potentially significant indirect impacts to California glossy snake, but such impacts can be reduced to less than significant with application of the mitigation measures recommended herein. This finding is consistent with the significance determination and mitigation findings in the State-Certified EIR for impacts to other special-status terrestrial reptile species with similar life histories.

#### 6.2.2.9 California Legless Lizard

As discussed in Chapter 5, the overall status of California legless lizard on the Entrada South Project Site and elsewhere in the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. Surveys since 2010 confirmed the presence of California legless lizard within the Entrada South tract boundary but not within areas subject to permanent and temporary impacts from the Modified Project. However, the State-Certified EIR assumed the presence of the species on the Entrada South Project Site and elsewhere in the RMDP/SCP area. Approximately 195.8 acres of suitable habitat occur on the Entrada South Project Site, and the availability of suitable habitat remains substantially similar (a 0.5-acre increase) to that described in the State-Certified EIR. Permanent impacts from the Modified Project would be slightly less compared to the 2017 Approved Project. The Modified Project would result in 161.1 acres of permanent impacts and 8.3 acres of

temporary impacts (169.4 acres total) to California legless lizard habitat, compared to 168.5 acres of permanent impacts under the 2017 Approved Project.

California legless lizard (at the time, silvery legless lizard) was a California Species of Special Concern and an LA County sensitive species at the time of the analysis for the State-Certified EIR. All legless lizard species currently are California Species of Special Concern, and legless lizards remain LA County sensitive species.

The permanent loss of suitable habitat for California legless lizard through implementation of the Modified Project would be mitigated by preservation, enhancement and restoration, and management of suitable habitat within a large open space system that will be conserved under the RMDP in the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, SP-4.6-27, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22, the Entrada South Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved areas of the Entrada South Project Site, which would provide suitable habitat to support California legless lizard in the vicinity of the Entrada South Project Site and offset impacts of the Entrada South Project. In addition, streambeds and riparian habitat within Unnamed Canyon 2 would be permanently conserved under ES-PDF-BIO-1. These areas would preserve additional suitable habitat for California legless lizard beyond the conservation implemented under the RMDP. Mitigation measures imposed under the State-Certified EIR also require pre-construction surveys for the development of a relocation plan, pre-construction surveys, and relocation for California legless lizards and other special-status terrestrial reptiles. The Modified Project would be consistent with the 2017 Approved Project. Taking into account the absence of any material change in the current status of California legless lizard on the Entrada South Project Site and overall, or any material change to impacts to the species or its habitat under the Modified Project compared to the 2017 Approved Project, the Modified Project would not result in new direct or indirect significant impacts, or substantially increase any previously identified direct or indirect significant impacts, to California legless lizard.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to California legless lizard on the Entrada South Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)

- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-54** (relocation plan for certain reptile species)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-85** (Argentine ant controls)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

### 6.2.2.10 Southwestern Pond Turtle

As discussed in Chapter 5, the current presence and status of southwestern pond turtle on the Entrada South Project Site and elsewhere in the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. No aquatic habitat for this species occurs on the Entrada South Project Site, and upland habitats on the Entrada South Project Site are separated from suitable habitat in the Santa Clara River by extensive development and therefore are not accessible to this species. The Modified Project would result in no direct impacts to southwestern pond turtle.

Southwestern pond turtle was a California Species of Special Concern and an LA County sensitive species at the time of the analysis for the State-Certified EIR. In 2015, USFWS issued a finding on a petition to federally list western pond turtle, determining that the petition presented substantial scientific or commercial information indicating that the petitioned actions may be warranted (80 FR 19259–19263). In October 2023, USFWS found that the listing of both the southwestern pond turtle and the northwestern pond turtle as threatened under ESA was warranted and solicited comments on the proposed listing of the two species as threatened (88 FR 68370–68399).

If the southwestern pond turtle were to be federally listed, it would increase its sensitivity rangewide; however, because both direct and indirect impacts were determined to be potentially significant in the State-Certified EIR, avoidance, minimization, and mitigation measures have already been adopted for the species on the Entrada South Project Site and the larger RMDP/SCP area. The State-Certified EIR identified potential significant indirect impacts to southwestern pond turtle resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to western pond turtle.

The following RMDP/SCP mitigation measures would address potential indirect impacts to southwestern pond turtle from development of the Entrada South Project, which would be limited to impacts that could occur off site, such as those related to water quality, dust from construction, pets, and introduction of non-native species:

- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)



- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

#### 6.2.2.11 Burrowing Owl

As discussed in Chapter 5, the current presence and status of burrowing owl on the Entrada South Project Site and elsewhere in the RMDP/SCP area remain essentially the same as that analyzed in the State-Certified EIR. Based on extensive biological surveys of the Entrada South Project Site, burrowing owl has not been detected. In addition, focused surveys on the adjacent Mission Village Project Site and in several other villages have resulted in no detections of burrowing owl in the RMDP/SCP area since the State-Certified EIR analysis. Nonetheless, the State-Certified EIR assumed that burrowing owl could occasionally occur in the RMDP/SCP area, including on the Entrada South Project Site, for wintering and migration. Also, because the Entrada South Project Site is within the burrowing owl's breeding range, the analysis also assumed that burrowing owl could nest on the site. Approximately 106.6 acres of suitable habitat occurs on the Entrada South Project Site, and the availability of suitable habitat remains substantially similar (a 0.2-acre decrease) to that described in the State-Certified EIR. The Modified Project would result in permanent impacts to 75.1 acres and temporary impacts to 1.1 acres of suitable habitat (76.1 acres total), compared to 74.3 acres of permanent impacts from the 2017 Approved Project. The Modified Project therefore would result in an increase of 0.8 acres in permanent impacts and 1.9 acres overall, compared to impacts from the 2017 Approved Project. This minor increase is mostly a result of some minor changes in the distribution and acreages of natural vegetation communities on the Entrada South Project Site, as described in Section 6.1.1, and not due to a substantial increase in the area subject to impacts of the Modified Project compared to the 2017 Approved Project.

Burrowing owl was a federal Bird of Conservation Concern, a California Species of Special Concern, and an LA County sensitive species at the time of the State-Certified EIR analysis, and its federal, state, and local status remain the same. The State-Certified EIR would result in an open space system that would result in preservation of suitable habitat for burrowing owl through preservation of grasslands and other suitable communities in the High Country SMA and the Salt Creek area. Under mitigation measure SP-4.6-26a, the Entrada South Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved areas of the Entrada South Project Site, which would provide suitable habitat to support burrowing owl in the vicinity of the Entrada South Project Site and offset impacts of the Entrada South Project. In addition, mitigation measures imposed under the State-Certified EIR would require avoidance and minimization measures that would substantially reduce direct and indirect impacts to burrowing owl individuals during construction, as well as long-term indirect impacts to burrowing owls. Although impacts to suitable burrowing owl habitat increased slightly from 74.3 acres of permanent impacts to 75.1 acres of permanent and 1.1 acres of temporary impacts, the species has not been observed on the Entrada South Project Site, despite numerous surveys of upland habitats. Taking into account the absence of any material change in the current status of burrowing owl on the Entrada South Project Site overall and the lack of any observations of the species, the Modified Project would not result in new direct or indirect significant impacts to burrowing owl, or substantially increase any previously identified direct or indirect significant impacts to the species.



The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to burrowing owl on the Entrada South Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-56** (downcast lighting near natural areas)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-57** (pre-construction surveys for burrowing owl)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

#### 6.2.2.12 California Condor

As discussed in Chapter 5, the current presence and status of California condor on the Entrada South Project Site and elsewhere in the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. No focused surveys for California condor were conducted on the Entrada South Project Site. However, U.S. Geological Survey data for California condors fitted with GPS transmitters showed that none of the condors being tracked had landed on the Entrada South Project Site, although condors had landed in the RMDP area on several occasions. The frequency of condors flying over Entrada South Project Site was low, but overall supported the conclusion in the State-Certified EIR that condors fly over the site and vicinity at high altitudes, and not for the purpose of foraging on the Entrada South Project Site. The State-Certified EIR also acknowledged based on 2009 flight data that flights over the RMDP/SCP area were increasing. The State-Certified EIR did not estimate the area of suitable habitat for this species, which it concluded likely occurs only very irregularly to forage opportunistically for large mammal carcasses, and this conclusion remains valid based on the most recent data.

California condor is listed as endangered under both the ESA and CESA, is state fully protected, and is an LA County sensitive species. Its regulatory status remains the same as at the time of the State-Certified EIR analysis. The Modified Project would be consistent with the 2017 Approved Project. Taking into account the absence of any material change in the current status of California condor within the Entrada South Project area or overall, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to this species.

The following RMDP/SCP mitigation measures would address direct and indirect impacts to California condor on the Entrada South Project Site:

- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-82** (condor protection measures)

### 6.2.2.13 Coastal California Gnatcatcher

As discussed in Chapter 5, the current presence and status of coastal California gnatcatcher on the Entrada South Project Site and elsewhere in the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. Focused surveys were conducted on the Entrada South Project Site in 2012, 2015, 2018, 2019, and 2022. Although one juvenile coastal California gnatcatcher was detected at the southern edge of the Entrada South Project Site in 2015, this individual was considered to be dispersing from a breeding site, not resident on the site. One observed during surveys for Southern California Edison work within the Entrada South Project site in June 2024 was also observed once (Knight, pers. comm., 2024). No coastal California gnatcatchers were detected in 2012, 2018, 2019, and 2022. Surveys confirm that no breeding population occurs on the Entrada South Project Site, and the general absence of coastal California gnatcatchers based on surveys elsewhere in the RMDP/SCP area or the Legacy Village Project Site during this time suggests no breeding population occurs anywhere in the RMDP/SCP area and the immediate vicinity. Approximately 150.8 acres of suitable habitat occurs on the Entrada South Project Site, and the availability of suitable habitat remains substantially similar (a decrease of 2.7 acres) to that described in the State-Certified EIR. The Modified Project would result in 121.7 acres of permanent impacts and 3.5 acres of temporary impacts to suitable habitat for the species (125.2 acres of impacts overall). By comparison, the 2017 Approved Project would have resulted in 128.7 acres of permanent impacts, meaning that impacts under the Modified Project represent a net decrease of 3.6 acres, which mostly reflects the overall change in the distribution and acreage of suitable habitat on the Entrada South Project Site under current conditions compared to the conditions reported in the State-Certified EIR.

The permanent loss of suitable habitat for coastal California gnatcatcher through implementation of the Modified Project would be mitigated by preservation, enhancement and restoration, and management of suitable habitat within a large open space system that will be conserved under the RMDP within the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-55, the Entrada South Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved areas of the Entrada South Project Site, which would provide suitable upland habitat to support coastal California gnatcatcher in the vicinity of the Entrada South Project Site and offset impacts of the Entrada South Project. In addition, mitigation measures imposed under the State-Certified EIR would require avoidance and minimization measures that would substantially reduce potential direct and indirect impacts to coastal California gnatcatcher individuals during construction, as well as long-term indirect impacts to the species, as described below.

Coastal California gnatcatcher was listed as threatened under the ESA, was a California Species of Special Concern, and was an LA County sensitive species at the time of the analysis for the State-Certified EIR. Its regulatory status remains the same. The Modified Project would be consistent with the 2017 Approved Project. Taking into account the absence of any material change in the current status of coastal California gnatcatcher within the Entrada South Project area or overall, the Modified Project would not result in any new significant direct indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to coastal California gnatcatcher on the Entrada South Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-56** (downcast lighting near natural areas)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)

- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-55** (mitigation for least Bell's vireo and California gnatcatcher habitat)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-85** (Argentine ant controls)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

#### 6.2.2.14 Least Bell's Vireo

As discussed in Chapter 5, the current presence and status of least Bell's vireo on the Entrada South Project Site and elsewhere in the Santa Clara River and Castaic Creek in the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. No riparian habitat suitable for this species occurs on the Entrada South Project Site, and the Modified Project would result in no direct impacts to least Bell's vireo.

Least Bell's vireo was listed as endangered under the ESA and CESA at the time of the State-Certified EIR analysis, as well as being an LA County sensitive species. The status of the species remains unchanged.

The State-Certified EIR identified potential significant indirect impacts to least Bell's vireo resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to least Bell's vireo.

The following RMDP/SCP mitigation measures would address potential indirect impacts to least Bell's vireo from development of the Entrada South Project, which would be limited to impacts that could occur off site, such as those related to water quality, dust from construction, and pets:

- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-78** (cowbird trapping)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

### 6.2.2.15 Southwestern Willow Flycatcher

As discussed in Chapter 5, the current presence and status of southwestern willow flycatcher on the Entrada South Project Site and elsewhere in the Santa Clara River and Castaic Creek in the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. No riparian habitat suitable for this species occurs on the Entrada South Project Site, and the Modified Project would result in no impacts to southwestern willow flycatcher.

Southwestern willow flycatcher was listed as endangered under the ESA and CESA at the time of the State-Certified EIR analysis, as well as being an LA County sensitive species. The status of the species remains unchanged.

The State-Certified EIR identified potential significant indirect impacts to southwestern willow flycatcher resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to southwestern willow flycatcher.

The following RMDP/SCP mitigation measures would address potential indirect impacts to southwestern willow flycatcher from development of the Entrada South Project, which would be limited to impacts that could occur off site, such as those related to water quality, dust from construction, and pets:

- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-78** (cowbird trapping)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

### 6.2.2.16 Tricolored Blackbird

As discussed in Chapter 5, the current presence and status of tricolored blackbird on the Entrada South Project Site and elsewhere in the RMDP/SCP area remain essentially the same as that analyzed in the State-Certified EIR. Based on extensive biological surveys of the Entrada South Project Site, tricolored blackbird has not been detected. In addition, no new nesting occurrences have been recorded since 1994. Nonetheless, the State-Certified EIR assumed that tricolored blackbird could occur in the RMDP/SCP area, including on the Entrada South Project Site, while foraging. The State-Certified EIR also assumed that tricolored blackbirds could nest in wetland and marsh habitat in the RMDP/SCP area, but no such habitat occurred on the Entrada South Project Site at the time of analysis. The Entrada South Project Site now supports approximately 0.04 acres (approximately 1,700 square feet) of potential nesting habitat (cattail marshes) for tricolored blackbird, although nesting has not been observed on the Entrada South Project Site. The 0.04 acres of cattail marshes under current vegetation mapping compares to no cattail marshes mapped on the Entrada South Project Site prior to the analysis for the State-Certified EIR (cattail marshes can rapidly colonize areas with suitable growing conditions, such as ponded water). The Modified Project would result in impacts to all cattail marshes on site, including permanent impacts to 0.04 acres and temporary impacts to less than 0.01 acres. The State-Certified EIR identified 3.4 acres of

suitable nesting habitat for tricolored blackbird in the RMDP/SCP area, and permanent impacts to 1.6 acres (47%) of this area. These impacts were considered “adverse but not significant.” The addition of 0.04 acres of impacts would increase the area of impacts to tricolored blackbird nesting habitat across the RMDP/SCP area by less than 3%. This small incremental loss of suitable habitat would not result in the loss of a known nesting location; would affect an area that is very small overall and that has only a low likelihood of ever supporting nesting by this species; and constitutes a minor change in impacts under the Modified Project that does not substantially increase the overall impacts to tricolored blackbird.

Approximately 106.6 acres of suitable foraging habitat occurs on the Entrada South Project Site, and the availability of suitable foraging habitat remains substantially similar (a 0.2-acre increase) to that described in the State-Certified EIR (106.7 acres). The Modified Project would result in 75.1 acres of permanent impacts and 1.1 acres of temporary impacts (76.1 acres overall), compared to permanent impacts of 74.3 acres from the 2017 Approved Project. Therefore, the Modified Project would result in an increase of 0.8 acres in permanent impacts (1.9 acres overall) to suitable foraging habitat. As described in Section 6.2.2.10 for burrowing owl, this minor increase is mostly due to some minor changes in the distribution and acreages of natural vegetation communities on the Entrada South Project Site under the Modified Project compared to those described in the State-Certified EIR.

Tricolored blackbird was a federal Bird of Conservation Concern, a California Species of Special Concern, and an LA County sensitive species at the time of the State-Certified EIR analysis. However, tricolored blackbird was listed as threatened under CESA in April 2018. In addition, in 2015, USFWS issued a finding on a petition to federally list tricolored blackbird, determining that the petition presented substantial scientific or commercial information indicating that the petitioned actions may be warranted (80 FR 56423–56432). USFWS has yet to issue a final determination on whether the listing is warranted. The state listing of tricolored blackbird increased the sensitivity of the species rangewide, but because both direct and indirect impacts were determined to be significant absent mitigation in the State-Certified EIR, avoidance, minimization, and mitigation measures have already been adopted for the species on the Entrada South Project Site and the larger RMDP/SCP area. In addition, while impacts would occur to suitable foraging habitat, none would occur to occupied suitable nesting habitat.

The State-Certified EIR would result in an open space system that would result in preservation of suitable foraging habitat for tricolored blackbird through preservation of grasslands and other suitable communities in the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, RMDP/SCP-BIO-1, and RMDP/SCP-BIO-2 the Entrada South Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved areas of the Entrada South Project Site, which would provide suitable habitat to support tricolored blackbird in the vicinity of the Entrada South Project Site and offset impacts of the Entrada South Project. This would reduce habitat losses on the Entrada South Project Site to less than significant. In addition, streambeds and riparian habitat within Unnamed Canyon 2 would be permanently conserved under ES-PDF-BIO-1. These areas would preserve additional potential habitat for tricolored blackbird beyond the conservation implemented under the RMDP. Mitigation measures imposed under the State-Certified EIR also would require avoidance and minimization measures that would substantially reduce potential direct and indirect impacts to tricolored blackbird individuals during construction, as well as long-term indirect impacts to tricolored blackbirds. The Modified Project would result in an increase in impacts to suitable foraging habitat compared to the 2017 Approved Project and would also result in a small permanent impact to suitable nesting habitat. However, the species has not been detected on the Entrada South Project Site during the many biological surveys conducted on site. Taking into account the absence of any material change in the current occurrence status of tricolored blackbird on the Entrada South Project Site overall and the absence of any observations of the species, the Modified Project would not result in new significant direct or indirect impacts to tricolored blackbird, or substantially increase any previously identified direct or indirect significant impacts to the species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to tricolored blackbird on the Entrada South Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

#### 6.2.2.17 Western Yellow-Billed Cuckoo

As discussed in Chapter 5, the current presence and status of western yellow-billed cuckoo on the Entrada South Project Site and elsewhere in the Santa Clara River and Castaic Creek in the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. No riparian habitat suitable for this species occurs on the Entrada South Project Site, and the Modified Project would result in no impacts to western yellow-billed cuckoo.

Western yellow-billed cuckoo was a candidate for listing under the ESA, was listed as endangered under CESA, was a federal Bird of Conservation Concern, and was an LA County sensitive species at the time of the analysis for the State-Certified EIR analysis. The state and local status of the species remain unchanged, but the species was federally listed as threatened in 2014.



The State-Certified EIR identified potential significant indirect impacts to western yellow-billed cuckoo resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to western yellow-billed cuckoo.

The following RMDP/SCP mitigation measures would address potential indirect impacts to western yellow-billed cuckoo from development of the Entrada South Project, which would be limited to impacts that could occur off site, such as those related to water quality, dust from construction, and pets:

- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-78** (cowbird trapping)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

### 6.2.2.18 Cougar

As discussed in Chapter 5, the current presence and status of cougar on the Entrada South Project Site and elsewhere in the RMDP/SCP area remain essentially the same as that analyzed in the State-Certified EIR. No focused surveys for cougar were conducted on the Entrada South Project Site. Cougar was detected on the Entrada South Project Site incidentally through sign (tracks, scat) after the State-Certified EIR was prepared, confirming presence of the species for the first time. Subsequently, the species was directly observed incidentally. But the analysis for the State-Certified EIR assumed that the species could occur virtually anywhere in the RMDP/SCP area, including on the Entrada South Project Site. Therefore, detection of cougar activity on the Entrada South Project Site confirms the conclusion of the State-Certified EIR. Approximately 195.8 acres of suitable habitat occurs on the Entrada South Project Site, and the availability of suitable habitat remains substantially similar (a 0.5-acre increase) to that described in the State-Certified EIR (195.3 acres).

The cougar was designated in California as a Specially Protected Mammal at the time of the analysis for the State-Certified EIR and was considered a special-status species for purposes of that document. As discussed in Chapter 5, in April 2021 CFGC, following a review of a petition filed by the Center for Biological Diversity and the Mountain Lion Foundation (CBD and MLF 2019), found that listing of the cougar in the proposed Southern California/Central Coast ESU may be warranted, making cougars in the Entrada South Project region a candidate species under CESA. Candidate status provides the cougar with the same protections as endangered species under CESA, as long as the species remains a candidate. Therefore, the legal status of cougar has changed since the analysis for the State-Certified EIR, although the cougar remains a special-status species.

#### Direct Impacts to Cougar and Cougar Habitat

As described in Section 5.3.2.17, and consistent with the analysis in the State-Certified EIR, the cougar is known to occur on the Entrada South Project Site. However, cougar use of the site is believed to be only occasional. The Modified Project would result in permanent impacts to 161.1 acres and temporary impacts to 8.3 acres



(169.4 acres overall) of suitable habitat for cougar, compared to 168.5 acres of permanent impacts from the 2017 Approved Project. Therefore, the Modified Project would result in an increase in overall impacts of 1.0 acres compared to the 2017 Approved Project, which is a negligible change.

The impacts associated with the Modified Project represent less than 8% of impacts to cougar habitat analyzed in the State-Certified EIR, which found that implementation and buildout within the RMDP/SCP area as a whole would result in permanent loss of a total of 2,223 acres of suitable habitat for the species. The State-Certified EIR considered the entire RMDP/SCP area (about 22 square miles) as not large enough to support a single individual's entire home range or more than two or three cougars with overlapping home ranges at any one time. However, the State-Certified EIR found that the RMDP/SCP as a whole would result in substantial permanent loss of habitat for cougar that would reduce the distribution and range of the cougar population in the RMDP/SCP area, which would be a significant impact absent mitigation.

Habitat loss can also result in fragmentation of remaining habitats. However, the Entrada South Project Site itself is relatively isolated under existing conditions. Existing development occurs to the east and south, and lands immediately to the north are either developed or fenced and disturbed. Development associated with the Mission Village Project to the west leaves only a tenuous connection to suitable habitat to the southwest, and cougars no longer have access to the Santa Clara River corridor via Magic Mountain Canyon along the western edge of the Entrada South Project Site. Therefore, loss of habitat within the Entrada South Project Site would not result in further fragmentation of habitat for cougars.

As stated in the State-Certified EIR, it is unlikely that construction activities would result in direct injury or mortality of individual adult cougars. The risk of collision with fast-moving construction equipment and vehicles is very low because cougars are expected to avoid construction activities and because the species is highly mobile. The potential for disturbance of denning cougars is low because the species is likely only to be foraging temporarily within the Entrada South Project Site. Cougars typically den in rockier areas with caves or cavities suitable for dens, which are more likely to be found in the upland habitats of the High Country SMA and are absent from the Entrada South Project Site. However, the species has been known to den in dense vegetation. Therefore, while it is highly unlikely the Modified Project would result in impacts to very young cougars confined to natal dens, this possibility cannot be entirely discounted, and any impact to individuals of a species that is considered a candidate under CESA could be considered significant.

These potentially significant direct impacts to cougar suitable habitat and cougar individuals would be reduced to less than significant by the following Specific Plan and RMDP/SCP mitigation measures that are applicable to the Entrada South Project (see Appendix D):

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)

- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-60** (pre-construction surveys for cougar natal dens)

The permanent loss of suitable habitat for the cougar through implementation of the Modified Project would be mitigated by preservation, enhancement and restoration, and management of suitable habitat within a large open space system that will be conserved under the RMDP within the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, SP-4.6-27, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22, the Entrada South Project would preserve, enhance, and restore vegetation communities within this large managed open space system to offset impacts of the Entrada South Project. Restoration and management in the open space system is expected to improve the availability of habitat for the cougar. Although any cougar use of the Entrada South Project Site is expected to be only occasional, the permanent conservation of jurisdictional streambeds and riparian habitat within Unnamed Canyon 2 under ES-PDF-BIO-1 also would preserve habitat that cougars could use for foraging.

RMDP/SCP-BIO-60 requires a pre-construction survey for cougar natal dens and the prohibition of construction activities within 2,000 feet of any natal den located during the survey until a qualified biologist in consultation with CDFW determines a suitable no-construction buffer. The protection of cougar natal dens with young will result in avoidance of any direct impacts to individual cougars.

Based on the foregoing analysis, the Modified Project may cause potentially significant direct impacts to potential suitable habitat for cougar, but such impacts will be reduced to less than significant with application of the mitigation measures recommended herein. This finding is consistent with the significance determination and mitigation findings in the State-Certified EIR. In addition, the measures described herein are sufficient to address the elevated status of this species since the analysis for the State-Certified EIR.

### **Indirect Impacts to Cougars**

The Modified Project could result in short-term and long-term indirect impacts to cougars. Potential short-term impacts include collision with vehicles due to increased traffic and disturbance from noise and increased human presence during construction, especially if construction occurs near a natal den. Because the cougar is highly mobile, it would be expected to leave and/or avoid construction zones. Short-term noise and human presence associated with construction and/or grading activities may alter the foraging behavior and movement patterns of

cougars in the immediate vicinity of these activities. However, because this species typically forages and moves at night (although some activity may occur at dusk and dawn), the effects of these short-term construction-related activities on cougars are expected to be minimal, although cougars may avoid lighted construction areas.

The potential for disturbance of denning cougars is low, as discussed under direct impacts, because the species is mostly expected only to be foraging temporarily within the Entrada South Project Site. Cougars typically den in rockier areas with caves or cavities suitable for dens, which are more likely to be found in the upland habitats of the High Country SMA. Such habitats are absent on the Entrada South Project Site. However, the species has been known to den in dense vegetation. Therefore, while it is highly unlikely the Modified Project would result in impacts to very young cougars confined to natal dens, this possibility cannot be entirely discounted, and any impact to individuals of a species that is considered a candidate under CESA could be considered significant.

As described in the State-Certified EIR, several additional long-term indirect impacts could occur to individual cougars, including nighttime illumination of areas adjacent to open space that could disrupt foraging and movement behavior; increased incidence of vehicle collisions at new and expanded roadways; increased encounters with humans and pet, stray, and feral dogs, which could lead to predation and disease; the use of rodenticides to control small mammals that are prey for cougars (e.g., ground squirrels and rabbits), which may reduce the prey populations and possibly cause secondary poisoning; and introduction and invasion of non-native plant species into natural areas. These short-term and long-term indirect impacts could permanently restrict the range of the cougar and reduce its population on site. Indirect impacts would be significant, absent mitigation.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to individual cougars on the Entrada South Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)

- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-60** (pre-construction surveys for cougar natal dens)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

RMDP/SCP-BIO-60 requires a pre-construction survey for cougar natal dens and the prohibition of construction activities within 2,000 feet of any natal den located during the survey until a qualified biologist in consultation with CDFW determines a suitable no-construction buffer. The protection of cougar natal dens with young will help avoid and reduce construction-related indirect impacts.

Preservation, enhancement, and management of vegetation communities to offset Entrada South Project impacts within the large open space system composed of the River Corridor SMA, the High Country SMA, and the Salt Creek area will contribute to protected open space that will in part offset indirect impacts. The open space system connects the Santa Susana Mountains in the south to the Los Padres National Forest north of the Santa Clara River via the High Country SMA, Salt Creek area, and River Corridor SMA. This regional habitat connection will allow cougars to use and move through the RMDP/SCP area without having to contact residential, commercial, and industrial areas, thus reducing indirect effects such as noise and nighttime lighting and contact with humans and domestic and stray or feral animals. In addition, streambeds and riparian habitat within Unnamed Canyon 2 on the Entrada South Project Site will be permanently conserved under ES-PDF-BIO-1, which would preserve habitat that cougars could use for foraging.

SP-4.6-56 requires downcast lighting along the perimeter of natural areas, so that light is directed away from these areas and cougar movement and foraging would not be disrupted there, further reducing impacts from perimeter lighting.

RMDP/SCP-BIO-63 will be implemented to control for pet, stray, and feral animals. This measure requires each homeowners' association to supply educational information to future residents regarding pets, wildlife, and open space areas, specifying that pets must remain leashed while on designated trail systems and/or in any areas within or adjacent to open space. This measure also requires as-needed control of stray and feral dogs in open space areas.

RMDP/SCP-BIO-64 requires implementation of an IPM plan, which will ensure the implementation of BMPs to avoid and minimize adverse effects on the natural environment, including from rodenticides. RMDP/SCP-WQ-2 requires preparation of a Landscape and Integrated Pest Management Plan, which addresses application guidelines for integrated pest management for common area landscaping.

RMDP/SCP-BIO-9 and RMDP/SCP-BIO-10 will ensure control of exotic and invasive plants in areas where habitat is created to mitigate for impacts to aquatic resources under U.S. Army Corps of Engineers or CDFW jurisdiction, as required under RMDP/SCP-BIO-2. Measures included in RMDP/SCP-BIO-20 for coastal scrub mitigation and

RMDP/SCP-BIO-22 for managing oak resources also include provisions that would result in control of invasive species in those areas.

Based on the foregoing analysis, the Modified Project may cause potentially significant indirect impacts to cougars, but such impacts can be reduced to less than significant with application of the mitigation measures recommended herein. This finding is consistent with the significance determination and mitigation findings in the State-Certified EIR, in addition, the measures described herein are sufficient to address the elevated status of this species since the analysis for the State-Certified EIR.

## 6.3 Impacts to Wildlife Corridors and Habitat Linkages

As discussed in Chapter 5, the value of the Entrada South Project Site for wildlife movement was described as “low” in the State-Certified EIR and has been further reduced, consistent with the analysis in that document, by implementation of the RMDP and SCP within the Mission Village Project area west of the Entrada South Project Site, which eliminated the Magic Mountain Canyon wildlife corridor. Thus, the current wildlife movement value of the Entrada South Project Site is consistent with the State-Certified EIR: no identified habitat linkages or wildlife corridors exist within or adjacent to the site, and the site has limited value for wildlife movement due to the presence of development immediately adjacent to the site on all sides (i.e., the site is not situated to serve as a connection between habitat patches).

The Modified Project’s development impacts within the Entrada South Project Site are substantially the same as those of the 2017 Approved Project (see Table 3 and Figure 4). The 2017 Approved Project would have permanently impacted the entirety of the site except for the vicinity of the spineflower preserve within Unnamed Canyon 3 and the utility corridor along the southern edge of the site (Figure 3). Those impacts would have included filling and converting to underground storm drain the majority of Unnamed Canyon 1 and Unnamed Canyon 2. The Modified Project would have substantially the same impact footprint, except that Unnamed Canyon 2 would be temporarily impacted for stream stabilization and restoration activities and would be replanted with native vegetation (Figure 4). Although it is a linear feature, the restored Unnamed Canyon 2 is not expected to have significant wildlife movement value because it does not connect patches of suitable habitat due to the presence of development both upstream and downstream of the restored reach, including Magic Mountain Parkway to the north and the Westridge development immediately to the south. Nonetheless, streambeds and riparian habitat within Unnamed Canyon 2 would be permanently conserved under ES-PDF-BIO-1, which would preserve habitat that could provide cover for wildlife to the extent the area is used for movement within the Entrada South Project Site. Likewise, Unnamed Canyon 3 and the utility corridor within the Entrada South Project Site are expected to have limited wildlife movement value due to the presence of Entrada South Project development to the north, The Old Road and existing urban development to the east, the Westridge development to the south, and RMDP development to the west (Figure 4). However, the majority of Unnamed Canyon 3 has been permanently conserved under the conservation instrument covering the Entrada Spineflower Preserve, ensuring that habitat within the area remains available for wildlife use. Like the 2017 Approved Project, the Modified Project would include construction of roads, residential and commercial development, and associated infrastructure and uses within the developed portions of the Entrada South Project Site, which would present obstacles to movement by wildlife. In addition, secondary effects that would make the area less suitable for wildlife would occur, including increased noise, lighting, human activity, and presence of pets and feral cats and dogs, other mesopredators, and invasive species. However, the significance of these obstacles is limited in light of the minimal wildlife opportunities the Entrada South Project Site currently presents. Also, because the Entrada South Project Site does not support aquatic habitat, the Modified Project would not result in impacts to fish movement. Bird movements would also remain relatively unaffected. Most bird species

are highly mobile and would be able to move through remaining habitats or fly over new development to disperse or migrate through the area. Although birds are known to collide with buildings in some cases, causing bird injury or mortality, most bird collisions with buildings occur close to the ground and are related to the presence of habitat (especially that including trees) near glass that reflects such habitat (Borden et al. 2010; Kahle et al. 2016; Gelb and Delacretaz 2006, 2009). However, the remaining and restored habitat around the perimeter of the Entrada South Project Site is lacking in trees. Preserved areas will include mostly California annual grassland within Unnamed Canyon 3 and mostly coastal scrub communities along the southern Project boundary. Temporary impact areas within Unnamed Canyon 2, currently including most scale broom scrub and big sagebrush scrub, will be restored with similar vegetation following construction. No wooded habitats will occur in these areas. Therefore, the presence of buildings will not serve as a barrier that will make birds unable to reach other or nearby habitats; cause migrants or other birds moving locally to collide with buildings; or sever any connection between populations.

Taking into account the absence of any material change in the suitability of the Entrada South Project Site for wildlife movement, or in the development impacts of the Modified Project compared to the 2017 Approved Project, the impacts of the Modified Project on wildlife movement would be consistent with those described in the State-Certified EIR: The Modified Project would not affect wildlife movement within any identified habitat linkage, including the High Country SMA, Salt Creek area, and River Corridor SMA areas identified in the State-Certified EIR as part of important regional habitat linkages. As described in the State-Certified EIR, those regional habitat linkages would remain intact and fully functional and would support landscape-scale connectivity. The Modified Project also would not affect any wildlife corridor that has not already been eliminated by RMDP activities as analyzed in the State-Certified EIR. The Modified Project would convert to development an area that has limited wildlife movement value because it is surrounded by existing development on all sides and does not connect habitat patches. Thus, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to wildlife corridors or habitat linkages.

INTENTIONALLY LEFT BLANK



---

# 7 Cumulative Impacts

## 7.1 Methods of Analysis

To analyze cumulative impacts of implementation of the RMDP/SCP, including the 2017 Approved Project, the State-Certified EIR relied on data for cumulative impacts within the Santa Clara River watershed as a whole, from past, present, and reasonably foreseeable future projects within this area. Vegetation data from the analysis was from the California Gap Analysis Program (GAP) database (UCSB 1999), which was the only database available that covered the entire watershed. The analysis in this section similarly relies on more recent GAP data (USGS 2012) that was available for the Upper Santa Clara River Watershed (USCRW), similar to use of updated vegetation data for the project-level analysis. Also similar to the vegetation data used in the project-level analysis, the two databases rely on similar classification schemes, with communities that may be grouped under general categories including chaparrals, scrubs, riparian, wetland and aquatic, woodland, coniferous forest, grasslands, other natural land covers, and developed land covers.

Direct comparison of the newer data set to the analysis in the State-Certified EIR may be misleading, because the 1999 data set used in the State-Certified EIR did not map vegetation communities to the same level of detail as the 2012 GAP data set. In the 1999 data set, the entire Entrada South Project Site was mapped as Venturan coastal scrub, while current mapping includes the occurrence of the large areas of grassland, a significant area of woodland, and smaller areas of scrub, chaparral, and developed lands.

The information presented in this Report also differs from the analysis in the State-Certified EIR in the extent of the study area. This analysis relies on the Final Upper Santa Clara River Watershed Study (USCRW study; Dudek 2015f), which described the impacts of existing and potential future projects within the U.S. Geological Survey hydrologic unit code (HUC) 10, watersheds Numbers 2 through 5 (hereafter referred to as “watersheds” or “study area”).<sup>7</sup> Each of the four HUC 10 watersheds in the study area is well defined and supports a variety of plants, animals, and natural communities and other man-made land covers (e.g., agriculture, development). They do, however, drain to a common point, the Santa Clara River. These four watersheds were selected because, when compared to the downstream watersheds, they are more likely to be developed and sustain effects from the Newhall projects. The USCRW study area is also consistent with the conservation area delineated in the Santa Clara River Upper Watershed Conservation Plan produced by The Nature Conservancy, except that the 2015 USCRW study excludes HUC 10 Watershed 19 (Lower Piru Creek), which was included in the Nature Conservancy study (TNC 2006). The HUC 10 Watershed 19 is excluded from the USCRW study because it is downstream of Newhall property.

The State-Certified EIR analyzed cumulative impacts over the entire Santa Clara Sub-Basin (including the current study area and an additional five watersheds). However, because of different regulatory environments in Los Angeles and Ventura Counties, the current analysis excludes all but a fraction of the Ventura County portion of the Santa Clara Sub-Basin. Development in rural and agricultural areas of Ventura County is essentially under a moratorium as a result of several “Save Open Space and Agricultural Resources” (SOAR) ordinances and initiatives. The Ventura County SOAR ordinance, extended through 2020, requires County-wide voter approval of any change to the County General Plan involving the Agricultural, Open Space, or Rural land use map designations, or any

---

<sup>7</sup> HUCs are a way to classify divisions of watersheds—the largest and most inclusive category, HUC 2, covers large areas of the United States, like the Great Basin or the Pacific Northwest. The most exclusive HUC classification is HUC 12, the subwatershed. The HUCs investigated in this study are all HUC 10 watersheds.

change to a General Plan goal or policy related to those land use designations. The City of Ventura has two measures: (1) its original SOAR measure, which requires voter approval of any change to the General Plan involving the Agriculture designation and has been extended through 2030, and (2) the Hillside Voter Participation Act, which requires voter approval of any urban development within the Hillside Voter Participation Act line.

Table 4 shows the acreage of each vegetation community that would be affected by (1) development projects proposed by the Applicant; (2) other development projects; or (3) a combination of both.<sup>8</sup> Note that, within the same 425,507-acre area, the State-Certified EIR identified 37,890 acres of impacts (323.8 from the 2017 Approved Project) from all planned and approved projects in the USCRW, compared to only 27,007 acres identified in Table 4. Although the acreage of impacts from approved and reasonably foreseeable projects has decreased since the previous analysis, the numbers are similar, supporting the validity of using the USCRW study and more recent GAP data for cumulative impacts of the Modified Project.

**Table 4. Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in the Study Area**

Land Cover Type	Total Study Area (Acres)	Development Impacts (Acres)			
		Modified Project	Newhall Projects	All Other Planned and Approved Projects	Total Planned and Approved Development in Study Area
Chaparrals					
Southern California dry-mesic chaparral	139,772	9.6	683	3,571	4,254
California mesic chaparral	1,748	—	8	13	22
Sonora-Mojave semi-desert chaparral	765	—	—	14	14
Mediterranean California mesic serpentine woodland and chaparral	290	—	24	2	26
California montane woodland and chaparral	78	—	—	—	—
Subtotal <sup>a</sup>	142,653	9.6	715	3,600	4,316
Scrubs					
Southern California coastal scrub	69,404	27.4	1,399	5,665	7,064
Sonora-Mojave creosote bush-white bursage desert scrub	4,801	—	7	570	578
Mojave mid-elevation mixed desert scrub	2,515	—	—	90	90
Sonora-Mojave mixed salt desert scrub	442	—	—	6	6

<sup>8</sup> The California GAP data were compiled using satellite imagery forming a 30-meter resolution map for the entire United States based on NatureServe's Ecological Systems Classification. Thus, the California GAP vegetation database was mapped at a broader scale and necessarily lower precision than the project-level vegetation community and land cover mapping. Nonetheless, the GAP data provide reasonable estimates of regionwide vegetation community conditions (i.e., acreage).

**Table 4. Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in the Study Area**

Land Cover Type	Total Study Area (Acres)	Development Impacts (Acres)			
		Modified Project	Newhall Projects	All Other Planned and Approved Projects	Total Planned and Approved Development in Study Area
Mediterranean California southern coastal dune	85	—	—	<1	<1
Inter-mountain basins big sagebrush shrubland	39	—	<1	2	2
Inter-mountain basins mixed salt desert scrub	30	—	—	—	—
North American warm desert active and stabilized dune	2	—	—	—	—
<i>Subtotal<sup>a</sup></i>	<i>77,318</i>	<i>27.4</i>	<i>1,406</i>	<i>6,333</i>	<i>7,739</i>
<b>Riparian</b>					
Mediterranean California foothill and lower montane riparian woodland	2,018	—	34	12	47
North American warm desert riparian woodland and shrubland	141	—	—	16	16
California Central Valley riparian woodland and shrubland	7	—	—	1	1
<i>Subtotal<sup>a</sup></i>	<i>2,166</i>	<i>—</i>	<i>34</i>	<i>30</i>	<i>64</i>
<b>Wetland and Aquatic</b>					
Open water (fresh)	3,296	—	—	—	—
Temperate Pacific freshwater mudflat	1,315	—	19	15	35
Temperate Pacific freshwater emergent marsh	512	—	21	34	55
<i>Subtotal<sup>a</sup></i>	<i>5,123</i>	<i>—</i>	<i>41</i>	<i>49</i>	<i>90</i>
<b>Woodland</b>					
Great Basin pinyon-juniper woodland	44,092	—	3	2,021	2,024
California Coastal live oak woodland and savannah	18,952	49.4	440	503	943
California Central Valley mixed oak savannah	4,100	0.2	62	385	446
Central and southern California mixed evergreen woodland	1,469	—	—	—	—

**Table 4. Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in the Study Area**

Land Cover Type	Total Study Area (Acres)	Development Impacts (Acres)			
		Modified Project	Newhall Projects	All Other Planned and Approved Projects	Total Planned and Approved Development in Study Area
California lower montane blue oak–foothill pine woodland and savanna	1,395	6.3	49	194	243
Southern California oak woodland and savannah	489	1.5	22	64	86
Mediterranean California mixed evergreen forest	78	—	—	—	—
<i>Subtotal<sup>a</sup></i>	70,576	57.3	575	3,166	3,742
<b>Coniferous Forest</b>					
Mediterranean California dry-mesic mixed conifer forest and woodland	17,594	—	—	3	3
California montane Jeffrey pine (Ponderosa pine) woodland	1,265	—	—	—	—
California coastal redwood forest	84	—	<1	1	1
<i>Subtotal<sup>a</sup></i>	18,942	—	<1	3	3
<b>Grasslands</b>					
California Central Valley and southern coastal grassland	50,167	208.2	2,178	4,317	6,495
California mesic serpentine grassland	24	—	—	5	5
<i>Subtotal<sup>a</sup></i>	50,192	208.2	2,178	4,321	6,499
<b>Other Natural Land Covers</b>					
Southern California Coast Ranges cliff and canyon	407	—	—	12	12
North American warm desert bedrock cliff and outcrop	369	—	—	97	97
North American warm desert pavement	28	—	<1	3	3
<i>Subtotal<sup>a</sup></i>	803	—	<1	112	112
<b>Agricultural Lands</b>					
Pasture/hay	2,676	—	598	165	764
Cultivated cropland	2,114	—	209	29	238
Recently burned shrubland	815	—	2	3	5
<i>Subtotal<sup>a</sup></i>	5,605	—	809	197	1,006

**Table 4. Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in the Study Area**

Land Cover Type	Total Study Area (Acres)	Development Impacts (Acres)			
		Modified Project	Newhall Projects	All Other Planned and Approved Projects	Total Planned and Approved Development in Study Area
Developed Lands					
Developed, open space	30,871	19.0	711	2,155	2,866
Developed, low intensity	12,996	4.2	100	341	441
Developed, medium intensity	8,056	2.1	24	102	126
Developed, high intensity	206	—	—	2	2
Subtotal <sup>a</sup>	52,128	25.2	835	2,600	3,435
Total <sup>a</sup>	425,507	327.6	6,594	20,412	27,007

**Notes:** GAP = Gap Analysis Program.

<sup>a</sup> Subtotals and totals may not sum precisely due to rounding.

As described in Section 3.1, Disturbance Footprint, the Modified Project would reduce the permanent development footprint under the 2017 Approved Project, and otherwise includes refinements to the Entrada South Project that reflect a more detailed development plan to implement the conceptual land use plan analyzed in the State-Certified EIR. Because of these minor changes relative to the 2017 Approved Project, the Modified Project would not result in a substantial increase in the Entrada South Project's contribution to cumulative impacts, compared to the 2017 Approved Project, for any resource or species analyzed in the State-Certified EIR. Therefore, the Modified Project would not result in new significant cumulative impacts or substantially increase the severity of any significant cumulative impact identified in the State-Certified EIR. This conclusion applies to all rare plants analyzed above: spineflower, slender mariposa lily, Peirson's morning-glory, mainland cherry, Southern California black walnut, white rabbit-tobacco, island mountain-mahogany, Parish's sagebrush, and oak trees. The same conclusion applies to the following wildlife species: arroyo chub, Santa Ana sucker, southern steelhead, unarmored threespine stickleback, arroyo toad, western spadefoot, California legless lizard, southwestern pond turtle, burrowing owl, California condor, coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, tricolored blackbird, western yellow-billed cuckoo, and cougar. Therefore, this Report does not further analyze cumulative impacts to these species. However, neither Crotch's bumble bee nor California glossy snake was considered a special-status species at the time of the cumulative analysis for the State-Certified EIR, and impacts to these species have not previously been analyzed. Cumulative impacts for both species are discussed in this chapter, based on the data presented in Table 4.

## 7.2 Crotch's Bumble Bee

The Modified Project, when combined with planned and approved projects, could reduce available habitat suitable for Crotch's bumble bee. Based on the likely presence of floral resources and nesting microhabitats for the species, described above, there are approximately 366,651 acres of suitable Crotch's bumble bee habitat in the study area, including all native vegetation communities and non-native grassland (and excluding developed, cropland, bare, and open water land covers). Planned and approved projects in the study area would affect 22,423 acres (6%), of which 4,933 acres (1%) would be affected by Newhall Land projects. The Modified Project's contribution to this

cumulative impact would be 302.4 acres (0.1%). Although the range of Crotch's bumble bee is widespread in California, its population has substantially declined, and the species has apparently disappeared from parts of its former range, mostly in the Central Valley (CDFW 2019c). However, recent observations have confirmed that Crotch's bumble bee occurs on the Entrada South Project Site. The Modified Project's contribution to the cumulative loss of habitat for this species, when combined with planned and approved projects in the study area, unless mitigated, could be a significant cumulative impact.

In addition, the Modified Project, when combined with planned and approved projects, could result in potential long-term indirect impacts. These include impacts from pesticides and herbicides and habitat fragmentation, making the species more vulnerable to extirpation from smaller habitat patches or precluding successful colonization. In addition, the close proximity of urban development to suitable habitat for these species could result in disruption of essential behavioral activities (e.g., foraging, reproduction) and greater vulnerability to several potential indirect impacts, including human-caused habitat degradation (e.g., from off-road vehicles or trampling of vegetation); disturbances by pet, stray, and feral cats and dogs; wildfire; invasive species such as Argentine ants; and increased collisions with vehicles. Unless mitigated, these indirect impacts could contribute to a potential significant cumulative impact.

The Modified Project's contribution to potential significant direct and indirect impacts on Crotch's bumble bee would be a less-than-significant cumulative impact with mitigation.

Permanent loss of suitable habitat for Crotch's bumble bee would be mitigated by measures requiring habitat preservation, enhancement and restoration, and management within a large, permanent open space system that would include suitable habitat to support the species. These mitigation measures include RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10, RMDP/SCP-BIO-12, RMDP/SCP-BIO-15, RMDP/SCP-BIO-16, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22. Implementation of these mitigation measures would contribute to the protection and management of suitable habitat expected to support floral resources and nesting and hibernation microhabitats (small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, rock walls, and brush piles) for Crotch's bumble bee in the Santa Clara River SMA/SEA and within the High Country SMA/SEA and the Salt Creek area. This would contribute to Crotch's bumble bee's ability to persist in the study area.

Mitigation measures would also be implemented to reduce long-term indirect impacts to Crotch's bumble bee. Pesticides will be controlled through an IPM plan (RMDP/SCP-BIO-64) and, for common area landscaping, a Landscape and Integrated Pest Management Plan (RMDP/SCP-WQ-2). Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas (RMDP/SCP-BIO-63). Measures addressing long-term indirect impacts from Argentine ants include quarterly monitoring for Argentine ants along the urban-open space interface and the spineflower preserve, as well as control measures for Argentine ants in perpetuity (RMDP/SCP-BIO-85, RMDP/SCP-BIO-87). Implementation of these measures would allow Crotch's bumble bee to persist through habitat mitigation within the large amount of permanent open space that would be protected and managed in the Entrada South Project Site vicinity, as noted above.

For the reasons set forth in this section, the Modified Project would not result in (1) a cumulatively considerable contribution to a potential significant cumulative impact on individual Crotch's bumble bees, (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat for this species, or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to indirect impacts.

## 7.3 California Glossy Snake

The Modified Project, when combined with planned and approved projects, could reduce available habitat suitable for California glossy snake. There are approximately 178,517 acres of suitable California glossy snake habitat in the study area, including chaparral, scrub, and grassland. Planned and approved projects in the study area would affect approximately 20,742 acres (12%), of which 5,764 acres (3%) would be affected by Newhall projects. The Modified Project's contribution to this impact would be 245.1 acres (0.1%).

California glossy snake is highly localized in distribution and apparently declining in much of its range, so it is vulnerable to habitat fragmentation from development. The Modified Project's contribution to the cumulative loss of habitat for this species, when combined with planned and approved projects in the study area, unless mitigated, could be a significant cumulative impact.

In addition, the Modified Project, when combined with planned and approved projects, could result in potential long-term indirect impacts. These include habitat fragmentation and isolation of some local populations, making the species more vulnerable to extirpation from smaller habitat patches. In addition, the close proximity of urban development to suitable habitat for these species could result in disruption of essential behavioral activities (e.g., foraging, reproduction) and greater vulnerability to several potential indirect impacts, including human-caused habitat degradation (e.g., trampling of vegetation, introduction of invasive species such as Argentine ants, and damage from off-road vehicle use); harassment and collection; predation by pet, stray, and feral cats and dogs; increased roadkill; and use of pesticides, which may reduce California glossy snake's prey or cause secondary poisoning. Unless mitigated, these indirect impacts could be a potentially significant cumulative impact.

The Modified Project's contribution to potentially significant direct and indirect impacts on the California glossy snake would be a less than significant cumulative impact with mitigation.

Permanent loss of suitable habitat for California glossy snake would be mitigated by measures requiring habitat preservation, enhancement and restoration, and management within a large, permanent open space system conserved under the RMDP/SCP that would include suitable habitat to support this species. These mitigation measures include SP-4.6-26a, as well as RMDP/SCP measures RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10, RMDP/SCP-BIO-12, RMDP/SCP-BIO-15, RMDP/SCP-BIO-16, and RMDP/SCP-BIO-20 through RMDP/SCP-BIO-22. Implementation of these mitigation measures would contribute to the protection and management of suitable habitat for the California glossy snake in the River Corridor SMA and within the High Country SMA and the Salt Creek area, and potentially within conserved areas of the Entrada South Project Site. In addition, any suitable habitat for California glossy snake within jurisdictional streambeds and riparian habitat within Unnamed Canyon 2 would be permanently conserved under ES-PDF-BIO-1. This would allow California glossy snake to persist in the study area.

Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas (RMDP/SCP-BIO-63). Pesticides would be controlled through an IPM plan (RMDP/SCP-BIO-64) and, for common area landscaping, a Landscape and Integrated Pest Management Plan (RMDP/SCP-WQ-2). Argentine ant invasions of upland habitats would be monitored and controlled to the extent feasible (RMDP/SCP-BIO-85). Implementation of these measures would allow these species to persist on site in the large amount of permanent open space that would be protected and managed.



For the reasons set forth in this section, the Modified Project would not result in (1) a cumulatively considerable contribution to a potentially significant cumulative impact on individuals of these species, (2) a cumulatively considerable contribution to a potentially significant cumulative impact due to loss of suitable habitat for these species, or (3) a cumulatively considerable contribution to a potentially significant cumulative impact due to indirect impacts.

---

## 8 Thresholds of Significance

The State-Certified EIR evaluated the significance of the 2017 Approved Project's effects to biological resources using the applicable significance criteria set forth in the California Environmental Quality Act (CEQA) Guidelines, with minor modifications. This Report uses the equivalent significance thresholds as currently set forth in the CEQA Guidelines and adopted by the County, as set forth below, which do not differ materially from those used in the State-Certified EIR. This section evaluates whether the Modified Project would have any *new* significant effect not considered in the State-Certified EIR or would substantially increase the severity of any significant effect identified in the State-Certified EIR as a result of incremental project changes, new information, or changed circumstances evaluated in this Report.

The findings in the State-Certified EIR took into account mitigation measures imposed on the 2017 Approved Project that remain applicable to the Modified Project. These are provided in Appendix D to this Report.

- 1. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?**

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on special-status species and their habitat, taking into account the project design features, avoidance measures, and mitigation measures applicable to the Entrada South Project. Impacts of the Modified Project remain consistent with those of the 2017 Approved Project overall, with only minor changes as described in Section 6 of this Report and a slight reduction in permanent impacts to vegetation communities overall. With one exception, these impacts can be reduced to less than significant with application of the existing Specific Plan and RMDP/SCP mitigation measures recommended herein. Based on the information evaluated in this Report (including the incremental changes to the Modified Project and any relevant new information or changed circumstances regarding special-status species and their habitat within the Entrada South Project Site), the Modified Project would result in the following effects to two special-status species not evaluated in the State-Certified EIR: potential significant direct and indirect impacts on habitat for, and individuals of, Crotch's bumble bee and California glossy snake. One new mitigation measure is proposed to address potential direct impacts to Crotch's bumble bee: ES/VCC-MM-BIO-2. ES/VCC-MM-BIO-2 would require pre-construction surveys for Crotch's bumble bee and, if the species is found, avoidance of any nests found and preparation of a Crotch's Bumble Avoidance and Minimization Plan with additional, site-specific measures to avoid take of the species. These measures would result in avoidance of impacts to individuals, consistent with requirements that apply to other special-status species. Habitat mitigation measures for communities potentially occupied by Crotch's bumble bee would also reduce impacts from loss of habitat, similar to mitigation for impacts to other special-status wildlife species potentially occurring on the Entrada South Project Site. Implementation of ES/VCC-MM-BIO-2 and existing Specific Plan and RMDP/SCP mitigation measures would reduce potential impacts to Crotch's bumble bee to less than significant.

New mitigation measure ES/VCC-MM-BIO-1 is proposed to address potential direct impacts to California glossy snake. ES/VCC-MM-BIO-1 would require development of a relocation plan, pre-construction surveys, and relocation of any California glossy snakes captured during surveys or otherwise detected on site during construction activities. These are the same requirements that apply to other special-status terrestrial reptiles

addressed under RMDP/SCP-BIO-54 and, in conjunction with the existing Specific Plan and RMDP/SCP mitigation measures recommended herein, would reduce potential impacts to California glossy snake to less than significant. This finding is consistent with the significance determination and mitigation findings in the State-Certified EIR for impacts to other special-status wildlife species with similar life histories.

Taking into account the mitigation measures already applicable to the Entrada South Project (see Appendix D to this Report) and implementation of ES/VCC-MM-BIO-1 and ES/VCC-MM-BIO-2, the Modified Project would not have a substantial adverse effect, either directly or via habitat modifications, on any special-status species, as defined, that was not evaluated in the State-Certified EIR. There would be minor increases in direct impacts to slender mariposa lily, but these increases would not substantially increase the severity of previously identified adverse effects to such species. There would also be minor increases in direct impacts to suitable habitat for the following special-status species: island mountain-mahogany, California legless lizard, burrowing owl, and tricolored blackbird, but these increases would not substantially increase the severity of previously identified adverse effects to such species. Increased impacts to suitable habitat for island mountain-mahogany would result from an increase in impacts to chaparral. However, this increase results from an increase in mapped chaparral with the updated classification that resulted in scrub oak chaparral being mapped during a vegetation map update since the 2017 Approved Project, rather than an increase in the extent of permanent impacts where chaparral occurs. Moreover, impacts to special-status species would be reduced through the reduction of permanent impacts to Unnamed Canyon 2 and the permanent conservation of areas within Unnamed Canyon 2 under ES-PDF-BIO-1. Additional information regarding impacts to special-status species is included in Section 6.2, Impacts to Special-Status Species.

**2. Would the project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?**

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on riparian habitat or other special-status natural community, taking into account the project design features, avoidance measures, and mitigation measures imposed on the Entrada South Project. The Modified Project would permanently impact less riparian habitat than analyzed in the State-Certified EIR and would permanently conserve riparian habitat in Unnamed Canyon 2 under ES-PDF-BIO-1. The Modified Project includes environmentally beneficial changes by reducing permanent impacts to vegetation communities. However, the Modified Project would have the following impacts to special-status vegetation communities not evaluated in the State-Certified EIR: 1.7 acres of permanent impacts to valley oak grassland, and 1.9 acres of permanent impacts and 3.2 acres of temporary impacts to scale broom scrub. However, such impacts would be reduced to less than significant levels with application of the mitigation measures recommended herein for oak woodlands and for wetland and riparian vegetation communities. Therefore, taking into account the mitigation measures already applicable to the Entrada South Project (as provided in Appendix D to this Report), the Modified Project would not have a substantial adverse effect, either directly or via habitat modifications, on any riparian habitat or special-status vegetation, as defined, that was not evaluated in the State-Certified EIR. Additional information regarding impacts to riparian habitat or other special-status natural communities is included in Section 6.1.1, Vegetation Communities and Land Covers.

- 3. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on wildlife movement, taking into account the project design features, avoidance measures, and mitigation measures imposed on the Entrada South Project. Based on the information evaluated in this Report, including the incremental changes to the Modified Project, the Modified Project would not have any additional effects to wildlife movement that were not evaluated in the State-Certified EIR. The impacts from the Modified Project would likely be reduced compared to those from the 2017 Approved Project given the reduction in wildlife movement value of the Entrada South Project Site from development associated with the Mission Village Project and permitted under the State-Certified EIR. In addition, the permanent conservation of jurisdictional streambeds and riparian habitat under ES-PDF-BIO-1 would ensure that habitat in Unnamed Canyon 2 remains available for use by wildlife. Therefore, taking into account the mitigation measures already applicable to the Entrada South Project (as provided in Appendix D to this Report), the Modified Project would not have any substantial adverse effects on wildlife movement that were not evaluated in the State-Certified EIR. Additional information regarding impacts to wildlife movement is included in Section 6.3, Impacts to Wildlife Corridors and Habitat Linkages.

- 4. Would the project convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inches in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, Southern California black walnut, etc.)?**

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on oak woodlands, oaks, or Southern California black walnut, taking into account the project design features, avoidance measures, and mitigation measures imposed on the Entrada South Project. The Modified Project overall includes environmentally beneficial changes by reducing permanent impacts to vegetation communities. However, the Modified Project would impact 1.7 acres of valley oak grassland that were not evaluated in the State-Certified EIR. There would be slightly greater impacts to individual oak trees under the Modified Project compared to the 2017 Approved Project, given updates to the oak woodland inventory since the 2017 Approved Project. However, the State-Certified EIR provides mitigation for impacts to oak woodlands and individual oaks that would adequately address this additional impact. Mitigation provided is in accordance with CLAOTO. No Southern California black walnuts have been observed on site during surveys conducted since 2010. Therefore, taking into account the mitigation measures already applicable to the Entrada South Project (as provided in Appendix D to this Report), the Modified Project would not have any substantial adverse effect on oaks or Southern California black walnut that were not evaluated in the State-Certified EIR. Additional information regarding impacts to oak woodlands is included in Section 6.1.1; additional information regarding impacts to individual oaks is included in Section 6.2.1.9, Oak Trees, and information regarding impacts to Southern California black walnut is included in Section 6.2.1.5, Southern California Black Walnut.

5. **Would the project conflict with any local policies or ordinances protecting biological resources including Wildflower Reserve Areas (LA County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (LA County Code, Title 22, Ch. 22.174, Part 16), the Significant Ecological Areas (SEAs) (LA County Code, Title 22, Ch. 102), Specific Plans (LA County Code, Title 22, Ch. 22.46), Community Standards Districts (LA County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (LA County General Plan, Figure 9.3)?**

Neither the 2017 Approved Project nor the Modified Project would affect any Wildflower Reserve Areas. Neither the 2017 Approved Project nor the Modified Project would affect any SEAs or County-designated Significant Environmental Resource Areas. The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on oaks, taking into account the project design features, avoidance measures, and mitigation measures imposed on the Entrada South Project. The Modified Project overall includes environmentally beneficial changes by reducing permanent impacts to vegetation communities. However, the Modified Project would not have greater impacts on oaks compared to what was evaluated in the State-Certified EIR, given updates to the oak woodland inventory since the 2017 Approved Project. An additional 13 oaks would be impacted under the Modified Project compared to the 2017 Approved Project. However, the State-Certified EIR provides mitigation for impacts to oaks that would adequately address this additional impact. Mitigation provided is in accordance with CLAOTO and includes planting replacement oaks at oak restoration sites per the ORMP (see RMDP/SCP-BIO-22 in Appendix D). Therefore, taking into account the mitigation measures already applicable to the Entrada South Project (as presented in Appendix D to this Report), the Modified Project would not have any substantial adverse effects on oaks that were not evaluated in the State-Certified EIR. Additional information regarding impacts to oak woodlands is included in Section 6.1.1; additional information regarding impacts to individual oaks is included in Section 6.2.1.9.

6. **Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional or local habitat conservation plan?**

The Entrada South Project Site is not within any adopted habitat conservation plan, natural community conservation plan, or other approved state, regional, or local habitat conservation plan, with the exception of the approved SCP, which was evaluated within and adopted in conjunction with the State-Certified EIR. The Entrada South Project would be fully consistent with the SCP, including providing for the conservation of the Entrada Spineflower Preserve within the Entrada South Project Site, which has already been permanently conserved. The SCP authorizes take of spineflower associated with the Entrada South Project outside the spineflower preserve area. Additional information regarding implementation of the SCP is included in Section 6.2.1.

Therefore, taking into account the mitigation measures already applicable to the Entrada South Project (as presented in Appendix D to this Report), the Modified Project would not conflict with the provisions of any adopted habitat conservation plan, natural community conservation plan, or other approved state, regional, or local habitat conservation plan.

---

## 9 Acknowledgments

David Compton and Kathleen Dayton prepared this Report, with review by Philip Behrends. Kirsten Zecher provided graphics and GIS mapping analyses. Laurel Porter and Hannah Wertheimer-Roberts provided editorial review and Summer Forsman provided formatting.

INTENTIONALLY LEFT BLANK



---

## 10 Documents Cited

50 CFR 17.11. “Endangered and Threatened Wildlife.”

59 FR 4845–4867. Final rule: “Designation of Critical Habitat for the Least Bell’s Vireo.” February 2, 1994.

66 FR 38611–38626. Notice of 12-month petition finding: “12-Month Finding for a Petition to List the Yellow-Billed Cuckoo (*Coccyzus americanus*) in the Western Continental United States.” July 25, 2001.

70 FR 52488–52627. Final rule: “Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California.” September 2, 2005.

78 FR 343–534. Final rule: “Designation of Critical Habitat for Southwestern Willow Flycatcher.” January 3, 2013.

79 FR 48548–48652. Proposed rule: “Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-Billed Cuckoo.” August 15, 2014.

79 FR 59992–60038. Final rule: “Determination of Threatened Status for the Western Distinct Population Segment of the Yellow-Billed Cuckoo (*Coccyzus americanus*).” October 3, 2014.

80 FR 19259–19263. “90-Day Findings on 10 Petitions.” April 10, 2015.

80 FR 37568–37579. “90-Day Findings on 31 Petitions.” July 1, 2015.

80 FR 56423–56432. “90-Day Findings on 25 Petitions.” September 18, 2015.

88 FR 68370–68399. Proposed rule: “Threatened Species Status with Section 4(d) Rule for the Northwestern Pond Turtle and the Southwestern Pond Turtle.” October 3, 2023.

Allan E. Seward (Allan E. Seward Engineering Geology Inc.). 2002. “Geologic Evaluation: San Fernando Valley Spineflower Occurrences.” Letter report from B.J. Swanson and E.J. Seward (Allan E. Seward) to Gatzke, Dillon and Balance LLP. October 1, 2002.

Allan E. Seward. 2004. “Surface and Subsurface Geologic Evaluation: San Fernando Valley Spineflower Occurrences.” Letter report from Allan E. Seward to M. Subbotin (The Newhall Land and Farming Company). August 13, 2004.

Aquatic Consulting Services (Aquatic Consulting Services Inc.). 2002a. *Aquatic Surveys along the Santa Clara River; Part II: Commerce Center Bridge Project Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. June 2002.

Aquatic Consulting Services. 2002b. *Aquatic Surveys along the Santa Clara River; Part III: West of Commerce Center Bridge to the Ventura County Line, California*. Revised. Prepared for Newhall Land Company. Ventura, California: Aquatic Consulting Services. June 18, 2002.

- Aquatic Consulting Services. 2002c. *Aquatic Surveys along the Santa Clara River; Part IV: Ventura County Line to Las Brisas Bridge, Ventura County, California*. Revised. Prepared for Newhall Land Company. Ventura, California: Aquatic Consulting Services. June 25, 2002.
- Aquatic Consulting Services. 2002d. *Aquatic Surveys along the Santa Clara River; Part I: Castaic Junction Project Area, Los Angeles County, California*. Prepared for Newhall Land. Ventura, California: Aquatic Consulting Services. April 2002.
- Bloom, P.H. 2007. *Report on Arroyo Toad Surveys on Landmark Village, Newhall Land and Farming Company Property, Los Angeles County, California*. Prepared for U.S. Fish and Wildlife Service. Santa Ana, California: P.H. Bloom (Bloom Biological). November 2007.
- Bloom Biological (Bloom Biological Inc.). 2011. *2011 NRMP Bird Survey Report*. Prepared for The Newhall Land and Farming Company. August 2011.
- Bloom Biological. 2012. *Results of Special-Status Riparian Bird Surveys Conducted on Newhall Land and Planning Areas in Spring and Summer 2012*. Prepared for The Newhall Land and Farming Company. August 2012.
- Bloom Biological. 2014. *Santa Clara River Riparian Bird Surveys: 2014 Final Report*. Prepared for The Newhall Land and Farming Company. August 2014.
- Bloom Biological. 2015. *Santa Clara River Riparian Bird Surveys: 2015 Final Report*. Prepared for The Newhall Land and Farming Company. August 2015.
- Bloom Biological. 2016. *Santa Clara River Riparian Bird Surveys: 2016 Final Report*. Prepared for The Newhall Land and Farming Company. September 2016.
- Bontrager, D.R. 1991. *Habitat Requirements, Home Range, and Breeding Biology of the California Gnatcatcher (Polioptila californica) in South Orange County, California*. Prepared for Santa Margarita Co.; Rancho Santa Margarita, California. April 1991.
- Borden, W.C., O.M. Lockhart, A.W. Jones, and M.S. Lyons. 2010. "Seasonal, Taxonomic, and Local Habitat Components of Bird-window Collisions on an Urban University Campus in Cleveland, OH." *Ohio Journal of Science* 110(3): 44–52.
- Boyd, S. 1999. "Vascular Flora of the Liebre Mountains, Western Transverse Ranges, California." *Aliso* 18(2):93–129.
- California Trout. 2021. "Notice of Petition: Southern California Steelhead (*Oncorhynchus mykiss*)." Letter from C. Knight (California Trout, Executive Director) to the California Fish and Game Commission. June 7, 2021.
- Cardno. 2015a. *Technical Memorandum: Newhall Ranch Aquatic Species Survey in the Santa Clara River, Los Angeles County, California, 2014*. November 2015 update.
- Cardno. 2015b. *Southern Western Pond Turtle Nesting Study Report*. Prepared for The Newhall Land and Farming Company. November 18, 2015.

- Carlberg (Carlberg Associates). 2023. *Oak Tree Report Entrada South, VTTM 53295, The Old Road and Magic Mountain Parkway, Unincorporated Los Angeles County*. Prepared by S. McAllaster for FivePoint Holdings LLC. March 31, 2023.
- Carpenter, M. 2009. "Re: Potrero Canyon Pond Turtle Record." Email from M. Carpenter (The Newhall Land and Farming Company) to P. Behrends (Dudek). January 21, 2009.
- CBD and MLF (Center for Biological Diversity and Mountain Lion Foundation). 2019. *Before the California Fish and Game Commission, a Petition to List the Southern California/Central Coast Significant Evolutionary Unit (ESU) of Mountain Lions as Threatened under the California Endangered Species Act (CESA)*. June 25, 2019.
- CBOC (California Burrowing Owl Consortium). 1993. *Burrowing Survey Protocol and Mitigation Guidelines*. April 1993.
- CCH (Consortium of California Herbaria). 2019. "County-Level Distribution Results: Distribution of *Artemisia tridentata* ssp. *parishii*." CCH1: Featuring California Vascular Plant Data from the Consortium of California Herbaria and Other Sources [online database]. Regents of the University of California. Accessed 2019. <http://ucjeps.berkeley.edu/consortium/>.
- CDFG (California Department of Fish and Game). 2003. *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database*. CDFG, Biogeographic Data Branch, Vegetation Classification and Mapping Program. September 2003.
- CDFG. 2007. "Vegetation Classification and Mapping Program, List of California Vegetation Alliances." Sacramento: CDFG.
- CDFG. 2010. *List of Vegetation Alliances and Associations: Hierarchical List of Natural Communities with Holland Types*. September 2010. Accessed April 19, 2011. [http://www.dfg.ca.gov/biogeodata/vegcamp/natural\\_comm\\_list.asp](http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp).
- CDFW (California Department of Fish and Wildlife). 2019. *Report to the Fish and Game Commission. Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered under the California Endangered Species Act*. State of California, the Natural Resources Agency, Department of Fish and Wildlife. April 4, 2019.
- CDFW. 2021. Pacific Rock Quarry Expansion Project, Draft Environmental Impact Report, SCH #2017081052, Ventura County. Letter from Erinn Wilson-Olgin, CDFW, to Justin Bertoline, Ventura County, Planning Division. January 22, 2021.
- CDFW. 2023a. California Natural Community List. June 1, 2023. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>
- CDFW. 2023b. *Survey Considerations for the California Endangered Species Act (CESA) Candidate Bumble Bee Species*. June 6. <https://www.wildlife.ca.gov/Data/CNDDB>.

- CDFW. 2024. *RareFind*. California Natural Diversity Database. Accessed August 2024.  
<https://www.wildlife.ca.gov/Data/CNDDDB>.
- CNPS (California Native Plant Society). 2024. *Rare Plant Inventory* (online ed., version 6.5). Sacramento: CNPS, Rare Plant Program. <http://www.rareplants.cnps.org/>.
- Compliance Biology. 2004a. "Results of Focused Western Spadefoot Toad Surveys on the River Village Project Site and Associated Borrow Sites." Letter report from D. Crawford (Compliance Biology) to Newhall Ranch Company. Camarillo, California: Compliance Biology. November 3, 2004.
- Compliance Biology. 2004b. *Results of Butterfly Surveys on the Newhall Ranch Project Site, Los Angeles County, California*. Camarillo, California: Compliance Biology. September 16, 2004.
- Compliance Biology. 2004c. *Results of Butterfly Surveys on Newhall Land, Stevenson Ranch Phase V Site, Los Angeles County, California*. Camarillo, California: Compliance Biology. September 16, 2004.
- Compliance Biology. 2004d. *Results of Butterfly Surveys on Magic Mountain Entertainment Site, Los Angeles County, California*. Camarillo, California: Compliance Biology. August 4, 2004.
- Compliance Biology. 2005. Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area, Los Angeles County, California. Prepared for Newhall Land and Farming. Camarillo, California: Compliance Biology, July 31, 2005.
- Compliance Biology. 2012. *Results of Focused Western Spadefoot Toad and Fairy Shrimp Habitat Surveys on the Entrada South Project Site*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology. July 2012.
- Compliance Biology. 2013. *Results of Small Mammal Trapping Surveys; Entrada South Project*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology. September 2013.
- Compliance Biology. 2014. *Results of Focused Surveys for Arroyo Toad and Special-Status Herpetofauna, Mission Village Project, Newhall Ranch*. August 2014.
- Compliance Biology. 2017a. *Summary of 2017 Pre-Construction Surveys for the MV1 Project Area*. Memorandum to S. Rojas (Newhall Land) from D. Crawford (Compliance Biology). October 3, 2017.
- Compliance Biology. 2017b. *Western Spadefoot Toad Habitat Assessment and Monitoring Plan, Mission Village Site, City of Santa Clarita, California*. October 2017.
- Compliance Biology. 2019. *Summary of California Gnatcatcher (Poliioptila californica) Surveys: Entrada South*. Los Angeles County. Spring 2019. Prepared for The Newhall Land and Farming Company.
- Compliance Biology. 2022a. *Summary of California Gnatcatcher (Poliioptila californica) Surveys: Entrada South*. Los Angeles County. Spring 2022. Prepared for The Newhall Land and Farming Company.
- Compliance Biology. 2022b. *Summary of Riparian Bird Surveys. Castaic Creek: Santa Clara River Confluence to I-5. Santa Clarita. Los Angeles County. Spring 2022*. Prepared for The Newhall Land and Farming Company.

- Compliance Biology. 2022c. *Summary of Riparian Bird Surveys. Santa Clara River: Resource Management and Development Plan (RMDP) Area. Santa Clarita. Los Angeles County. Spring 2022.* Prepared for The Newhall Land and Farming Company.
- Corps and CDFG (U.S. Army Corps of Engineers and California Department of Fish and Game). 2010. *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan Joint Environmental Impact Statement and Environmental Impact Report.* Final. SCH No. 2000011025. Los Angeles: Corps and CDFG. June 2010.
- Coulombe, H.N. 1971. "Behavior and Population Ecology of the Burrowing Owl, *Speotyto cunicularia*, in the Imperial Valley of California." *Condor* 73:162–176.
- County of Riverside. 2008. "BIRDS." Volume 2 – The MSHCP Reference Document. *Western Riverside County Multiple Species Habitat Conservation Plan.* County of Riverside Transportation and Land Management Agency (TLMA). Accessed July 2019. <https://rctlma.org/Portals/0/mshcp/volume2/index.html>.
- Dudek & Associates (Dudek & Associates Inc.). 2003. *2003 Sensitive Plant Survey Results for the Salt Creek Site.*
- Dudek & Associates. 2004. *2004 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2004.
- Dudek & Associates. 2006a. *Biological Resources Technical Report, Entrada, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek. October 2006.
- Dudek & Associates. 2006b. *2005 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2006.
- Dudek & Associates. 2006c. *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area.* Prepared for The Newhall Land and Farming Company.
- Dudek. 2007. "Focused Surveys for the Undescribed Everlasting Species in Castaic Creek and the Santa Clara River in Los Angeles County, California." Memorandum from A. Causey (Dudek) to M. Carpenter (Newhall Land). Valencia, California: Dudek. December 14, 2007.
- Dudek. 2012a. *2012 Botanical Survey Results for the Entrada South Site, Los Angeles, California.* Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2012.
- Dudek. 2012b. *2011 Sensitive Plant Survey Results for the Entrada Site, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. January 2012.
- Dudek. 2012c. *2012 Botanical Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. August 2012.
- Dudek. 2012d. "California Gnatcatcher Survey on the Entrada South Project Site."

- Dudek. 2012e. *Bat Survey, Entrada South Project, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. October 2012.
- Dudek. 2012f. *Report for Focused Arroyo Toad Surveys for the Mission Village Project, Newhall Ranch, Los Angeles County, California*. Letter to Sam Rojas, Newhall Land and Farming Company. August 10, 2012.
- Dudek. 2012g. *Focused Grasshopper Sparrow and General Wildlife Report for the Entrada South Site, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Santa Barbara, California: Dudek. August 2012.
- Dudek. 2012h. *Focused American Badger, Burrowing Owl, San Emigdio Blue Butterfly, a General Wildlife Survey Report for the Mission Village Site, Los Angeles County, California*. August 2012.
- Dudek. 2012i. *Focused California Gnatcatcher Survey, Entrada North and South Projects, Los Angeles County, California*. Prepared for U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office. July 2012.
- Dudek. 2013. *2013 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Dudek. June 2013.
- Dudek. 2014a. *2014 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Dudek. July 2014.
- Dudek. 2014b. *Pre-Construction Wildlife Surveys and Species Relocation for the Mayo Crossing and Potrero Canyon Advance Mitigation Sites, Los Angeles County, California*. August 2014.
- Dudek. 2014c. *Wildlife Survey Report for the MV1 Project Site, 2013–2014, Los Angeles County, California*. November 2014.
- Dudek. 2015a. Updated vegetation mapping based on jurisdictional delineation. [GIS data.]
- Dudek. 2015b. *2015 Botanical Results for the San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles County, California*. Prepared for the Newhall Land and Farming Company. August 2015.
- Dudek. 2015c. *2015 Focused Surveys for Slender Mariposa Lily on the Entrada South Project Site, Los Angeles County, California*. Prepared for the Newhall Land and Farming Company. October 2015.
- Dudek. 2015d. *Focused California Gnatcatcher Survey, Entrada North Project Site, Los Angeles County, California*. Prepared for U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office. August 10, 2015.
- Dudek. 2015e. *Focused California Gnatcatcher Survey, Legacy Village Project Site, Los Angeles County, California*. Prepared for U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office. August 10, 2015.
- Dudek. 2015f. *Final Upper Santa Clara River Watershed Study*. June 2015.



- Dudek. 2016. *2016 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area*. Prepared for The Newhall Land and Farming Company. July 2016.
- Dudek. 2017a. Updated vegetation mapping based on additional off-site area. [GIS data.]
- Dudek. 2017b. *2017 Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. July 2017.
- Dudek. 2018a. *2018 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2018.
- Dudek. 2018b. *Focused California Gnatcatcher Survey, Entrada South Project Site, Los Angeles County, California*. August 6, 2018.
- Dudek. 2019a. *2019 Sensitive Plant Survey Results for the Entrada South Project Site, Los Angeles County, California*. Prepared for FivePoint Holdings LLC. Valencia, California: Dudek. December 2019.
- Dudek. 2019b. *2019 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2019.
- Dudek. 2020a. *2020 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2020.
- Dudek. 2020b. *Newhall Ranch San Fernando Valley Spineflower Potential Pollinators Study*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. April 2020.
- Dudek. 2021. *2021 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2021.
- Dudek. 2022. *2022 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. June 2022.
- Dudek. 2023a. *2023 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2023.
- Dudek. 2023b. *2022 Focused Survey Results for Slender Mariposa Lily on the Entrada South Project Site – Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. March 2023.
- Dudek. 2024a. *2024 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. August 2024.

- Dudek. 2024b. *2024 Crotch's Bumble Bee Reconnaissance Survey Report for the Entrada South Project*. Letter report from K. Dayton (Dudek) to S. Rojas (FivePoint). August 14, 2024.
- Ecological Sciences (Ecological Sciences Inc.). 2004. "Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences.) to M. Subbotin (Newhall Ranch Company). Santa Paula, California: Ecological Sciences. August 11, 2004.
- ENTRIX (ENTRIX Inc.). 2009. *Focused Special-Status Fish Species Habitat Assessment—Santa Clara River and Tributary Drainages, Newhall Ranch, Los Angeles County, California*. Prepared for Newhall Land. Ventura, California: ENTRIX.
- Feenstra, J. 2019. "The Lion." Email from J. Feenstra (Woodstar Biological LLC) to S. Rojas (The Newhall Land and Farming Company).
- Finkelstein, M., Z. Kuspa, N.F. Snyder, and N.J. Schmitt. 2015. "California Condor – *Gymnogyps californianus*." Version 2.0. *The Birds of North America Online*, ed. A. Poole. Ithaca, New York: Cornell Lab of Ornithology. <http://bna.birds.cornell.edu/bna/species/610>.
- Gelb, Y., and N. Delacretaz. 2006. "Avian Window Strike Mortality at an Urban Office Building." *Northeastern Naturalist* 16(3): 455–470.
- Gelb, Y., and N. Delacretaz. 2009. "Windows and Vegetation: Primary Factors in Manhattan Bird Collisions." *Kingbird* 56(3): 190–198.
- Guthrie, D.A. 1994. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 5, 1994.
- Haglund, T.R. 1989. *Current Status of the Unarmored Threespine Stickleback (*Gasterosteus aculeatus williamsoni*) along Portions of the Santa Clara River Drainage*. Prepared for Newhall Land and Farming Company. Los Angeles: University of California.
- Haglund, T.R., and J.N. Baskin. 2000. *Fish and Wildlife Survey and Habitat Assessment of the Santa Clara River at Interstate 5*. Prepared for Environmental Planning Branch, California State Department of Transportation. Pomona, California: California State Polytechnic University. October 2000.
- Halterman, M.D., M.J. Johnson, J.A. Holmes, and S.A. Laymon. 2015. *A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-Billed Cuckoo: U.S. Fish and Wildlife Techniques and Methods*.
- Hickman, J.C., ed. 1996. *The Jepson Manual: Higher Plants of California*. 3rd printing, with corrections. Berkeley, California: University of California Press.
- Holland, D.C., and N.R. Sisk. 2001. *Habitat Use and Population Demographics of the Arroyo Toad (*Bufo californicus*) on MCB Camp Pendleton, San Diego County, California 1998–2000*. Prepared for Wildlife Management Branch, AC/S Environmental Security, MCB Camp Pendleton, California. Contract # M 00681-97-C-0034.

- Huntley, C. 2008. Observation of mountain lion in the Project area (in upper Middle Canyon). Personal communication from C. Huntley (Aspen) to M. Carpenter (Newhall Land). 2008.
- Impact Sciences (Impact Sciences Inc.). 2001. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area, Valencia, California*. Prepared for Valencia Company. Agoura Hills, California: Impact Sciences. September 19, 2001.
- Impact Sciences. 2002. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California*. Prepared for Newhall Ranch Company. Agoura Hills, California: Impact Sciences. May 21, 2002.
- Impact Sciences. 2003a. *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch, Valencia, California*. Prepared for Newhall Land and Farming. Agoura Hills, California: Impact Sciences. January 24, 2003.
- Impact Sciences. 2003b. *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area, Valencia, California*. Prepared for Newhall Land and Farming. Agoura Hills, California: Impact Sciences. June 2003.
- Impact Sciences Inc. 2003c. *Annual Status Report for Unarmored Threespine Stickleback within the Natural River Management Plan Area, Valencia, California*. Prepared for Newhall Land and Farming. Agoura Hills, California: Impact Sciences. October 1, 2003.
- Impact Sciences. 2005. *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Draft. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences. May 2005.
- Impact Sciences. 2015a. *Results of the 2015 Burrowing Owl (Athene cunicularia) Surveys on the Mission Village Project Site*. Letter to S. Rojas (The Newhall Land and Farming Company). November 2, 2015.
- Impact Sciences. 2015b. *Results of Second Focused Special-Status Reptile Capture and Relocation Program on the Mission Village Project Site*. Letter to S. Rojas (The Newhall Land and Farming Company). September 17, 2015.
- Impact Sciences. 2017. "Summary of 2017 Pre-Construction Surveys for the MV1 Project Area." Letter to S. Rojas (The Newhall Land and Farming Company). October 3, 2017.
- Jepson Flora Project. 2019. "Asteraceae (Compositae): Sunflower Family." *Jepson eFlora*. Prepared by D.J. Keil. [http://ucjeps.berkeley.edu/eflora/eflora\\_display.php?tid=58](http://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=58).
- Jones, C.E., S.E. Walker, F.M. Shropshire, R.L. Allen, D.R. Sandquist, and J.C. Luttrell. 2004. "Newhall Ranch Investigation of the San Fernando Valley Spineflower *Chorizanthe parryi* S. Watson var. *fernandina* (S. Watson) Jepson." September 2004.
- Kahle, L.Q., M.E. Flannery, and J.P. Dumbacher. 2016. "Bird-Window Collisions at a West-Coast Urban Park Museum: Analyses of Bird Biology and Window Attributes from Golden Gate Park, San Francisco." *PLoS ONE* 11(1): e0144600. <https://doi.org/10.1371/journal.pone.0144600>.

- Knight, M. 2024. Del Valle – CAGN Sightings. Email communication from M. Knight to S. Rojas (FivePoint). July 1, 2024.
- Koford, C.B. 1953. “The California Condor.” *National Audubon Society Resource Report* 4:1–154.
- Laymon, S.A., and M.D. Halterman. 1989. “A Proposed Habitat Management Plan for Yellow-Billed Cuckoos in California.” U.S. Forest Service General Technical Report PSW-110:272–277.
- LDC (Land Design Consultants). 2011. *Oak Tree Report “Entrada” V.T.T.M. No 53295*. Prepared for Newhall Land. February 2007, revised January 2011.
- LDC. 2014. V.T.T.M. 53295 – “*Entrada South*.” Prepared for Newhall Land. January 20, 2014.
- Lecky, J.H. 2000. Clarification of critical habitat designation for steelhead (*Oncorhynchus mykiss*) in the Santa Clara River basin. Letter from J.H. Lecky (National Marine Fisheries Service) to D.J. Castanon (Los Angeles District, Army Corps of Engineers). June 23, 2000.
- Light, R.H., and L.E. Pedroni. 2002. “When Oak Ordinances Fail: Unaddressed Issues of Oak Conservation.” In *Proceedings of the Fifth Symposium on Oak Woodlands: Oaks in California’s Changing Landscape*, Technical Coordinators R.B. Standiford, D. McCready, and K.L. Purcell, 483–500. General Technical Report PSW-GTR-184. Albany, California: Pacific Southwest Research Station, U.S. Forest Service.
- Loft, E.R. 1996. “Spatial-Temporal Analyses of Mountain Lions in the Sierra Nevada: Looking for Patterns and ‘Bulls-Eyes’ Amid the Mess.” Abstract. In *Fifth Mountain Lion Workshop*. Organized by the California Department of Fish and Game and the Southern California Chapter of the Wildlife Society, San Diego, California, February 27–March 1, 1996.
- McGraw, J.M. 2020. *Newhall Ranch Spineflower Conservation Plan San Fernando Valley Spineflower Areal Extent Mapping Protocol*. May 13, 2020.
- Meretsky, V.J., and N.F.R. Snyder. 1992. “Range Use and Movements of California Condors.” *Condor* 94:313–335.
- Miller, B.W. 2001. “A Method for Determining Relative Activity of Free Flying Bats Using a New Activity Index for Acoustic Monitoring.” *Acta Chiropterologica* 3:93–105.
- Niemela, C. 2009. Memo from C. Niemela (Bloom Biological) to J. Grantham (USFWS) regarding observations of California condor in Potrero Canyon in January 2009. March 11, 2009.
- O’Farrell, M.J., B.W. Miller, and W.L. Gannon. 1999. “Qualitative Identification of Free-Flying Bats Using the Anabat Detector.” *Journal of Mammalogy* 80:11–23.
- Papenfuss, T.J., and J.F. Parham. 2013. “Four New Species of California Legless Lizard (*Anniella*).” *Breviora* 513:1–17.
- Penrod, K., C. Cabanero, P. Beier, C. Luke, W. Spencer, E. Rubin, R. Sauvajot, S. Riley, and D. Kamradt. 2006. *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.

- RECON. 1999. *Quino Checkerspot Butterfly Habitat Assessment for Phase 1 Development and Permit Areas of Newhall Ranch*. Prepared for Newhall Ranch Company by G.A. Scheid (RECON). San Diego, California: RECON. July 15, 1999.
- RECON and Impact Sciences. 1996. *Biota Report: Newhall Ranch Specific Plan; Santa Clara River Valley, California; Tentative Tract Map 44831*. Prepared for Los Angeles County, Department of Regional Planning. September 7, 1995; revised July 1996.
- Richmond, J.Q., A.R. Backlin, C. Galst, J.W. O'Brien, and R.N. Fisher. 2016a. "'Boom and Bust' Demography Distorts Historical Signals of Relatedness and Population Genetic Structure in the Santa Ana Sucker (*Catostomus santaanae*) of Southern California." Unpublished manuscript.
- Richmond, J.Q., A.R. Backlin, C. Galst-Cavalcante, J.W. O'Brien, and R.N. Fisher. 2016b. "'Boom and Bust' Demography Distorts Genetic Signals of Population History in the Endemic Santa Ana Sucker (*Catostomus santaanae*) of Southern California." Unpublished manuscript, in review.
- Rodriguez-Robles, J.A., C.J. Bell, and H.W. Greene. 1999. "Food Habits of the Glossy Snake, *Arizona elegans*, with Comparisons to the Diet of Sympatric Long-Nosed Snakes, *Rhinocheilus lecontei*." *Journal of Herpetology* 33:87–92.
- Root, R.P. 2008. "Acknowledgement of Request for Formal Consultation on the Proposed Newhall Ranch Specific Plan, Santa Clarita, Los Angeles County, California." Letter from R.P. Root (U.S. Fish and Wildlife Service) to A.O. Allen (U.S. Army Corps of Engineers). November 12, 2008.
- Rosenberg, D.K., B.R. Noon, and E.C. Meslow. 1995. "Towards a Definition of 'Biological Corridor.'" In *Integrating People and Wildlife for a Sustainable Future*, edited by J.A. Bissonette and P.R. Krausman, 436–439. Proceedings of the First International Wildlife Management Congress. Bethesda, Maryland: The Wildlife Society.
- Rosenberg, D.K., B.R. Noon, and E.C. Meslow. 1997. "Biological Corridors: Form, Function, and Efficacy." *BioScience* 47:677–687.
- Sandburg, N.H. 2001. "Field Summary of Santa Clara River Surveys for *Bufo californicus* and *Rana aurora draytonii*, May 8 through May 29, 2001." Letter report from N.H. Sandburg (Biological Consultant). Santa Barbara, California. June 6, 2001.
- SCAQMD (South Coast Air Quality Management District). 2005. Rule 403: Fugitive Dust. Adopted May 7, 1976; last amended June 3, 2005. <https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4>.
- SMEA (San Marino Environmental Associates). 1995. *Sensitive Aquatic Species Survey; Santa Clara River and San Francisquito Creek; Newhall Land and Farming Company Property; Los Angeles, California*. Final report. Prepared for M. Subbotin, Valencia Company by J.N. Baskin and T.R. Haglund. San Marino, California: SMEA. December 1995.
- Snyder, N., and H. Snyder. 2000. *The California Condor: A Saga of Natural History and Conservation*. London: Academic Press.
- Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. *California Amphibian and Reptile Species of Special Concern*. Oakland: University of California Press, California Department of Fish and Wildlife.

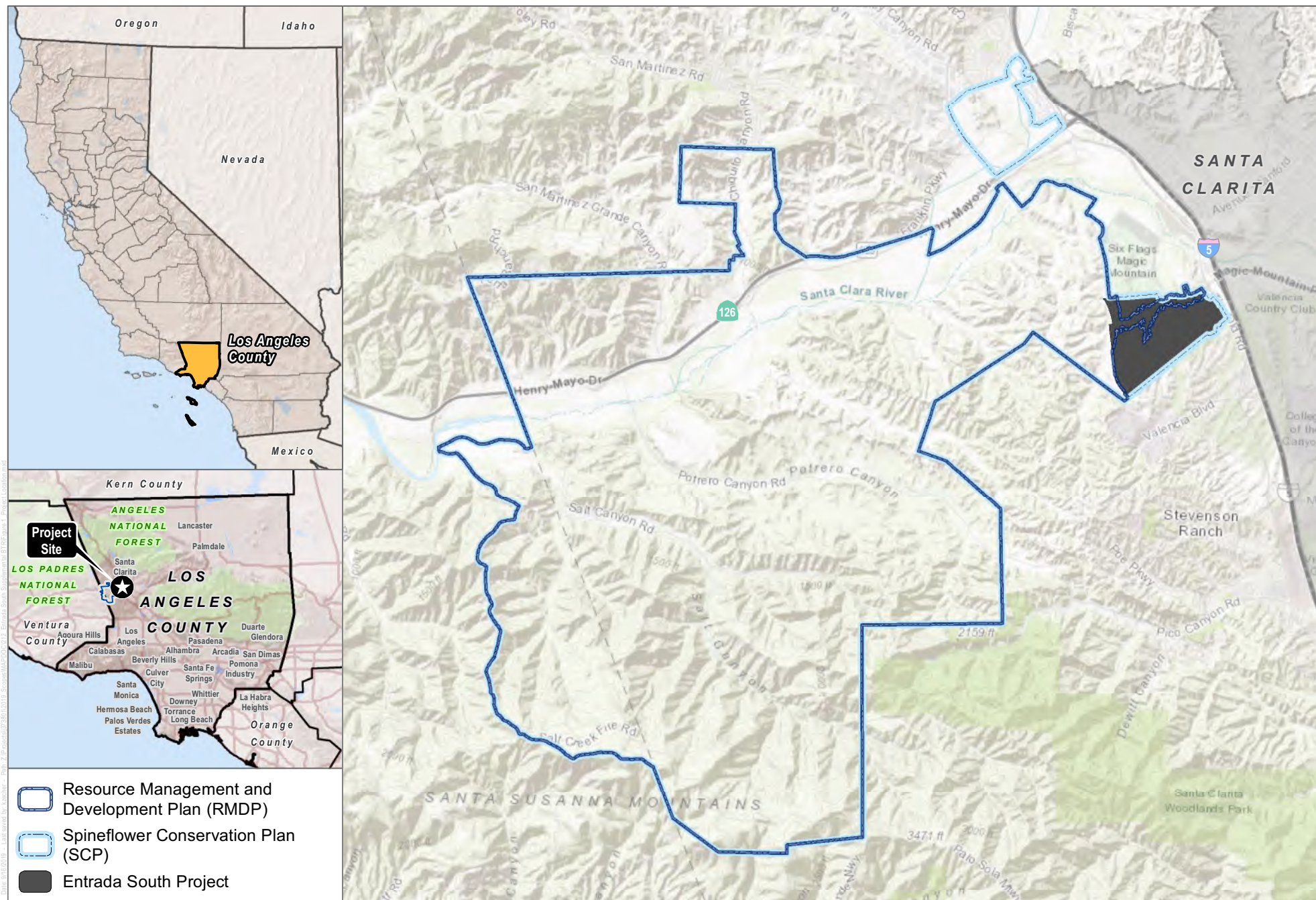


- Thorp, R.W., D.S. Horning, Jr., and L.L. Horning. 1983. "Bumble Bees and Cuckoo Bumble Bees of California (Hymenoptera: Apidae)." *Bulletin of the California Insect Survey* 23: i–viii, 1–79.
- TNC (The Nature Conservancy). 2006. *Santa Clara River Upper Watershed Conservation Plan*. A Project Funded in Part by the Santa Clara River Trustee Council ARCO Oil Spill Settlement. Fall 2006.
- UCSB (University of California, Santa Barbara). 1999. Gap Analysis of Mainland California. California Gap Analysis Project.
- USDA (U.S. Department of Agriculture). 2019. Web Soil Survey: Antelope Valley Area, California. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed July 18, 2019.  
<http://websoilsurvey.nrcs.usda.gov/>.
- USFWS (U.S. Fish and Wildlife Service). 1997. "Coastal California Gnatcatcher (*Poliophtila californica californica*) Presence/Absence Survey Protocol." Carlsbad, California: USFWS, Carlsbad Field Office. Revised July 28, 1997.  
<http://www.fws.gov/pacific/ecoservices/endangered/recovery/documents/CCalGnatcatcher.1997.protocol.pdf>.
- USFWS. 1998. "Biological Opinion for the Valencia Company's Clean Water Act Section 404 Authorization for Portions of the Santa Clara River, Los Angeles County, California (1-8-98 F/C-61)." November 27, 1998.
- USFWS. 2017. *Recovery Plan for the Santa Ana Sucker (Catostomus santaanae)*. Sacramento: USFWS, Region 8. February 28, 2017.
- USGS (U.S. Geological Survey). 2012. National Gap Analysis Program. Version 2. Updated 2012.
- USGS. 2023. "Active data: California condor." [Online database.] USGS ScienceBase-Catalog.  
<https://www.sciencebase.gov/catalog/item/53a1d33ae4b0403a441545c7?view=folder>.
- Wilbur, S.R. 1978. "The California Condor, 1966–76: A Look at Its Past and Future." U.S. Fish and Wildlife Service. *North American Fauna* 72:1–136.
- Williams, P.W., R. Thorp, L. Richardson, and S. Colla. 2014. *Bumble Bees of North America: An Identification Guide*. Princeton: Princeton University Press.
- Woodstar Biological (Woodstar Biological LLC). 2017. *Santa Clara River & Major Tributaries Riparian Bird Surveys, Valencia NRMP Areas, Newhall Ranch RMDP Areas & Other Newhall Ranch Areas*. Prepared for The Newhall Land and Farming Company.
- Woodstar Biological. 2018. *Summary of Riparian Bird Surveys Santa Clara River, Castaic Creek, San Francisquito Canyon. Los Angeles and Ventura Counties*. Prepared for The Newhall Land and Farming Company.
- Woodstar Biological. 2019a. *Summary of Riparian Bird Surveys, Resource Management and Development Plan (RMDP) Area. Santa Clara River. Los Angeles County. Spring 2019*. Prepared for FivePoint Holdings LLC.
- Woodstar Biological. 2019b. *Summary of Riparian Bird Surveys, Natural Resource [sic] Management Plan (NRMP) Area. Santa Clara River. Los Angeles County. Spring 2019*. Prepared for FivePoint Holdings LLC.



- Woodstar Biological. 2019c. *Summary of Riparian Bird Surveys, Castaic Creek*. Los Angeles County. Spring 2019. Prepared for FivePoint Holdings LLC.
- Woodstar Biological. 2021. *Summary of Riparian Bird Surveys, Santa Clara River: Resource Management and Development Plan (RMDP) and Natural Resource [sic] Management Plan (NRMP) Areas*. Santa Clarita. Los Angeles County. Spring 2021. Prepared for FivePoint Holdings LLC.
- Xerces Society, Defenders of Wildlife, and the Center for Food Safety. 2018. *A Petition to the State of California Fish and Game Commission to List the Crotch Bumble Bee (Bombus crotchii), Franklin's Bumble Bee (Bombus franklini), Suckley Cuckoo Bumble Bee (Bombus suckleyi), and Western Bumble Bee (Bombus occidentalis occidentalis) as Endangered under the California Endangered Species Act*. Submitted by the Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. October 2018.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990a. *California's Wildlife: Volume II. Birds*. Sacramento: California Department of Fish and Game.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990b. *California's Wildlife: Volume III. Mammals*. Sacramento: California Department of Fish and Game.

INTENTIONALLY LEFT BLANK

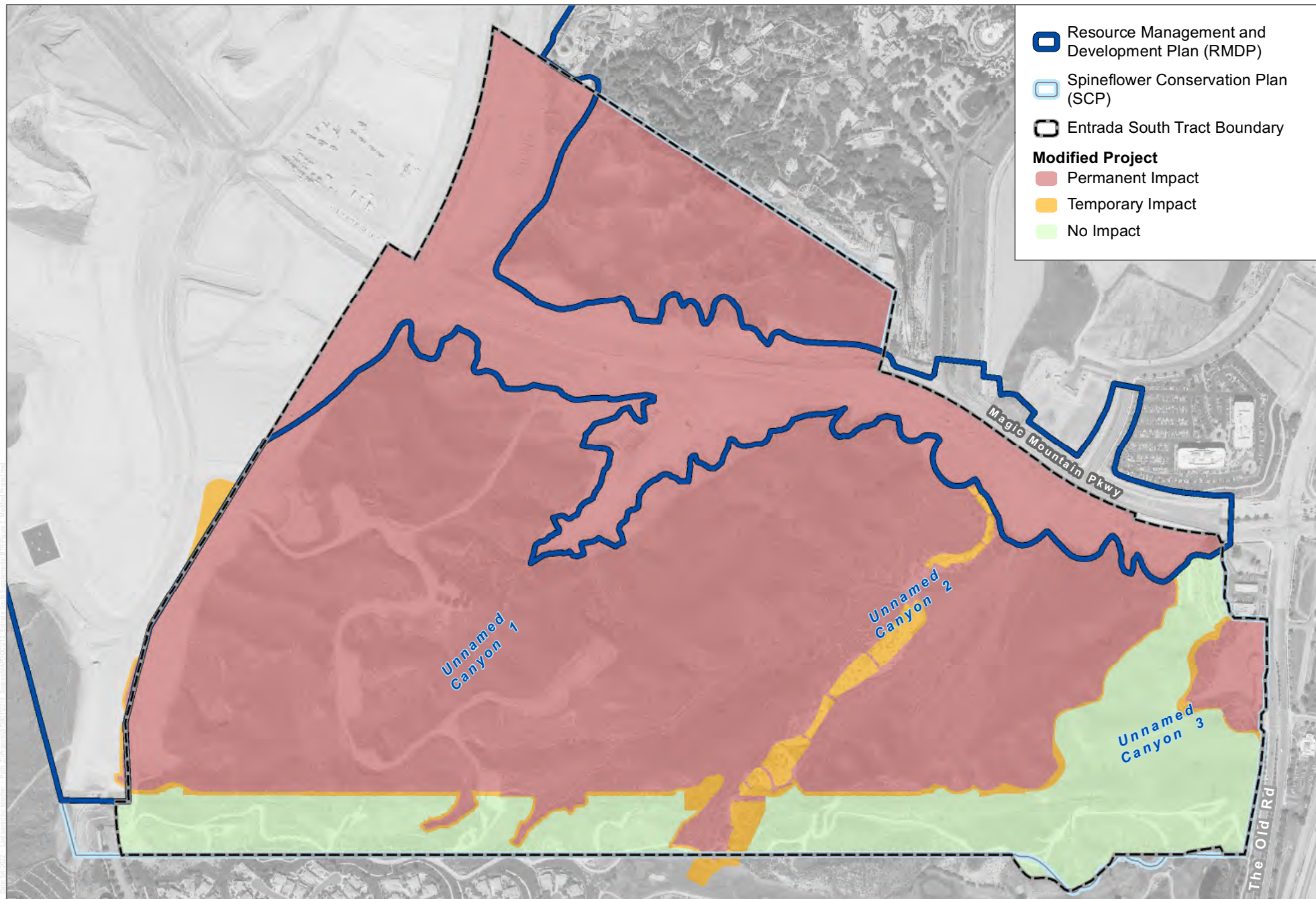


SOURCE: ESRI 2019; Hunsaker 2019

**FIGURE 1**  
**Project Location**

INTENTIONALLY LEFT BLANK

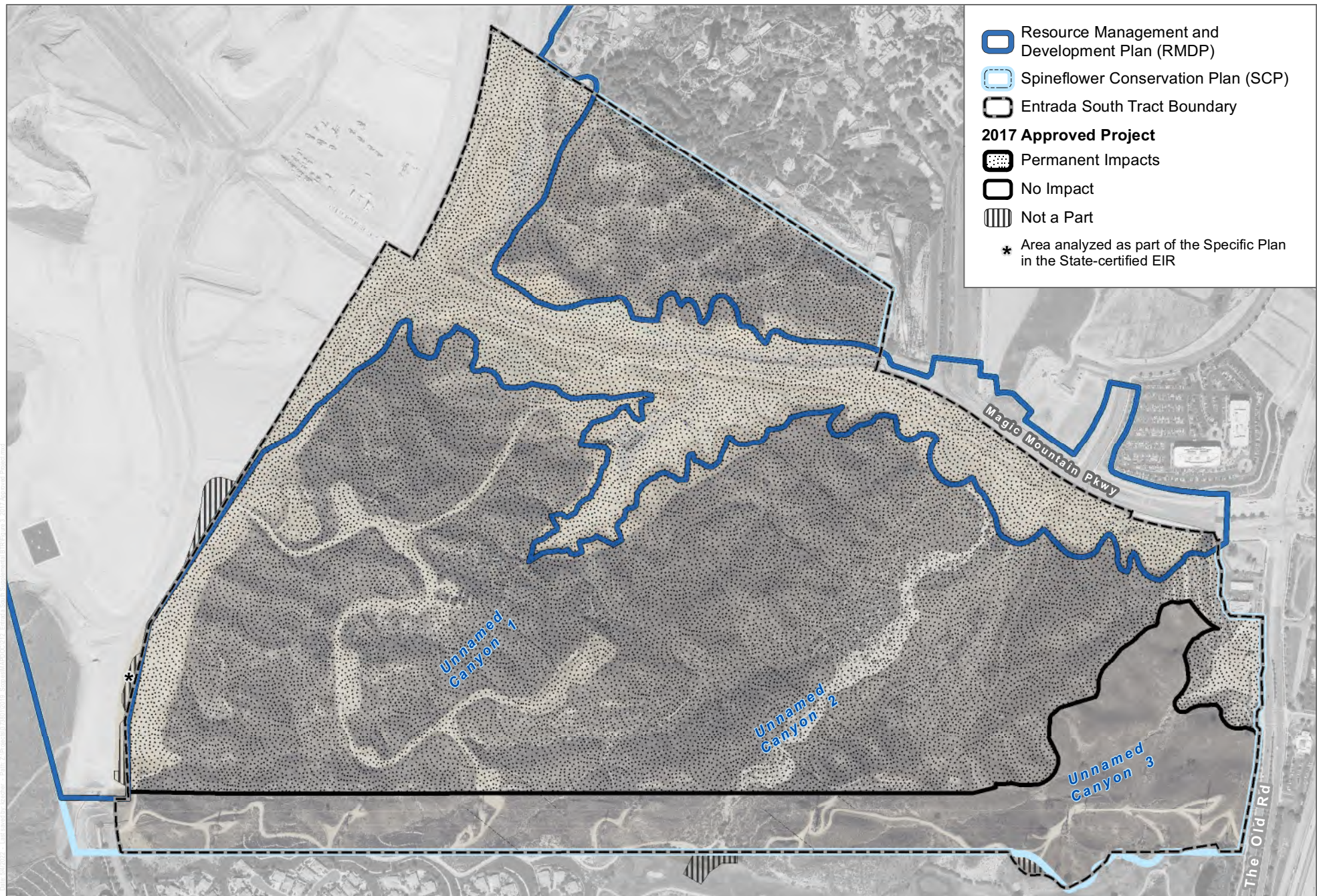




SOURCE: Eagle Aerial Solutions 2018, Hunsaker 2022

INTENTIONALLY LEFT BLANK

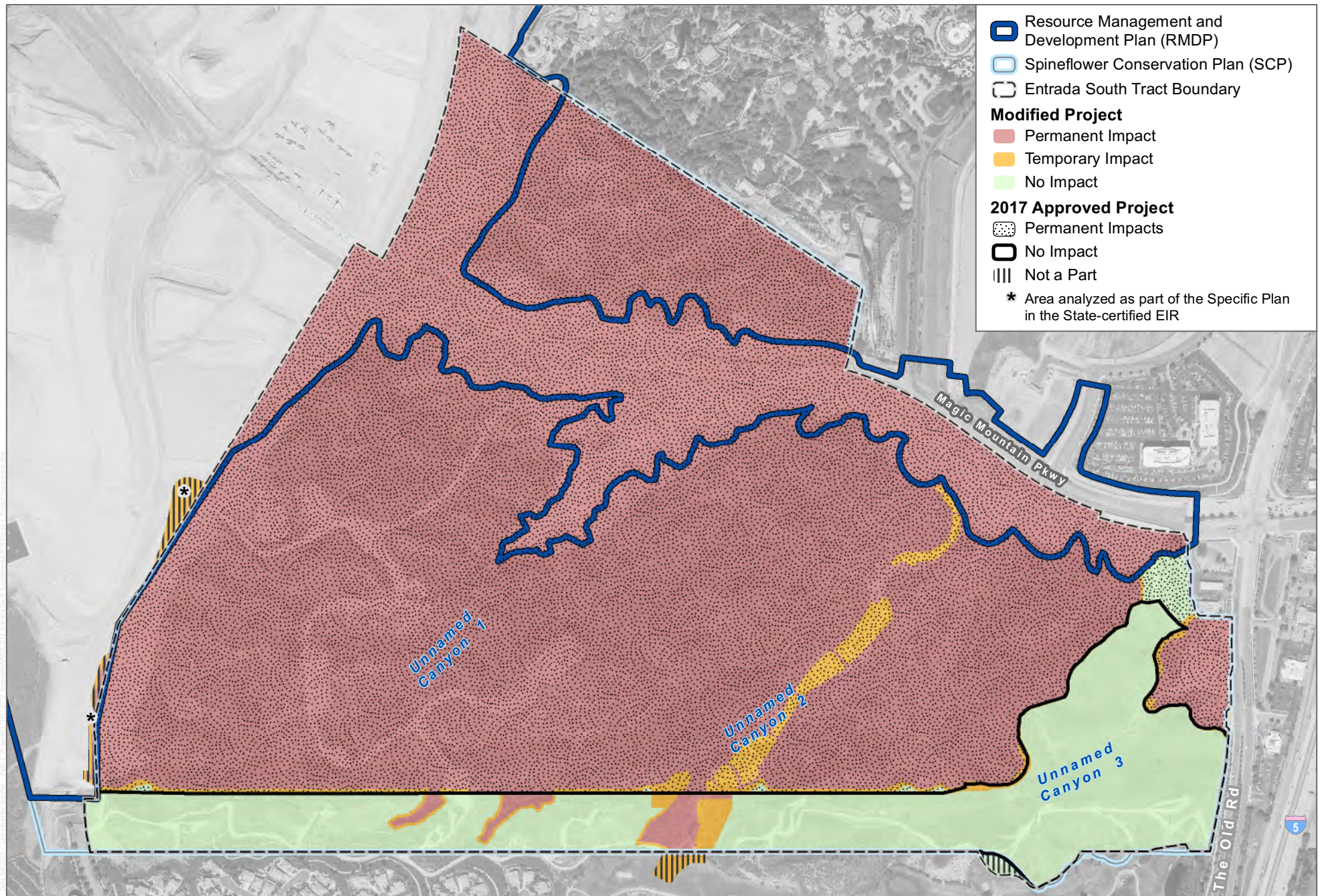




SOURCE: Eagle Aerial Solutions 2018

INTENTIONALLY LEFT BLANK





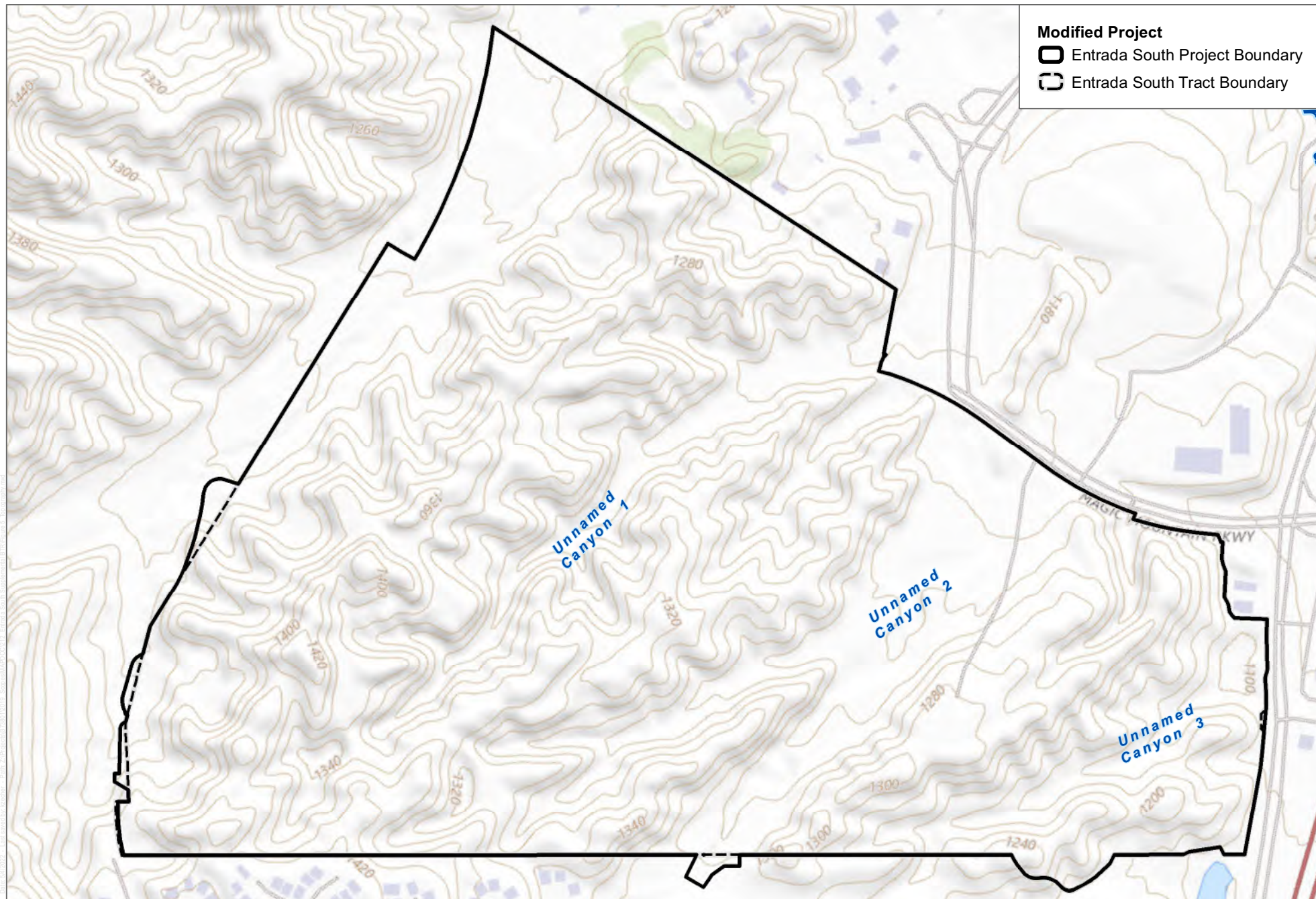
SOURCE: Eagle Aerial Solutions 2018, Hunsaker 2022

**FIGURE 4**

**Project Comparison**

INTENTIONALLY LEFT BLANK





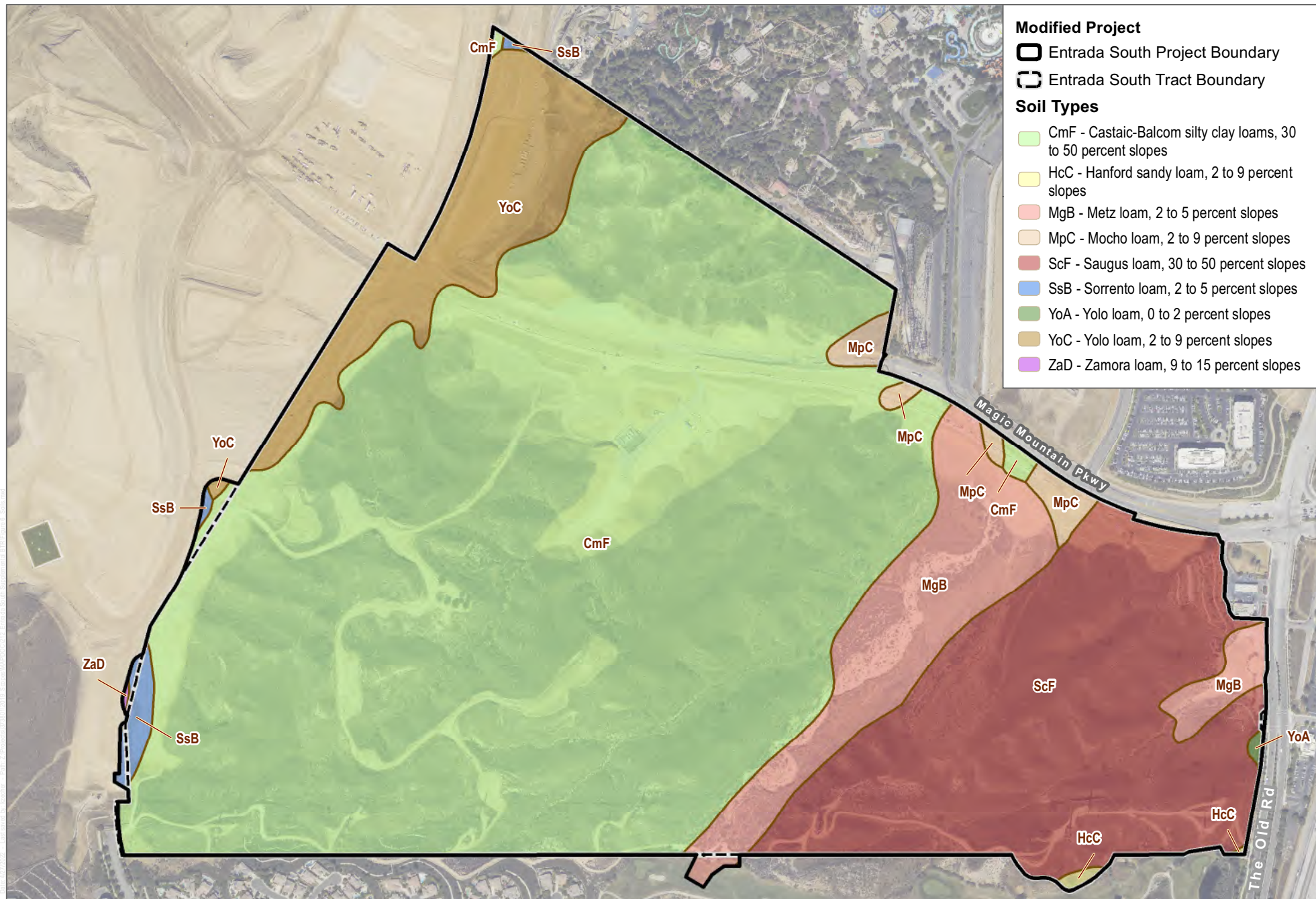
SOURCE: USGS National Map

**FIGURE 5**

**Topography**

INTENTIONALLY LEFT BLANK

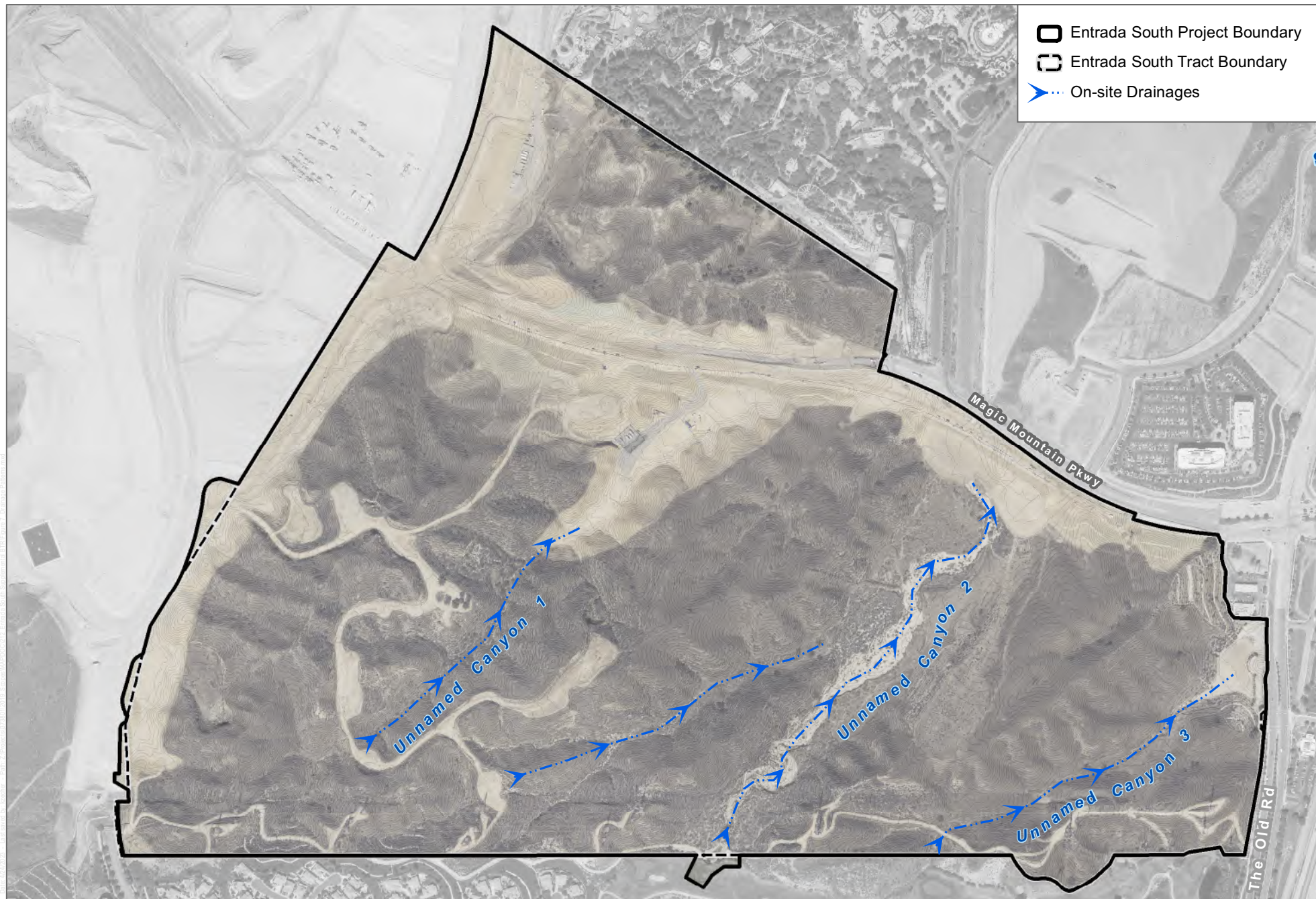




SOURCE: USGS National Map

INTENTIONALLY LEFT BLANK





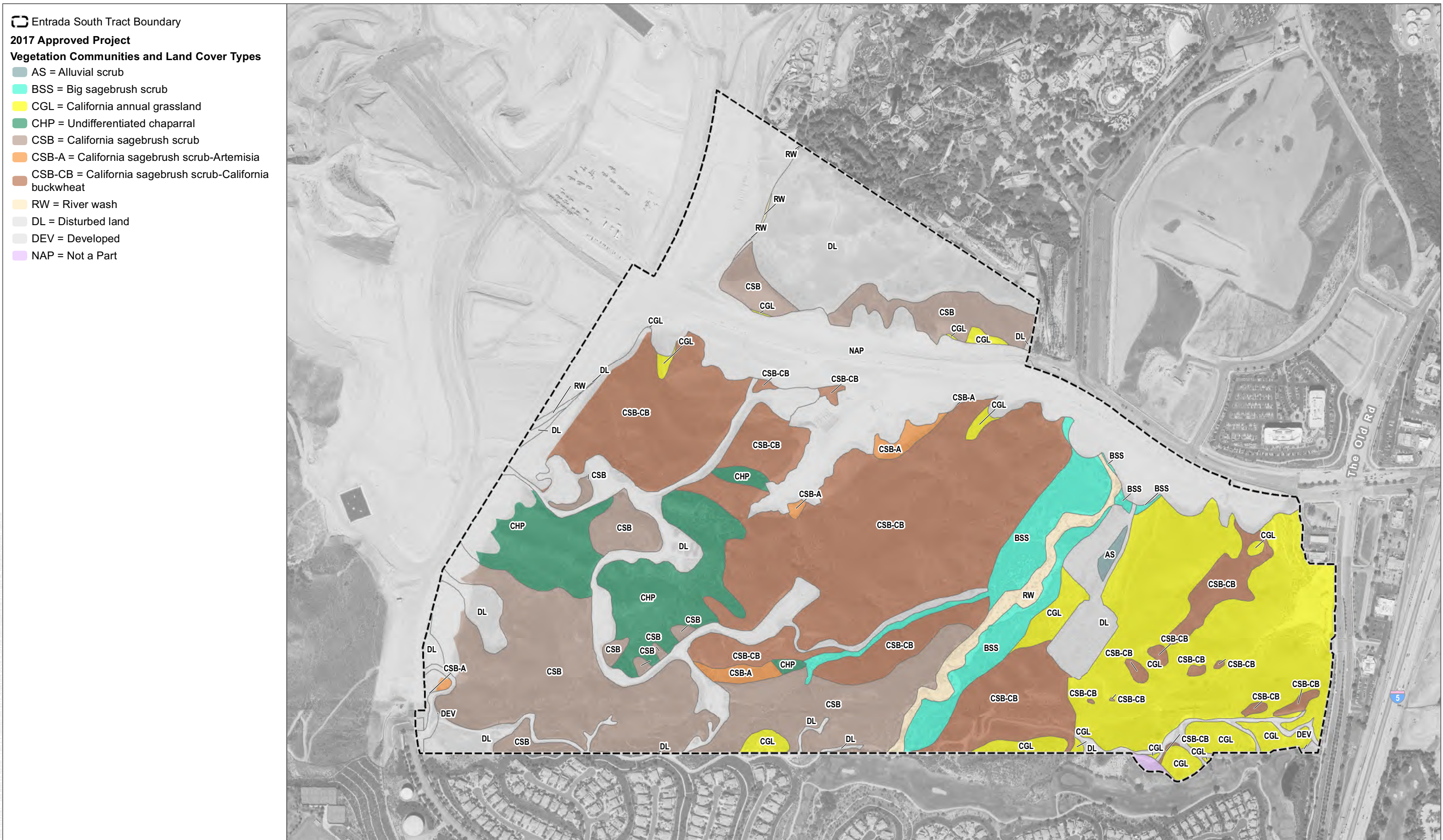
SOURCE: USGS National Map

**FIGURE 7**

**Drainage Patterns**

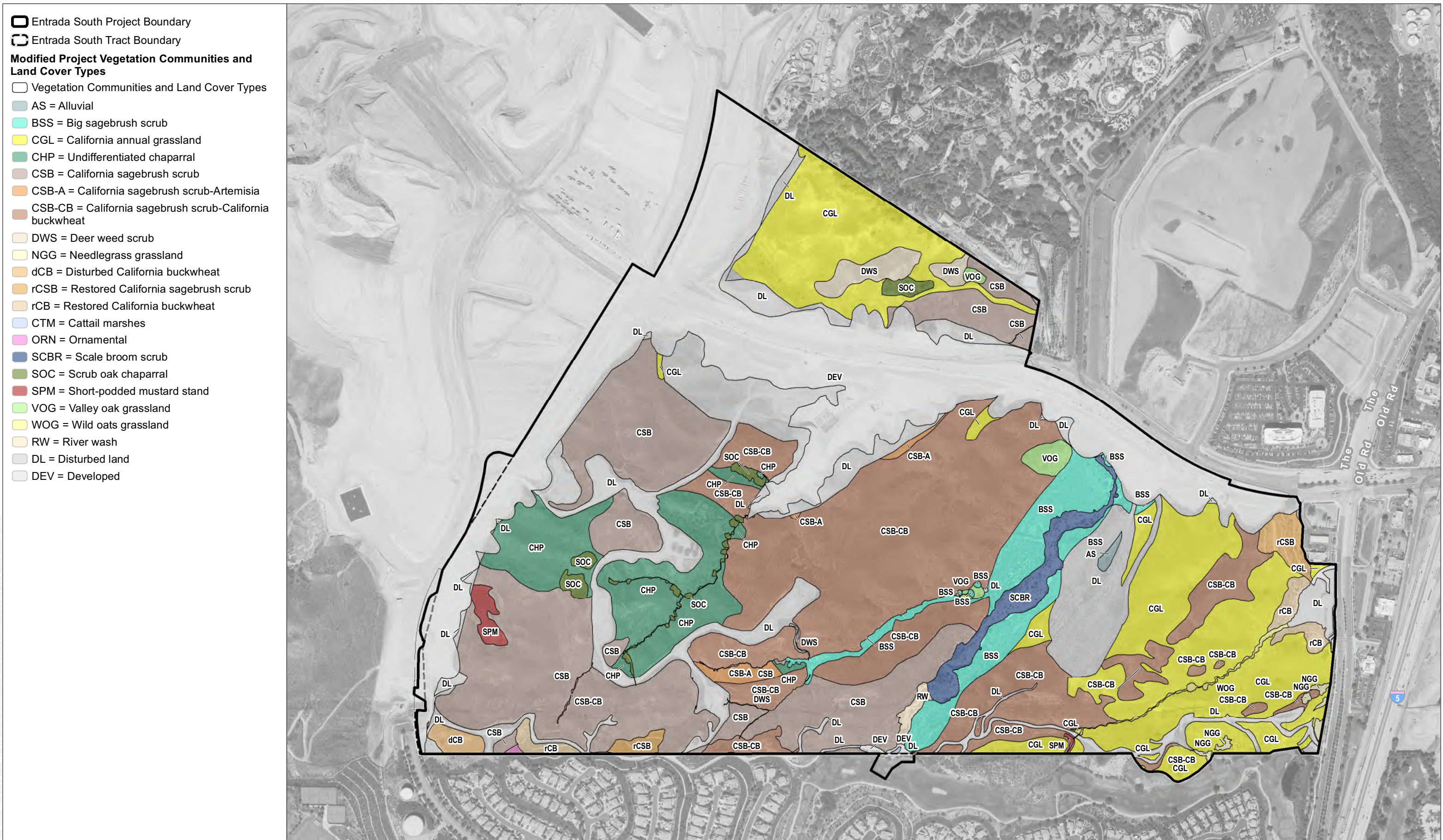
INTENTIONALLY LEFT BLANK





INTENTIONALLY LEFT BLANK





SOURCE: ESRI 2019; Hunsaker 2019

**FIGURE 8b**

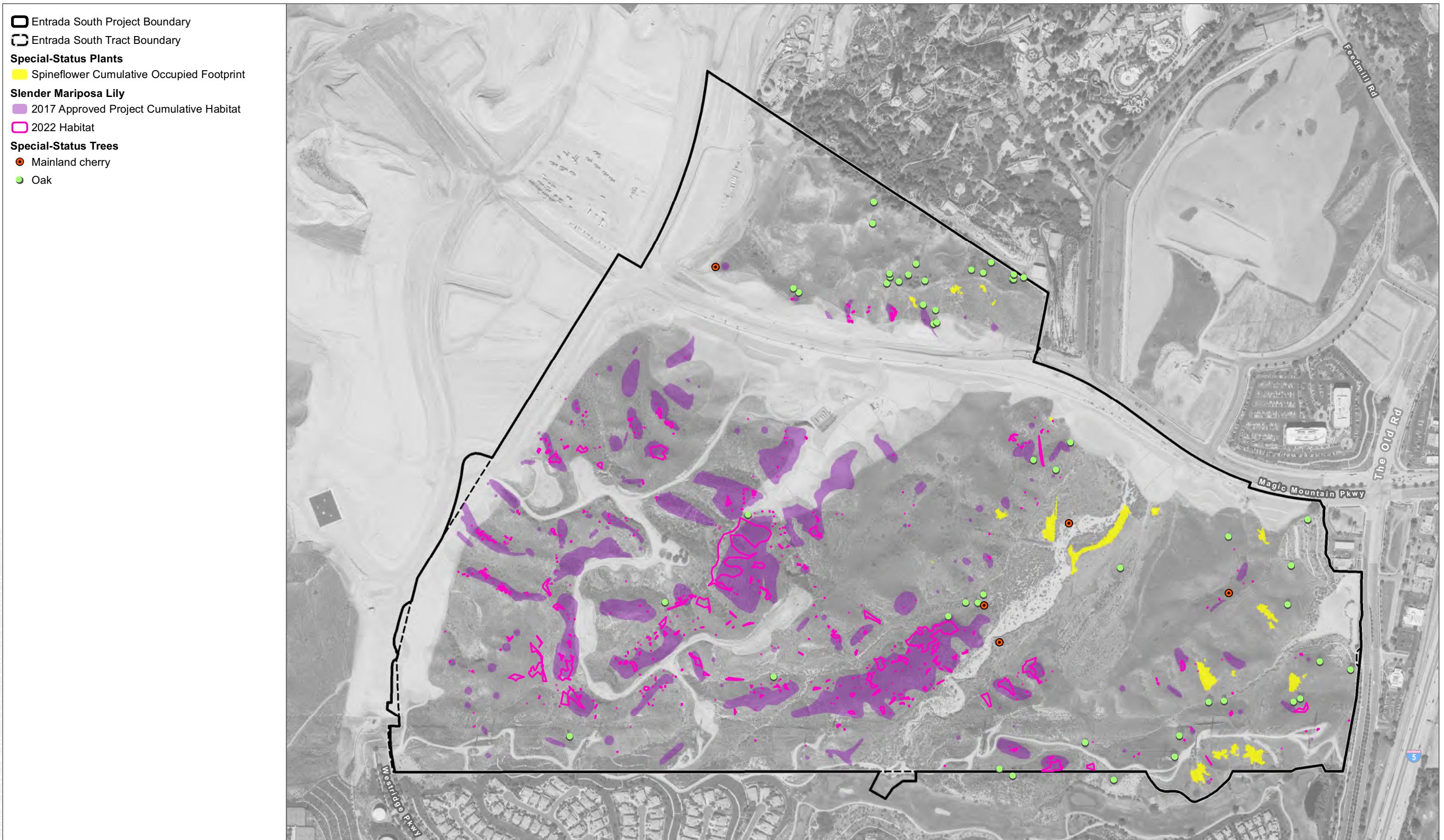
Modified Project Vegetation Communities and Land Cover Types

Entrada South Supplemental Biological Resources Technical Report



INTENTIONALLY LEFT BLANK





SOURCE: ESRI 2019; Hunsaker 2019

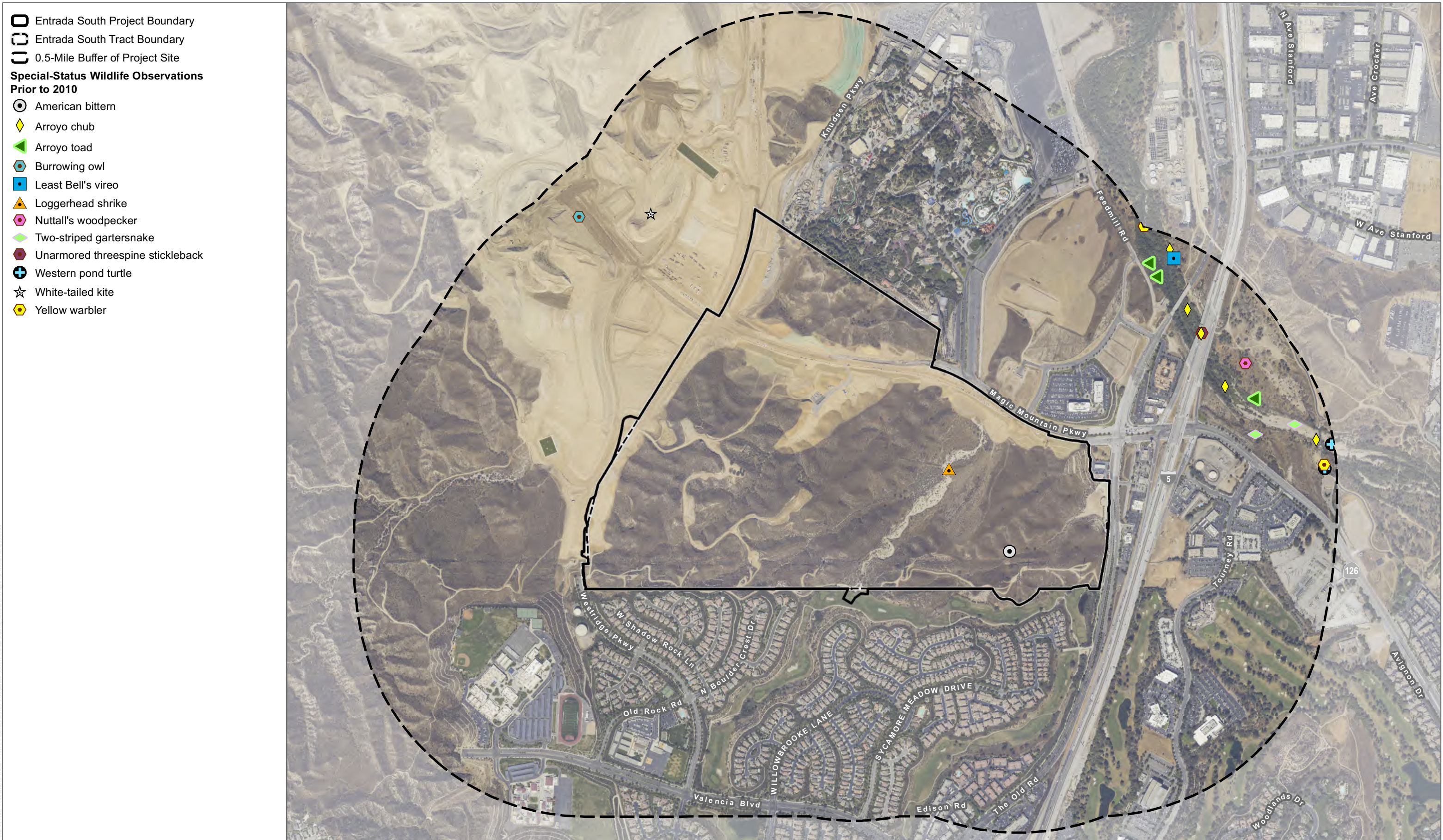
**FIGURE 9**

**Special-Status Plants**



INTENTIONALLY LEFT BLANK





SOURCE: Eagle Aerial Solutions 2018

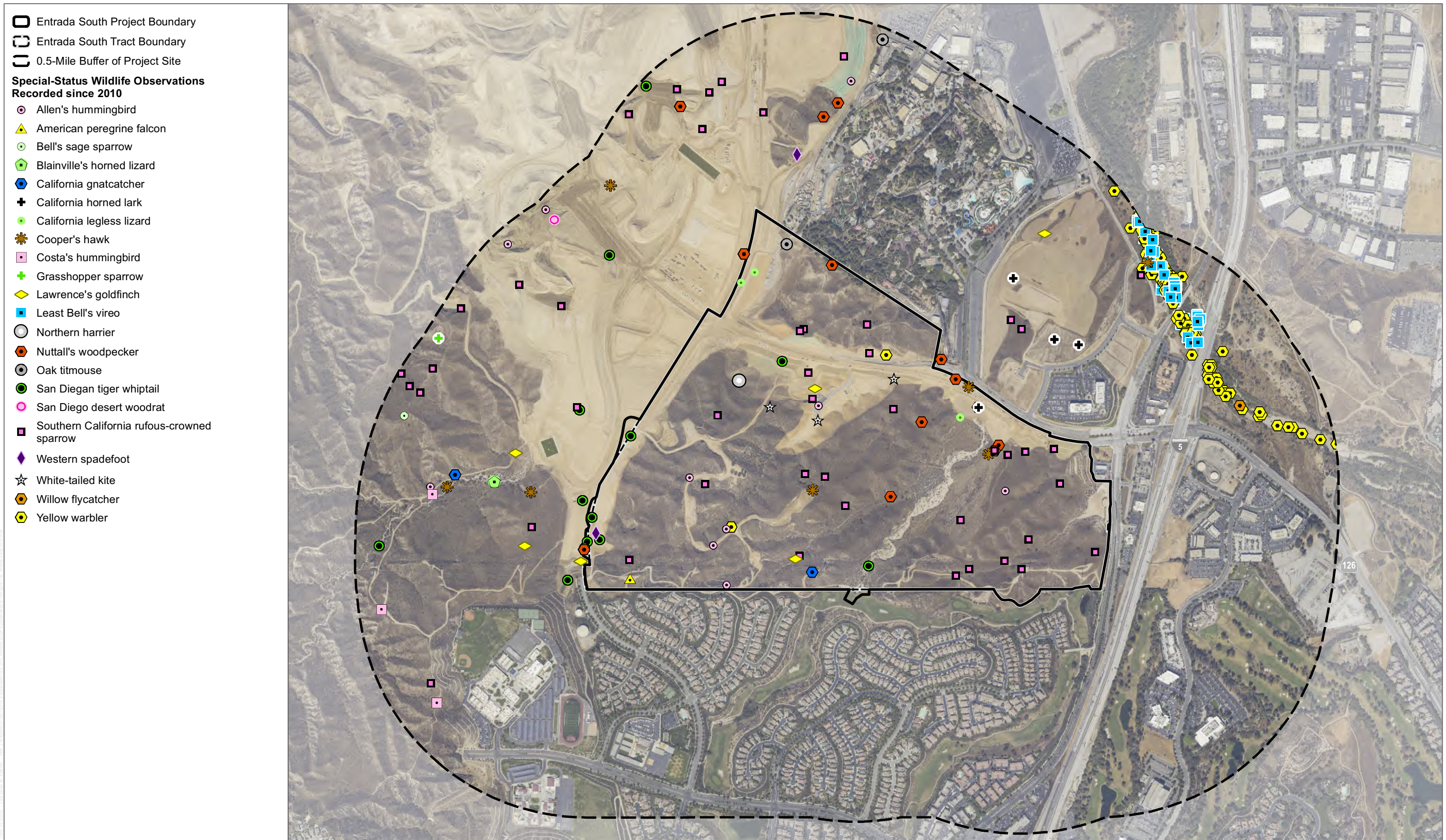
**FIGURE 10a**

2017 Approved Project Special-Status Wildlife Observations On-Site and Within 0.5-Mile of the Entrada South Project Site Prior to 2010



INTENTIONALLY LEFT BLANK



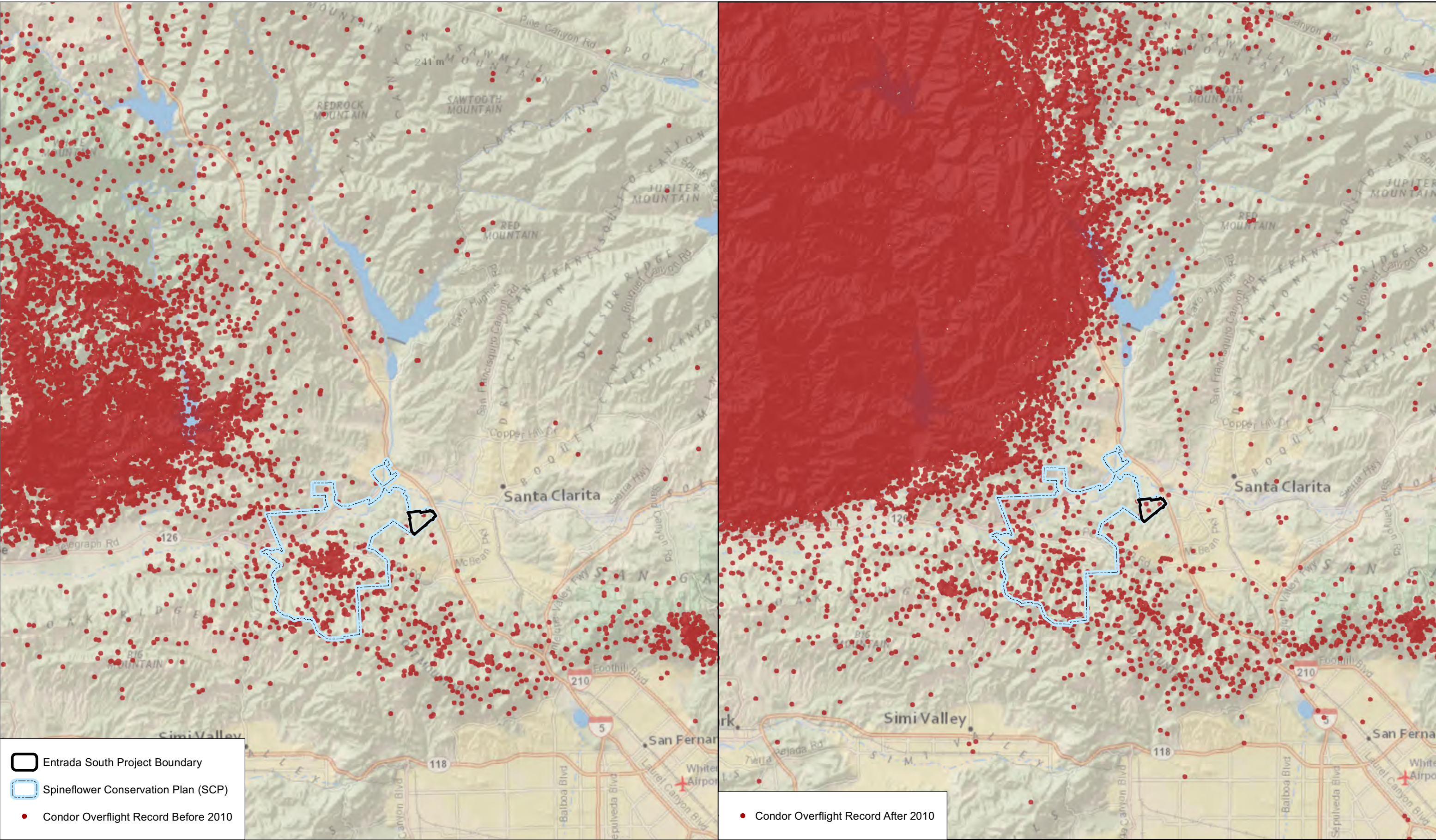


**FIGURE 10b**  
 Special-Status Wildlife Observations On-Site and Within 0.5-Mile of the Entrada South Project Site Recorded since 2010  
 Entrada South Supplemental Biological Resources Technical Report



INTENTIONALLY LEFT BLANK





SOURCE: USFWS 2021



INTENTIONALLY LEFT BLANK



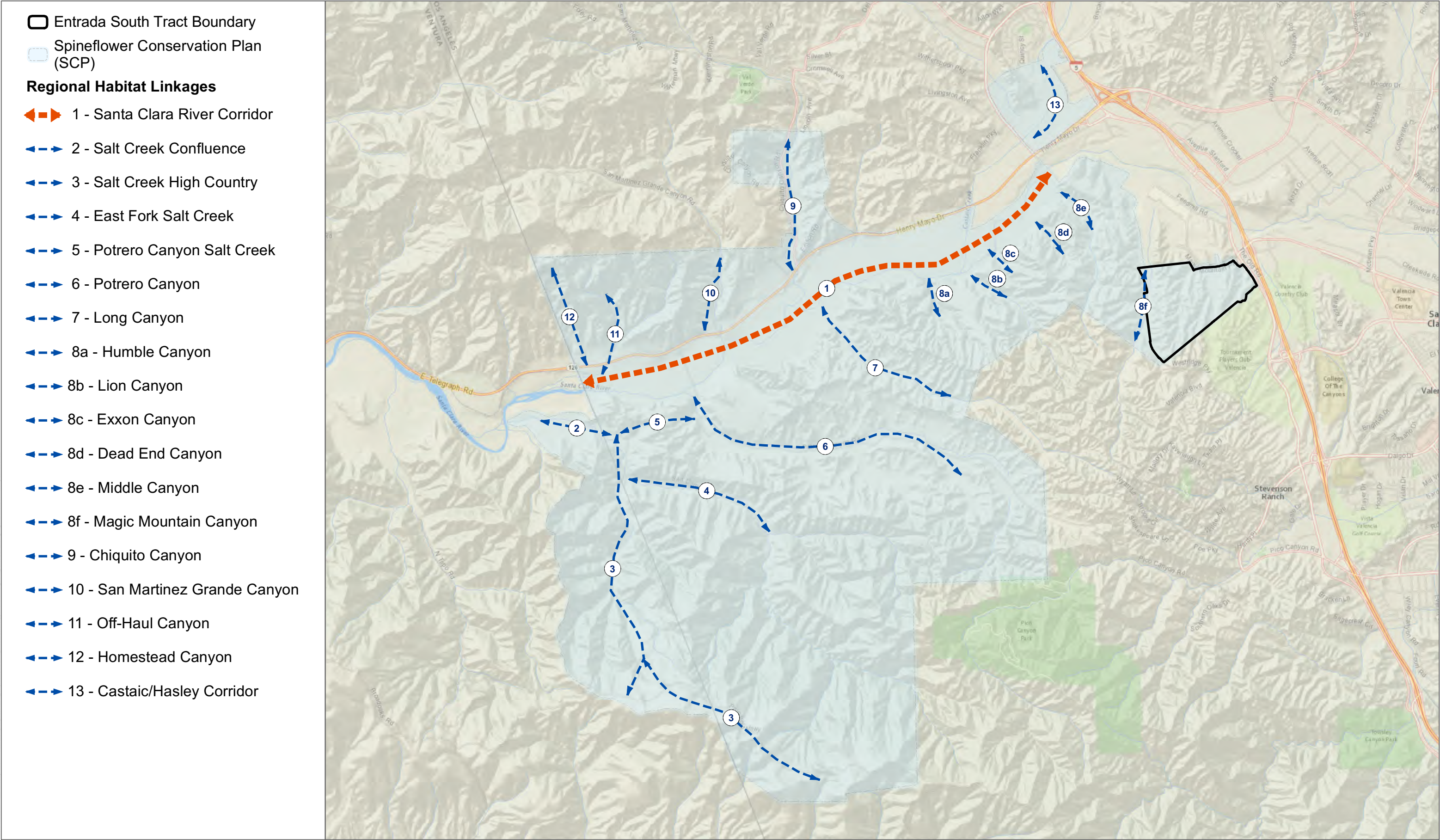


SOURCE: South Coast Wildlands (2006)



INTENTIONALLY LEFT BLANK



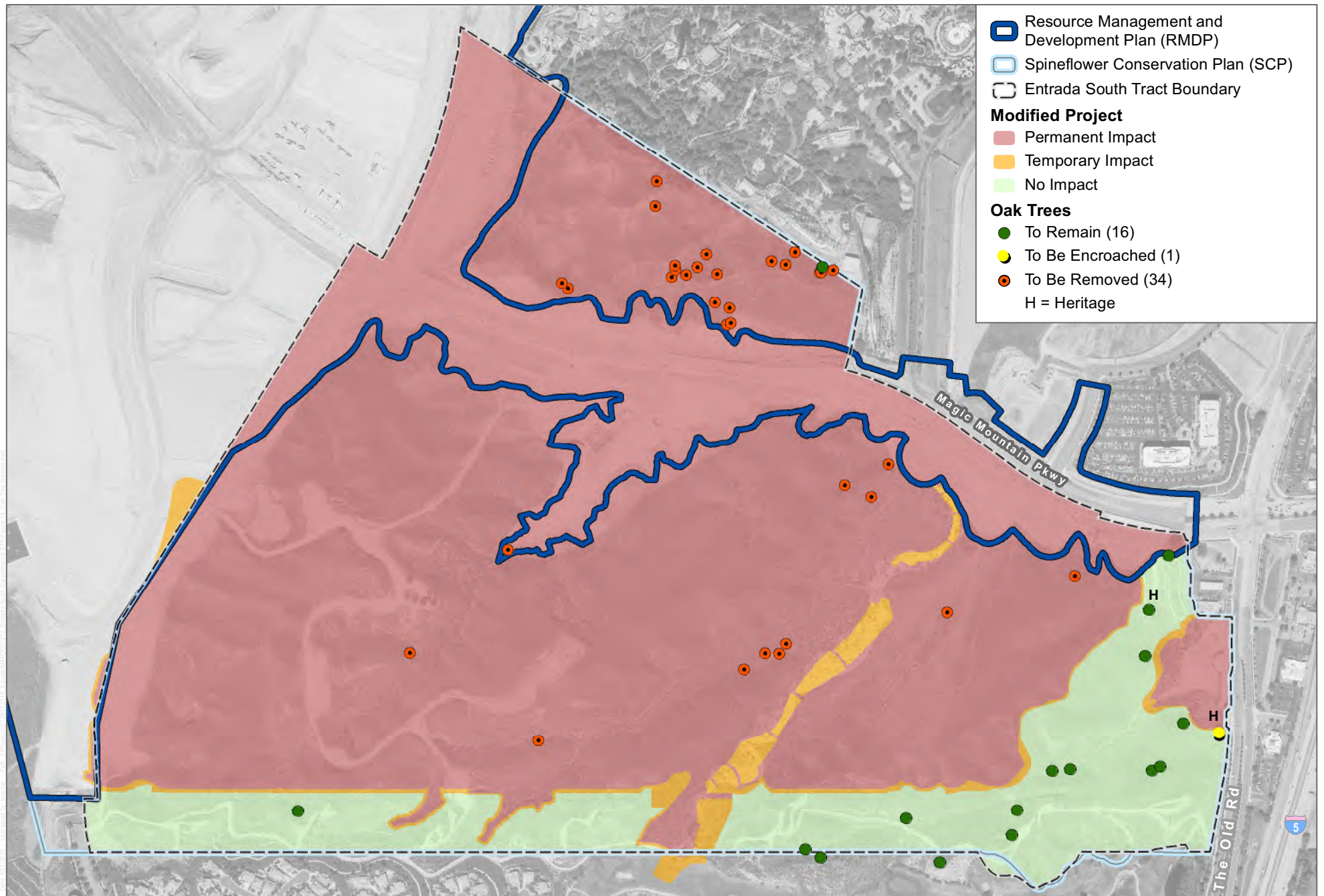


SOURCE: National Geographic 2019

**FIGURE 13**  
RMDP/SCP Existing Regional Wildlife Connectivity Corridors  
Entrada South Supplemental Biological Resources Technical Report



INTENTIONALLY LEFT BLANK



**FIGURE 14**

## Oak Tree Impacts

Entrada South Supplemental Biological Resources Technical Report

INTENTIONALLY LEFT BLANK



---

# Appendix A

## Plant Compendium



# Vascular Species

## Eudicots

### ADOXACEAE – MUSKROOT FAMILY

*Sambucus nigra* ssp. *caerulea* – blue elderberry

### AMARANTHACEAE – AMARANTH FAMILY

- \* *Amaranthus albus* – prostrate pigweed
- \* *Amaranthus retroflexus* – redroot amaranth

### ANACARDIACEAE – SUMAC OR CASHEW FAMILY

- Rhus aromatica* – basket bush
- Rhus ovata* – sugarbush
- \* *Schinus molle* – Peruvian peppertree
- \* *Schinus terebinthifolius* – Brazilian peppertree
- Toxicodendron diversilobum* – poison oak

### APIACEAE – CARROT FAMILY

- Apiastrum angustifolium* – mock parsley
- Bowlesia incana* – hoary bowlesia
- Daucus pusillus* – American wild carrot
- Lomatium utriculatum* – common lomatium

### APOCYNACEAE – DOGBANE FAMILY

- Asclepias californica* – California milkweed
- Asclepias eriocarpa* – woollypod milkweed
- Asclepias fascicularis* – Mexican whorled milkweed

### ASTERACEAE – SUNFLOWER FAMILY

- Acourtia microcephala* – sacapellote
- Ambrosia acanthicarpa* – flatspine bur ragweed
- Ambrosia confertiflora* – weakleaf bur ragweed
- Ambrosia psilostachya* – western ragweed
- \* *Arctotheca calendula* – Capeweed
- Artemisia californica* – California sagebrush
- Artemisia douglasiana* – Douglas' sagewort
- Artemisia dracunculus* – wild tarragon
- Artemisia tridentata* – big sagebrush
- Baccharis pilularis* ssp. *consanguinea* – coyotebrush
- Baccharis pilularis* – coyote brush

- Baccharis salicifolia* ssp. *salicifolia* – mulefat
- Baccharis salicifolia* – mulefat
- Baccharis sarothroides* – desertbroom
- Brickellia californica* – California brickellbush
- Brickellia nevinii* – Nevin’s brickellbush
- \* *Carduus pycnocephalus* ssp. *pycnocephalus* – Italian plumeless thistle
- \* *Centaurea benedicta* – blessed thistle
- \* *Centaurea melitensis* – Maltese star-thistle
- Chaenactis artemisiifolia* – white pincushion
- Chaenactis glabriuscula* – yellow pincushion
- Cirsium occidentale* var. *californicum* – cobwebby thistle
- Cirsium occidentale* var. *occidentale* – cobwebby thistle
- \* *Cirsium vulgare* – bull thistle
- Corethrogyne filaginifolia* – sand-aster
- \* *Cotula australis* – Australian waterbuttons
- \* *Cotula coronopifolia* – brass buttons
- \* *Cynara cardunculus* – cardoon
- Deinandra fasciculata* – clustered tarweed
- \* *Dimorphotheca sinuata* – glandular Cape marigold
- Encelia actoni* – Acton’s brittle brush
- Encelia californica* – California brittle bush
- Encelia farinosa* – brittle bush
- Ericameria linearifolia* – narrowleaf goldenbush
- Ericameria nauseosa* – rubber rabbitbrush
- Ericameria palmeri* var. *pachylepis* – Palmer’s rabbitbrush
- Ericameria pinifolia* – pinebush
- Erigeron canadensis* – Canadian horseweed
- Erigeron foliosus* – leafy fleabane
- Eriophyllum confertiflorum* – golden-yarrow
- Euthamia occidentalis* – western goldentop
- Gnaphalium palustre* – western marsh cudweed
- Hazardia squarrosa* var. *grindelioides* – sawtooth bristleweed
- Helianthus annuus* – common sunflower
- \* *Helminthotheca echioides* – bristly oxtongue
- Heterotheca grandiflora* – telegraphweed
- Heterotheca sessiliflora* ssp. *echioides* – sessileflower false goldenaster
- Heterotheca sessiliflora* – sessileflower false goldenaster
- \* *Hypochaeris glabra* – smooth cat’s ear
- Isocoma menziesii* – Menzies’s golden bush
- \* *Lactuca serriola* – prickly lettuce



- Laennecia coulteri* – Coulter's horseweed
- Lasthenia californica* – California goldfields
- Lasthenia glabrata* ssp. *coulteri* – Coulter's goldfields
- Lasthenia gracilis* – needle goldfields
- Layia platyglossa* – coastal tidytips
- Lepidospartum squamatum* – scale broom
- Leptosyne bigelovii* – Bigelow's tickseed
- Lessingia glandulifera* – valley lessingia
- Logfia filaginoides* – California cottonrose
- \* *Logfia gallica* – narrowleaf cottonrose
- Madia gracilis* – grassy tarweed
- Malacothrix saxatilis* var. *commutata* – cliff desertdandelion
- Malacothrix saxatilis* var. *tenuifolia* – cliff desertdandelion
- Matricaria discoidea* – disc mayweed
- Osmadenia tenella* – false rosinweed
- Pluchea sericea* – arrow weed
- Pseudognaphalium californicum* – ladies' tobacco
- \* *Pseudognaphalium luteoalbum* – Jersey cudweed
- Pseudognaphalium microcephalum* – Wright's cudweed
- Pseudognaphalium stramineum* – cottonbatting plant
- Rafinesquia californica* – California plumeseed
- Senecio californicus* – California ragwort
- Senecio flaccidus* var. *douglasii* – Douglas' ragwort
- \* *Senecio vulgaris* – old-man-in-the-Spring
- \* *Silybum marianum* – blessed milkthistle
- \* *Sonchus asper* ssp. *asper* – spiny sowthistle
- \* *Sonchus oleraceus* – common sowthistle
- Stebbinsoseris heterocarpa* – grassland silverpuffs
- Stephanomeria exigua* – small wirelettuce
- Stephanomeria pauciflora* – brownplume wirelettuce
- Stephanomeria virgata* – rod wirelettuce
- Stylocline gnaphaloides* – mountain neststraw
- Tetradymia comosa* – hairy horsebrush
- Uropappus lindleyi* – Lindley's silverpuffs
- Xanthium spinosum* – spiny cocklebur
- Xanthium strumarium* – cocklebur

## BORAGINACEAE – BORAGE FAMILY

- Amsinckia intermedia* – common fiddleneck
- Amsinckia menziesii* – Menzies' fiddleneck
- Amsinckia tessellata* var. *tessellata* – bristly fiddleneck

*Amsinckia tessellata* – bristly fiddleneck  
*Cryptantha intermedia* var. *intermedia* – Clearwater cryptantha  
*Cryptantha intermedia* – Clearwater cryptantha  
*Cryptantha micrantha* – redroot cryptantha  
*Cryptantha microstachys* – Tejon cryptantha  
*Cryptantha muricata* – pointed cryptantha  
*Cryptantha nevadensis* – Nevada cryptantha  
*Emmenanthe penduliflora* var. *penduliflora* – whisperingbells  
*Emmenanthe penduliflora* – whisperingbells  
*Eriodictyon crassifolium* var. *nigrescens* – thickleaf yerba santa  
*Eucrypta chrysanthemifolia* – spotted hideseed  
*Heliotropium curassavicum* var. *oculatum* – seaside heliotrope  
*Pectocarya linearis* ssp. *ferocula* – sagebrush combseed  
*Pectocarya linearis* – sagebrush combseed  
*Pectocarya penicillata* – sleeping combseed  
*Pectocarya setosa* – moth combseed  
*Phacelia cicutaria* var. *hispida* – caterpillar phacelia  
*Phacelia cicutaria* – caterpillar phacelia  
*Phacelia distans* – distant phacelia  
*Phacelia imbricata* var. *imbricata* – imbricate phacelia  
*Phacelia imbricata* – imbricate phacelia  
*Phacelia minor* – wild canterbury bells  
*Phacelia ramosissima* – branching phacelia  
*Phacelia tanacetifolia* – lacy phacelia  
*Plagiobothrys arizonicus* – Arizona popcornflower  
*Plagiobothrys canescens* var. *canescens* – valley popcornflower  
*Plagiobothrys collinus* – Cooper’s popcornflower  
*Plagiobothrys fulvus* – fulvous popcornflower  
*Plagiobothrys nothofulvus* – popcorn flower

## BRASSICACEAE – MUSTARD FAMILY

- \* *Brassica nigra* – black mustard
- \* *Capsella bursa-pastoris* – shepherd’s purse  
*Erysimum capitatum* var. *capitatum* – sanddune wallflower
- \* *Hirschfeldia incana* – shortpod mustard
- \* *Lepidium draba* – whitetop  
*Lepidium virginicum* – Virginia pepperweed  
*Nasturtium officinale* – watercress
- \* *Raphanus sativus* – cultivated radish
- \* *Sisymbrium irio* – London rocket
- \* *Sisymbrium orientale* – Indian hedgemustard

*Thysanocarpus curvipes* – sand fringe pod

*Thysanocarpus laciniatus* – mountain fringe pod

*Tropidocarpum gracile* – dobie pod

## CACTACEAE – CACTUS FAMILY

*Cylindropuntia californica* var. *parkeri* – brownspined pricklypear

*Opuntia basilaris* var. *basilaris* – beavertail pricklypear

\* *Opuntia ficus-indica* – Barbary fig

*Opuntia littoralis* – coast prickly pear

*Opuntia vaseyi* – Vasey's coastal pricklypear

## CAPRIFOLIACEAE – HONEYSUCKLE FAMILY

*Lonicera subspicata* – southern honeysuckle

## CARYOPHYLLACEAE – PINK FAMILY

*Loeflingia squarrosa* – spreading pygmyleaf

\* *Silene gallica* – common catchfly

\* *Spergularia rubra* – red sandspurry

\* *Stellaria media* – common chickweed

## CHENOPODIACEAE – GOOSEFOOT FAMILY

*Atriplex canescens* – fourwing saltbush

*Atriplex lentiformis* – quailbush

\* *Atriplex micrantha* – twoscale saltbush

\* *Atriplex rosea* – tumbling saltweed

\* *Atriplex semibaccata* – Australian saltbush

*Atriplex serenana* var. *serenana* – bractscale

\* *Atriplex suberecta* – peregrine saltbush

\* *Bassia hyssopifolia* – fivehorn smotherweed

\* *Chenopodium album* – lambsquarters

*Chenopodium berlandieri* – pitseed goosefoot

*Chenopodium californicum* – California goosefoot

\* *Chenopodium murale* – nettleleaf goosefoot

\* *Dysphania ambrosioides* – Mexican tea

\* *Salsola tragus* – prickly Russian thistle

## CLEOMACEAE – CLEOME FAMILY

*Peritoma arborea* – bladderpod

## CONVOLVULACEAE – MORNING-GLORY FAMILY

*Calystegia macrostegia* ssp. *cyclostegia* – island false bindweed

*Calystegia macrostegia* – island false bindweed

*Calystegia peirsonii* – Peirson’s morning-glory

\* *Convolvulus arvensis* – field bindweed

*Cuscuta californica* – chaparral dodder

## CRASSULACEAE – STONECROP FAMILY

*Crassula connata* – sand pygmyweed

*Dudleya lanceolata* – lanceleaf liveforever

## CUCURBITACEAE – GOURD FAMILY

*Cucurbita foetidissima* – Missouri gourd

*Marah horrida* – Sierra manroot

*Marah macrocarpa* – Cucamonga manroot

## EUPHORBIACEAE – SPURGE FAMILY

*Croton californicus* – California croton

*Croton setiger* – dove weed

*Euphorbia albomarginata* – whitemargin sandmat

*Euphorbia polycarpa* – smallseed sandmat

*Stillingia linearifolia* – queen’s-root

## FABACEAE – LEGUME FAMILY

\* *Acacia* sp. – wattle

*Acmispon americanus* – Spanish clover

*Acmispon brachycarpus* – foothill deervetch

*Acmispon glaber* var. *glaber* – common deerweed

*Acmispon glaber* – deer weed

*Acmispon maritimus* – coastal bird’s-foot trefoil

*Acmispon micranthus* – San Diego bird’s-foot trefoil

*Acmispon strigosus* – strigose bird’s-foot trefoil

*Acmispon wrangelianus* – Chilean bird’s-foot trefoil

*Astragalus didymocarpus* – dwarf white milkvetch

*Astragalus gambelianus* – Gambel’s dwarf milkvetch

*Astragalus trichopodus* var. *phoxus* – Santa Barbara milkvetch

*Lupinus bicolor* – miniature lupine

*Lupinus excubitus* var. *hallii* – Hall’s bush lupine

*Lupinus formosus* var. *formosus* – summer lupine

*Lupinus hirsutissimus* – stinging annual lupine

*Lupinus microcarpus* var. *densiflorus* – whitewhorl lupine

*Lupinus microcarpus* var. *microcarpus* – valley lupine

*Lupinus microcarpus* – valley lupine

*Lupinus sparsiflorus* – Coulter’s lupine



*Lupinus succulentus* – hollowleaf annual lupine

*Lupinus truncatus* – collared annual lupine

- \* *Medicago polymorpha* – burclover
- \* *Melilotus albus* – yellow sweetclover
- \* *Melilotus indicus* – annual yellow sweetclover
- \* *Parkinsonia aculeata* – Jerusalem thorn
- \* *Robinia pseudoacacia* – black locust
- Trifolium albopurpureum* – rancheria clover
- Trifolium ciliolatum* – foothill clover
- Trifolium gracilentum* – pinpoint clover
- \* *Trifolium hirtum* – rose clover
- Trifolium willdenovii* – tomcat clover
- \* *Vicia villosa* – winter vetch

## FAGACEAE – OAK FAMILY

*Quercus agrifolia* – coast live oak

*Quercus berberidifolia* – scrub oak

- \* *Quercus ilex* – holly oak
- Quercus john-tuckeri* – Tucker oak
- Quercus lobata* – valley oak

## GERANIACEAE – GERANIUM FAMILY

- \* *Erodium botrys* – longbeak stork's bill
- \* *Erodium cicutarium* – redstem stork's bill
- \* *Erodium moschatum* – musky stork's bill

## GROSSULARIACEAE – GOOSEBERRY FAMILY

*Ribes aureum* – golden currant

## JUGLANDACEAE – WALNUT FAMILY

*Juglans californica* – Southern California black walnut

## LAMIACEAE – MINT FAMILY

- \* *Marrubium vulgare* – horehound
- Salvia apiana* – white sage
- Salvia columbariae* – chia
- Salvia leucophylla* – purple sage
- Salvia mellifera* – black sage
- Trichostema lanceolatum* – vinegarweed

**MALVACEAE – MALLOW FAMILY**

*Malacothamnus fasciculatus* – Mendocino bushmallow

- \* *Malva parviflora* – cheeseweed mallow

**MONTIACEAE – MONTIA FAMILY**

*Calandrinia menziesii* – red maids

*Claytonia parviflora* – streambank springbeauty

*Claytonia perfoliata* – miner's lettuce

**MORACEAE – MULBERRY FAMILY**

- \* *Ficus carica* – edible fig

**MYOPORACEAE – EMU BUSHES FAMILY**

- \* *Myoporum parvifolium* – slender myoporum

**MYRTACEAE – MYRTLE FAMILY**

- \* *Eucalyptus polyanthemos* – redbox

- \* *Eucalyptus sideroxylon* – red ironbark

**NYCTAGINACEAE – FOUR O'CLOCK FAMILY**

*Mirabilis laevis* var. *crassifolia* – California four o'clock

**OLEACEAE – OLIVE FAMILY**

- \* *Ligustrum lucidum* – glossy privet

**ONAGRACEAE – EVENING PRIMROSE FAMILY**

*Camissonia campestris* ssp. *campestris* – Mojave suncup

*Camissoniopsis bistorta* – southern suncup

*Camissoniopsis hirtella* – Santa Cruz Island suncup

*Camissoniopsis micrantha* – miniature suncup

*Camissoniopsis robusta* – robust suncup

*Clarkia purpurea* ssp. *quadrivulnera* – winecup clarkia

*Clarkia purpurea* – winecup clarkia

*Clarkia speciosa* – redspot clarkia

*Clarkia unguiculata* – elegant clarkia

*Epilobium brachycarpum* – tall annual willowherb

*Epilobium canum* ssp. *canum* – hummingbird trumpet

*Epilobium ciliatum* – fringed willowherb

*Eremothera boothii* ssp. *decorticans* – shredding suncup

*Eulobus californicus* – California suncup

**OROBANCHACEAE – BROOM-RAPE FAMILY**

*Castilleja exserta* ssp. *exserta* – exserted Indian paintbrush

*Castilleja exserta* – exserted Indian paintbrush

*Castilleja foliolosa* – Texas Indian paintbrush

**PAEONIACEAE – PEONY FAMILY**

*Paeonia californica* – California peony

**PAPAVERACEAE – POPPY FAMILY**

*Eschscholzia californica* – California poppy

*Platystemon californicus* – creamcups

**PHRYMACEAE – LOPSEED FAMILY**

*Diplacus aurantiacus* – bush monkeyflower

**PLANTAGINACEAE – PLANTAIN FAMILY**

*Keckiella cordifolia* – heartleaf keckiella

*Penstemon centranthifolius* – scarlet bugler

*Plantago erecta* – dwarf plantain

\* *Plantago lanceolata* – narrowleaf plantain

\* *Plantago major* – common plantain

*Plantago ovata* – desert Indianwheat

\* *Veronica anagallis-aquatica* – water speedwell

**POLEMONIACEAE – PHLOX FAMILY**

*Eriastrum densifolium* ssp. *densifolium* – giant woollystar

*Eriastrum densifolium* ssp. *elongatum* – giant woollystar

*Eriastrum sapphirinum* – sapphire woollystar

*Gilia angelensis* – chaparral gilia

*Gilia capitata* – bluehead gilia

*Leptosiphon androsaceus* – false babystars

*Leptosiphon liniflorus* – narrowflower flaxflower

*Leptosiphon parviflorus* – variable linanthus

*Linanthus californicus* – California prickly phlox

*Navarretia atractyloides* – hollyleaf pincushionplant

**POLYGONACEAE – BUCKWHEAT FAMILY**

*Chorizanthe parryi* var. *fernandina* – San Fernando Valley spineflower

*Chorizanthe staticoides* – Turkish rugging

*Eriogonum angulosum* – anglestem buckwheat

*Eriogonum elongatum* var. *elongatum* – longstem buckwheat

*Eriogonum fasciculatum* var. *fasciculatum* – California buckwheat

*Eriogonum fasciculatum* var. *foliolosum* – California buckwheat

*Eriogonum fasciculatum* var. *polifolium* – California buckwheat

*Eriogonum gracile* var. *gracile* – slender woolly buckwheat

*Eriogonum gracillimum* – rose and white buckwheat

*Eriogonum viridescens* – twotooth buckwheat

*Lastarriaea coriacea* – leather spineflower

\* *Polygonum aviculare* ssp. *depressum* – prostrate knotweed

*Pterostegia drymarioides* – woodland pterostegia

\* *Rumex crispus* – curly dock

*Rumex hymenosepalus* – canaigre dock

## PORTULACACEAE – PURSLANE FAMILY

\* *Portulaca oleracea* – little hogweed

## RANUNCULACEAE – BUTTERCUP FAMILY

*Clematis lasiantha* – pipestem clematis

*Clematis ligusticifolia* – western white clematis

*Delphinium parryi* ssp. *parryi* – San Bernardino larkspur

## RHAMNACEAE – BUCKTHORN FAMILY

*Ceanothus crassifolius* – hoary leaf ceanothus

*Ceanothus megacarpus* – bigpod ceanothus

*Rhamnus crocea* – redberry buckthorn

*Rhamnus ilicifolia* – hollyleaf redberry

## ROSACEAE – ROSE FAMILY

*Adenostoma fasciculatum* – chamise

*Cercocarpus betuloides* var. *betuloides* – birchleaf mountain mahogany

*Cercocarpus betuloides* var. *blancheae* – island mountain-mahogany

*Fragaria* sp. – strawberry

*Heteromeles arbutifolia* – toyon

*Prunus ilicifolia* ssp. *ilicifolia* – mainland cherry

## RUBIACEAE – MADDER FAMILY

*Galium angustifolium* – narrowleaf bedstraw

*Galium aparine* – stickywilly

*Galium porrigens* – graceful bedstraw

## SALICACEAE – WILLOW FAMILY

*Populus fremontii* ssp. *fremontii* – Fremont cottonwood

*Populus fremontii* – Fremont cottonwood

*Salix exigua* – sandbar willow



*Salix laevigata* – red willow

*Salix lasiolepis* – arroyo willow

## SAURURACEAE – LIZARD’S-TAIL FAMILY

*Anemopsis californica* – yerba mansa

## SOLANACEAE – NIGHTSHADE FAMILY

*Datura wrightii* – sacred thorn-apple

\* *Nicotiana glauca* – tree tobacco

*Solanum americanum* – American black nightshade

*Solanum douglasii* – greenspot nightshade

*Solanum parishii* – Parish’s nightshade

*Solanum umbelliferum* – bluewitch nightshade

*Solanum xanti* – chaparral nightshade

## TAMARICACEAE – TAMARISK FAMILY

\* *Tamarix chinensis* – five-stamen tamarisk

\* *Tamarix ramosissima* – tamarisk

## URTICACEAE – NETTLE FAMILY

*Urtica dioica* – stinging nettle

\* *Urtica urens* – dwarf nettle

## VIOLACEAE – VIOLET FAMILY

*Viola pedunculata* – Johnny-jump-up

## VITACEAE – GRAPE FAMILY

\* *Parthenocissus inserta* – woodbine

## ZYGOPHYLLACEAE – CALTROP FAMILY

\* *Tribulus terrestris* – puncturevine

# Ferns and Fern Allies

## PTERIDACEAE – BRAKE FAMILY

*Pellaea andromedifolia* – coffee cliffbrake

*Pentagramma triangularis* – goldback fern

# Gymnosperms and Gnetophytes

## CUPRESSACEAE – CYPRESS FAMILY

*Hesperocyparis* sp. – cypress

*Juniperus californica* – California juniper

**PINACEAE – PINE FAMILY**

- \* *Pinus halepensis* – Aleppo pine

## Monocots

**AGAVACEAE – AGAVE FAMILY**

- Chlorogalum pomeridianum* var. *pomeridianum* – wavyleaf soap plant
- Chlorogalum pomeridianum* – wavyleaf soap plant
- Hesperoyucca whipplei* – chaparral yucca
- Yucca schidigera* – Mojave yucca

**CYPERACEAE – SEDGE FAMILY**

- Cyperus esculentus* – yellow nutsedge
- Schoenoplectus californicus* – California bulrush

**IRIDACEAE – IRIS FAMILY**

- Sisyrinchium bellum* – western blue-eyed grass

**LILIACEAE – LILY FAMILY**

- Calochortus clavatus* var. *gracilis* – slender mariposa lily
- Calochortus venustus* – butterfly mariposa lily

**POACEAE – GRASS FAMILY**

- \* *Avena barbata* – slender oat
- \* *Avena fatua* – wild oat
- \* *Avena sativa* – common oat
- Bromus arizonicus* – Arizona brome
- \* *Bromus catharticus* – rescuegrass
- \* *Bromus diandrus* – ripgut brome
- \* *Bromus hordeaceus* – soft brome
- \* *Bromus madritensis* ssp. *rubens* – red brome
- \* *Bromus madritensis* – compact brome
- \* *Bromus sterilis* – poverty brome
- \* *Bromus tectorum* – cheatgrass
- \* *Cynodon dactylon* – Bermudagrass
- Distichlis spicata* – salt grass
- Elymus condensatus* – giant wild rye
- Elymus elymoides* – squirreltail
- Elymus glaucus* – blue wildrye
- Elymus triticoides* – creeping ryegrass
- Festuca microstachys* – small fescue

- \* *Festuca myuros* – rat-tail fescue
- Hordeum brachyantherum* – meadow barley
- \* *Hordeum murinum* ssp. *glaucum* – smooth barley
- \* *Hordeum murinum* – mouse barley
- \* *Hordeum vulgare* – common barley
- \* *Lamarckia aurea* – goldentop grass
- Leptochloa fusca* ssp. *uninervia* – Mexican sprangletop
- Melica imperfecta* – smallflower melicgrass
- \* *Pennisetum setaceum* – fountain grass
- \* *Poa annua* – annual bluegrass
- Poa secunda* – curly blue grass
- \* *Polypogon interruptus* – ditch rabbitsfoot grass
- \* *Polypogon monspeliensis* – annual rabbitsfoot grass
- \* *Schismus barbatus* – common Mediterranean grass
- Stipa cernua* – nodding needlegrass
- Stipa lepida* – foothill needlegrass
- \* *Stipa miliacea* var. *miliacea* – smilgrass
- Stipa pulchra* – purple needlegrass
- \* *Triticum aestivum* – common wheat

#### THEMIDACEAE – BRODIAEA FAMILY

- Bloomeria crocea* – common goldenstar
- Brodiaea terrestris* ssp. *kernensis* – Kern brodiaea
- Dichelostemma capitatum* ssp. *capitatum* – bluedicks
- Dichelostemma capitatum* – bluedicks
- Muilla maritima* – sea muilla

#### TYPHACEAE – CATTAIL FAMILY

- Typha latifolia* – broadleaf cattail

- \* signifies introduced (non-native) species

INTENTIONALLY LEFT BLANK



---

## **Appendix B**

### Wildlife Compendium



# Amphibian

## Frogs

### HYLIDAE – TREEFROGS

*Pseudacris hypochondriaca* – Baja California treefrog

## Toads

### BUFONIDAE – TRUE TOADS

*Anaxyrus boreas* – western toad

# Bird

## Blackbirds, Orioles and Allies

### ICTERIDAE – BLACKBIRDS

*Agelaius phoeniceus* – red-winged blackbird

*Euphagus cyanocephalus* – Brewer's blackbird

*Icterus bullockii* – Bullock's oriole

*Icterus cucullatus* – hooded oriole

*Sturnella neglecta* – western meadowlark

\* *Molothrus ater* – brown-headed cowbird

## Bushtits

### AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

*Psaltiriparus minimus* – bushtit

## Cardinals, Grosbeaks and Allies

### CARDINALIDAE – CARDINALS AND ALLIES

*Passerina amoena* – lazuli bunting

*Passerina caerulea* – blue grosbeak

*Pheucticus melanocephalus* – black-headed grosbeak

*Piranga ludoviciana* – western tanager

## Falcons

### FALCONIDAE – CARACARAS AND FALCONS

*Falco peregrinus anatum* – American peregrine falcon

*Falco sparverius* – American kestrel

## Finches

### FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

*Haemorhous mexicanus* – house finch

*Spinus lawrencei* – Lawrence’s goldfinch

*Spinus psaltria* – lesser goldfinch

*Spinus tristis* – American goldfinch

## Flycatchers

### TYRANNIDAE – TYRANT FLYCATCHERS

*Contopus sordidulus* – western wood-pewee

*Myiarchus cinerascens* – ash-throated flycatcher

*Sayornis nigricans* – black phoebe

*Sayornis saya* – Say’s phoebe

*Tyrannus verticalis* – western kingbird

*Tyrannus vociferans* – Cassin’s kingbird

## Hawks

### ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

*Accipiter cooperii* – Cooper’s hawk

*Buteo jamaicensis* – red-tailed hawk

*Buteo lineatus* – red-shouldered hawk

*Elanus leucurus* – white-tailed kite

*Circus hudsonius* – northern harrier

## Hérons and Bitterns

### ARDEIDAE – HERONS, BITTERNS, AND ALLIES

*Ardea herodias* – great blue heron



## Hummingbirds

### TROCHILIDAE – HUMMINGBIRDS

*Archilochus alexandri* – black-chinned hummingbird

*Calypte anna* – Anna’s hummingbird

*Calypte costae* – Costa’s hummingbird

*Selasphorus rufus* – rufous hummingbird

*Selasphorus sasin* – Allen’s hummingbird

## Jays, Magpies and Crows

### CORVIDAE – CROWS AND JAYS

*Aphelocoma californica* – California scrub-jay

*Corvus brachyrhynchos* – American crow

*Corvus corax* – common raven

## Larks

### ALAUDIDAE – LARKS

*Eremophila alpestris* – horned lark

## Mockingbirds and Thrashers

### MIMIDAE – MOCKINGBIRDS AND THRASHERS

*Mimus polyglottos* – northern mockingbird

*Toxostoma redivivum* – California thrasher

## New World Quail

### ODONTOPHORIDAE – NEW WORLD QUAIL

*Callipepla californica* – California quail

## New World Vultures

### CATHARTIDAE – NEW WORLD VULTURES

*Cathartes aura* – turkey vulture

## Nuthatches

### SITTIDAE – NUTHATCHES

*Sitta carolinensis* – white-breasted nuthatch

## Old World Sparrows

### PASSERIDAE – OLD WORLD SPARROWS

- \* *Passer domesticus* – house sparrow

## Old World Warblers and Gnatcatchers

### SYLVIIDAE – SYLVIID WARBLERS

- Poliophtila caerulea* – blue-gray gnatcatcher
- Poliophtila californica californica* – coastal California gnatcatcher

## Owls

### TYTONIDAE – BARN OWLS

- Tyto alba* – barn owl

### STRIGIDAE – TYPICAL OWLS

- Bubo virginianus* – great horned owl

## Pigeons and Doves

### COLUMBIDAE – PIGEONS AND DOVES

- Patagioenas fasciata* – band-tailed pigeon
- Zenaida macroura* – mourning dove
- \* *Columba livia* – rock pigeon (rock dove)

## Roadrunners and Cuckoos

### CUCULIDAE – CUCKOOS, ROADRUNNERS, AND ANIS

- Geococcyx californianus* – greater roadrunner

## Shorebirds

### CHARADRIIDAE – LAPWINGS AND PLOVERS

- Charadrius vociferus* – killdeer

## Shrikes

### LANIIDAE – SHRIKES

- Lanius ludovicianus* – loggerhead shrike

## Silky Flycatchers

### PTILOGONATIDAE – SILKY-FLYCATCHERS

*Phainopepla nitens* – phainopepla

## Starlings and Allies

### STURNIDAE – STARLINGS

\* *Sturnus vulgaris* – European starling

## Swallows

### HIRUNDINIDAE – SWALLOWS

*Hirundo rustica* – barn swallow

*Petrochelidon pyrrhonota* – cliff swallow

*Stelgidopteryx serripennis* – northern rough-winged swallow

*Tachycineta thalassina* – violet-green swallow

## Swifts

### APODIDAE – SWIFTS

*Aeronautes saxatalis* – white-throated swift

*Chaetura vauxi* – Vaux's swift

## Terns and Gulls

### LARIDAE – GULLS, TERNS, AND SKIMMERS

*Larus occidentalis* – western gull

## Thrushes

### TURDIDAE – THRUSHES

*Catharus ustulatus* – Swainson's thrush

*Sialia mexicana* – western bluebird

*Turdus migratorius* – American robin

## Titmice

### PARIDAE – CHICKADEES AND TITMICE

*Baeolophus inornatus* – oak titmouse

## Waterfowl

### ANATIDAE – DUCKS, GEESE, AND SWANS

*Anas platyrhynchos* – mallard

*Branta canadensis* – Canada goose

## Waxwings

### BOMBYCILLIDAE – WAXWINGS

*Bombycilla cedrorum* – cedar waxwing

## Wood Warblers and Allies

### PARULIDAE – WOOD-WARBLERS

*Cardellina pusilla* – Wilson’s warbler

*Geothlypis trichas* – common yellowthroat

*Oreothlypis celata* – orange-crowned warbler

*Oreothlypis ruficapilla* – Nashville warbler

*Setophaga coronata* – yellow-rumped warbler

*Setophaga petechia* – yellow warbler

## Woodpeckers

### PICIDAE – WOODPECKERS AND ALLIES

*Colaptes auratus* – northern flicker

*Melanerpes formicivorus* – acorn woodpecker

*Dryobates nuttallii* – Nuttall’s woodpecker

## Wrens

### TROGLODYTIDAE – WRENS

*Catherpes mexicanus* – canyon wren

*Troglodytes aedon* – house wren

*Thryomanes bewickii* – Bewick’s wren

## Wrentits

### TIMALIIDAE – BABBLERS

*Chamaea fasciata* – wrentit

## New World Sparrows

### PASSERELLIDAE – NEW WORLD SPARROWS

*Aimophila ruficeps canescens* – Southern California rufous-crowned sparrow

*Amphispiza bilineata* – black-throated sparrow

*Artemisiospiza belli* – Bell's sparrow

*Chondestes grammacus* – lark sparrow

*Melospiza melodia* – song sparrow

*Melospiza crissalis* – California towhee

*Pipilo maculatus* – spotted towhee

*Spizella atrogularis* – black-chinned sparrow

*Zonotrichia leucophrys* – white-crowned sparrow

## Invertebrate

### Bees

#### APIDAE – BEES

*Bombus crotchii* – Crotch's bumble bee

*Bombus fervidus* – yellow bumble bee

*Bombus vosnesenskii* – Vosnesensky bumble bee

### Butterflies

#### LYCAENIDAE – BLUES, HAIRSTREAKS, AND COPPERS

*Brephidium exile* – western pygmy-blue

*Glaucopsyche lygdamus australis* – southern blue

*Icaricia acmon acmon* – Acmon blue

#### NYMPHALIDAE – BRUSH-FOOTED BUTTERFLIES

*Danaus plexippus* – monarch

*Junonia coenia* – common buckeye

*Nymphalis antiopa* – mourning cloak

*Nymphalis californica* – California tortoiseshell

*Vanessa cardui* – painted lady

#### RIODINIDAE – METALMARKS

*Apodemia mormo virgulti* – Behr's metalmark



## HESPERIIDAE – SKIPPERS

*Agathymus stephensi* – California giant-skipper

*Pyrgus albescens* – white checkered-skipper

## PAPILIONIDAE – SWALLOWTAILS

*Papilio eurymedon* – pale swallowtail

*Papilio rutulus* – western tiger swallowtail

*Papilio zelicaon* – anise swallowtail

## PIERIDAE – WHITES AND SULFURS

*Anthocharis sara sara* – Pacific sara orangetip

*Pieris rapae* – cabbage white

*Pontia protodice* – checkered white

# Mammal

## Bats

### VESPERTILIONIDAE – EVENING BATS

*Eptesicus fuscus* – big brown bat

*Lasiurus blossevillei* – western red bat

*Lasiurus cinereus* – hoary bat

*Myotis californicus* – Californian myotis

*Myotis yumanensis* – Yuma myotis

*Parastrellus hesperus* – canyon bat

*Myotis melanorhinus* – dark-nosed small-footed myotis

### MOLOSSIDAE – FREE-TAILED BATS

*Eumops perotis californicus* – western mastiff bat

*Nyctinomops femorosaccus* – pocketed free-tailed bat

*Tadarida brasiliensis* – Mexican free-tailed bat

## Canids

### CANIDAE – WOLVES AND FOXES

*Canis latrans* – coyote

*Urocyon cinereoargenteus* – gray fox

## Cats

### FELIDAE – CATS

*Lynx rufus* – bobcat

*Puma concolor* – cougar

## Hares and Rabbits

### LEPORIDAE – HARES AND RABBITS

*Sylvilagus audubonii* – desert cottontail

## Mustelids

### MUSTELIDAE – WEASELS, SKUNKS, AND OTTERS

*Mustela frenata* – long-tailed weasel

*Taxidea taxus* – American badger

### MEPHITIDAE – SKUNKS

*Mephitis mephitis* – striped skunk

## Pocket Gophers

### GEOMYIDAE – POCKET GOPHERS

*Thomomys bottae* – Botta's pocket gopher

## Pocket Mice

### HETEROMYIDAE – POCKET MICE AND KANGAROO RATS

*Chaetodipus californicus* – California pocket mouse

## Shrews

### SORICIDAE – SHREWS

*Sorex ornatus* – ornate shrew

## Squirrels

### SCIURIDAE – SQUIRRELS

*Sciurus griseus* – western gray squirrel

*Spermophilus (Otospermophilus) beecheyi* – California ground squirrel

## Ungulates

### CERVIDAE – DEERS

*Odocoileus hemionus* – mule deer

## Rats, Mice, and Voles

### CRICETIDAE – RATS, MICE, AND VOLES

*Peromyscus boylii* – brush deermouse

*Peromyscus eremicus* – cactus deermouse

*Peromyscus maniculatus* – North American deermouse

## Raccoons

### PROCYONIDAE – RACCOONS AND RELATIVES

*Procyon lotor* – raccoon

## Reptile

### Lizards

#### PHRYNOSOMATIDAE – IGUANID LIZARDS

*Sceloporus occidentalis* – western fence lizard

*Uta stansburiana* – common side-blotched lizard

#### SCINCIDAE – SKINKS

*Plestiodon skiltonianus* – western skink

#### TEIIDAE – WHIPTAIL LIZARDS

*Aspidoscelis tigris stejnegeri* – San Diegan tiger whiptail

## Snakes

#### COLUBRIDAE – COLUBRID SNAKES

*Coluber flagellum* – coachwhip

*Pituophis catenifer* – gophersnake

#### LEPTOTYPHLOPIDAE – SLENDER BLIND SNAKES

*Rena humilis* – western threadsnake

## VIPERIDAE – VIPERS

*Crotalus oreganus* – western rattlesnake

\* signifies introduced (non-native) species

INTENTIONALLY LEFT BLANK



---

## **Appendix C**

### Plant and Wildlife Species Potential to Occur



# Introduction

This appendix includes three tables addressing special-status plant and wildlife species that have been observed or have the potential to occur within the Resource Management and Development Plan/Spineflower Conservation Plan (RMDP/SCP) Area. These tables are reproduced from the 2017 State-Certified EIR (Corps and CDFG 2010) without change, except for the addition of a new column on the right, which explains whether the species is covered in the Entrada South Project Supplemental Biological Resources Technical Report (Entrada South Supplemental Bio Report), and any updated information specific to the Entrada South Planning Area, which is formatted in boldface type. A references section for all sources cited in this appendix is provided after the tables.

Table C-1, Special-Status Plant Species Observed in the RMDP/SCP Area, lists all special-status plant species identified in the 2017 State-Certified EIR as “observed on site” (Corps and CDFG 2010, Table 4.5-7, Special-Status Plant Species Observed within the Project Area). For each species, new information in the table addresses any change in status or name (the current status or name is shown in boldface), whether the species has been observed during the extensive focused botanical surveys of the Entrada South Project Site (in boldface), and whether the species is addressed in the Entrada South Supplemental Bio Report.<sup>1</sup> The Entrada South Supplemental Bio Report and this appendix do not address any additional plant species identified as “potentially occurring” (Corps and CDFG 2010, Table 4.5-12), given that several years of focused surveys have been conducted since the 2017 State-Certified EIR was prepared and either none of these species were identified on site and the species are therefore presumed to be absent or, if found, they are addressed as species observed within the Entrada South Project Site.

Table C-2, Special-Status Wildlife Species Observed in the RMDP/SCP Area, lists all special-status wildlife species identified in the 2017 State-Certified EIR as “observed on site” (Corps and CDFG 2010, Table 4.5-9, Special-Status Wildlife Species Observed on Site). For each species, new information in the table addresses any change in status or name (the current status or name is shown in boldface), whether or not the species has been observed on the Entrada South Project Site (new information in boldface), and whether the species is addressed in the Entrada South Supplemental Bio Report.<sup>2</sup>

Table C-3, Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area, lists all special-status wildlife species identified in the 2017 State-Certified EIR as having “potential to occur on site” (Corps and CDFG 2010, Table 4.5-10, Special-Status Wildlife Species with Potential to Occur on Site). As with Table C-2, for each species, new information in Table C-3 addresses any change in status or name (the current status or name is shown in boldface), whether or not the species has been observed on the Entrada South Project Site (in boldface), and whether or not the species is addressed in the Entrada South Supplemental Bio Report.

Plant and animal species that were identified in the 2017 State-Certified EIR as “not expected to occur” are not addressed in this appendix or in the Entrada South Supplemental Bio Report.

---

<sup>1</sup> The Entrada South Supplemental Bio Report addresses special-status plant species that are known to occur within the Entrada South Project Site (Section 5.3.1, Special-Status Plant Species).

<sup>2</sup> For wildlife species known to occur, or with the potential to occur, within the Entrada South Project Site, criteria for inclusion in the supplemental report include the following: “(1) the species is state and/or federally listed as threatened or endangered; (2) the species has been listed, proposed for listing, or petitioned for listing as threatened or endangered since its analysis in the 2017 State-Certified EIR; or (3) updated scientific studies suggest that the species may be more sensitive than it was considered in the 2017 State-Certified EIR or the species is otherwise considered to have heightened sensitivity” (Section 5.3.2, Special-Status Wildlife Species).

INTENTIONALLY LEFT BLANK

Table C-1. Special-Status Plant Species Observed in the RMDP/SCP Area

Scientific Name	Common Name	Status Federal/State	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Occurrence on Site	Is Species Addressed in the Entrada South Supplemental Bio Report?
<i>Artemisia tridentata</i> ssp. <i>parishii</i>	Parish's sagebrush	None/None	None	big sagebrush scrub on the margins of drainage channels/perennial shrub/November–August	<p>Parish's sagebrush was observed in the Salt Creek watershed and the Specific Plan area in 2006 (Dudek and Associates 2006B, 2006C). Plants were found primarily intermixed with big sagebrush. This species has not been observed within the VCC planning area (Dudek and Associates 2002C, 2004B, 2004G, 2006H, 2006K; Dudek 2007H). This species was not observed in the Entrada planning area (Dudek and Associates 2002B, 2004E, 2004H, 2006E, 2006G, 2006J; Dudek 2007G), but there is suitable big sagebrush scrub habitat on site. Co-occurs with <i>Artemisia tridentata</i> ssp. <i>tridentata</i>. Considered special status by the County of Los Angeles.</p> <p><b>Where big sagebrush scrub occurs along Unnamed Canyon 2, Parish's sagebrush may also be present.</b></p>	Yes; Parish's sagebrush ( <i>A. t.</i> ssp. <i>parishii</i> ) blooms October to November and would not be identifiable during the time of focused surveys for plants conducted on site, but there is suitable habitat.
<i>Calochortus clavatus</i> var. <i>gracilis</i>	slender mariposa lily	None/None	1B; 1B.2	chaparral and coastal sage scrub/perennial herb (geophyte)/March–May	<p>Slender mariposa lily was observed within the VCC area in 2004 and 2005 (Dudek and Associates 2004G, 2006H). Plants were found primarily on northwest- and southwest-facing ridges and slopes located just east of Hasley Canyon. Within the Entrada area, slender mariposa lily was recorded annually from 2003 to 2005 (Dudek and Associates 2004E, 2004H, 2006G) throughout the area, occurring primarily on south-facing slopes (70% of all individuals identified) and, to a lesser extent, on southeast-facing slopes (20% of all individuals identified). Slender mariposa lily was documented annually within the Specific Plan area from 2003 to 2006 (Dudek and Associates 2004C, 2004F, 2006F, 2006I), where it was found primarily on east-, northeast-, and southwest-facing ridges and slopes in the following areas: the San Martinez Grande Canyon, Chiquito Canyon, Off-Haul Canyon, Potrero Canyon, Long Canyon, Middle Canyon, Grapevine Mesa, and Airport Mesa areas as well as the lower Castaic Creek area. Slender mariposa lily was observed primarily in the northern portion and at the southwestern end of the Salt Creek area as well as along the southern end of the High Country SMA. Within the High Country SMA and Salt Creek area, slender mariposa lily was found primarily on east-, northeast-, and southwest-facing ridges and slopes. Observations were made within the High Country SMA and Salt Creek area from 2003 through 2006 (Dudek and Associates 2004F, 2004I, 2006B, 2006F). Slender mariposa lily was observed in the Entrada site fireworks area in 2004, 2005, and 2006 (FLx 2004B, 2005, 2006A). The estimated number of individuals in the study area ranged from 693 in 2006 to 65,297 in 2004. CNDDDB records also exist for mouth of Pico Canyon.</p> <p><b>Based on surveys conducted in 2015, 2019, and 2022, the total cumulative occupied footprint within the Entrada South Project Site has increased from 33 acres when the 2017 State-Certified EIR was prepared to 49.3 acres.<sup>a</sup></b></p>	Yes; present on Entrada South Project Site.
<i>Calochortus plummerae</i>	Plummer's mariposa lily	None/None	4; 4.2	chaparral, coastal sage scrub, cismontane woodland, grasslands on rocky granitic substrate/perennial herb (geophyte)/May–July	Three polygons and two point locations of Plummer's mariposa lily were mapped within the High Country SMA in 2006, with an estimated number of approximately 78 individuals (Dudek and Associates 2006B). Observed on steep southwest-facing slopes in the High Country SMA. No CNDDDB records exist for the Project area quads or adjacent quads; however, records exist for the Santa Susana Mountains and Simi Hills.	No; does not occur on site based on results of focused surveys.



Table C-1. Special-Status Plant Species Observed in the RMDP/SCP Area

Scientific Name	Common Name	Status Federal/ State	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Occurrence on Site	Is Species Addressed in the Entrada South Supplemental Bio Report?
					<b>This species has not been observed during comprehensive botanical surveys conducted on the Entrada South Project Site since the fieldwork for the 2017 State-Certified EIR in both 2012 and 2019.</b>	
<i>Calochortus weedii</i> var. <i>vestus</i> <i>Calochortus fimbriatus</i> <sup>b</sup>	late-flowered mariposa lily	None/None	1B; 1B.3	chaparral, cismontane and riparian woodland/perennial herb (geophyte)/June–August	Three polygons of late-flowered mariposa lily were mapped within the High Country SMA in 2003, with an estimated number of approximately 250 individuals (Dudek and Associates 2004I). Observed in chaparral and walnut woodlands at the head of the Salt Creek drainage on the crest of the Santa Susana Mountains. No CNDDDB records exist for the Project area quads or adjacent quads.  <b>This species was not observed during comprehensive botanical surveys conducted on the Entrada South Project Site in 2012 and 2019.</b>	No; does not occur on site based on results of focused surveys.
<i>Calystegia peirsonii</i>	Peirson’s morning-glory	None/None	4; 4.2	chaparral, coastal sage scrub, cismontane woodland, grassland/perennial herb/May–June	Peirson’s morning-glory was observed within the Entrada planning area in 2002, 2003, 2004, and 2005 (Dudek and Associates 2002B, 2004C, 2004E, 2004H, 2006G). This species was observed within the VCC planning area in 2003, 2004, 2005, and 2006 (Dudek and Associates 2004B, 2004G, 2006H, 2006K). Within the Specific Plan area, Peirson’s morning-glory was recorded annually from 2002 to 2006 (Dudek 2002A, 2004C, 2004F, 2006F, 2006I; FLx 2002A). Observations of this species were made within the High Country SMA and Salt Creek area in 2003 and 2006 (Dudek and Associates 2004I, 2006B). This species is widespread on site and was observed on ridges and slopes, weakly climbing over chaparral, coastal scrub, and grasslands throughout the Specific Plan, VCC, and Entrada planning areas.  <b>No Peirson’s morning-glory were observed on the Entrada South Project Site during surveys in 2011–2019, including during comprehensive surveys in 2012 and 2019.</b>	Yes; the species has been documented on the Entrada South Project Site.
<i>Cercocarpus betuloides</i> var. <i>blancheae</i>	island mountain-mahogany	None/None	4; 4.3	chaparral, closed-cone coniferous forest/evergreen shrub/February–May	Island mountain-mahogany was observed within the Entrada planning area in 2003, 2004, and 2005 (Dudek and Associates 2002B, 2004E, 2004H). Within the Specific Plan area, island mountain-mahogany was recorded annually from 2002 to 2006 (Dudek and Associates 2002A, 2004C, 2004F, 2006F, 2006I). Observations of this species were made within the Salt Creek area in 2003 (Dudek and Associates 2004I). In all three areas, plants were found primarily in chaparral at the base of north-facing slopes. Occurrences of this species were not mapped due to its low sensitivity status (CNPS List 4.3). This species has not been observed within the VCC planning area (Dudek and Associates 2002C, 2004B, 2004G, 2006H, 2006K; Dudek 2007H).  <b>A single individual of island mountain-mahogany was observed on the Entrada South Project Site during surveys in 2019 within California sagebrush scrub in the southeastern portion of the Entrada South Project Site.</b>	Yes; present on Entrada South Project Site.
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	None/SE	1B; 1B.1	coastal sage scrub, sandy soils/annual herb/April–June	In each year from 2002 through 2007, SFVS has been observed in four general areas within the Specific Plan area: Airport Mesa, Grapevine Mesa, Potrero Canyon, and San Martinez Grande Canyon (Dudek and Associates 2002A, 2004C, 2004F, 2006F, 2006I; Dudek 2007F). This species has also been observed from 2002 through 2007 in several areas at the Entrada planning area (Dudek and Associates 2002B, 2004E, 2004H, 2006G, 2006J; Dudek 2007G; FLx 2004B, 2005, 2006A), and on the western side of the VCC planning area, just east of Hasley Canyon (Dudek and Associates 2002C, 2004B, 2004G,	Yes; present on Entrada South Project Site.

Table C-1. Special-Status Plant Species Observed in the RMDP/SCP Area

Scientific Name	Common Name	Status Federal/ State	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Occurrence on Site	Is Species Addressed in the Entrada South Supplemental Bio Report?
					2006H, 2006K; Dudek 2007H). An estimated 760 to 7.4 million individuals were observed between the 2002–2007 growing seasons.  <b>Estimates of the number of spineflower individuals on the Entrada South Project Site conducted under the SCP ranged from a low of 790 individuals in 2013 to a high of 87,200 individuals in 2015 for the period from 2011 to 2019.</b>	
<i>Gnaphalium</i> sp. nova <i>Pseudognaphalium leucocephalum</i> <sup>c</sup>	undescribed everlasting <b>white rabbit-tobacco</b> <sup>c</sup>	None/None	None; <b>2B.2</b>	secondary alluvial benches/ perennial herb/late summer	Within the VCC planning area, individuals were observed in 2004, 2005, and 2007 in the portion of Castaic Creek west of I-5 Bridge and east of Commerce Center Drive on secondary alluvial benches (Dudek and Associates 2004G, 2006H; Causey 2007). Two main populations and a number of smaller populations of this undescribed species were documented within the Specific Plan area during the 2003, 2004, 2005, and 2007 field seasons (Dudek and Associates 2004C, 2004F, 2006F; Causey 2007; FLx 2004B). These occurrences are primarily on secondary alluvial benches in the Santa Clara River near the mouth of Long Canyon and where Castaic Creek and the Santa Clara River converge, south of SR-126. This species was not observed at Entrada.  <b>No white rabbit-tobacco was observed during comprehensive botanical surveys conducted on the Entrada South Project Site in 2012 and 2019. The species is not expected to occur due to lack of suitable secondary alluvial bench habitat.</b>	Yes; the status of the species has been updated since its identification.
<i>Helianthus</i> sp. nova <i>Helianthus inexpectatus</i> <sup>d</sup>	undescribed sunflower <b>Newhall sunflower</b> <sup>d</sup>	None/None	None; <b>1B.1</b>	seeps/perennial herb/mid-summer	A population of 10 undescribed sunflowers was found in 2002 at Middle Canyon Spring on the south side of the Santa Clara River between Middle Canyon and San Jose Flats within the Specific Plan development area (Dudek and Associates 2002A).  <b>Not observed on the Entrada South Project Site during focused surveys; no suitable seep habitat occurs.</b>	No; does not occur on site based on results of focused surveys.
<i>Juglans californica</i>	Southern California black walnut	None/None	<b>4; 4.2</b>	chaparral, cismontane woodland, coastal sage scrub, alluvial scrub/ deciduous tree/March–May	Southern California black walnut was observed within the Entrada planning area in 2004 and 2005 (Dudek and Associates 2004H, 2006G). Within the Specific Plan area, southern California black walnut was recorded annually in 2002, 2003, and 2004 (Dudek and Associates 2002A, 2004C, 2004F; FLx 2004A). Observations of this species were made within the High Country SMA and Salt Creek area in 2003 and 2006 (Dudek and Associates 2004I, 2006B) and within the VCC planning area in 2004 and 2005 (Dudek and Associates 2004G and 2006H). Within the Specific Plan area, southern California black walnut dominates California walnut woodland and is found as an occasional component of chaparral, coastal scrub, and oak woodland (Dudek and Associates 2002A, 2004C, 2004F, 2004I, 2006B). Within the VCC planning area, an individual southern California black walnut occurs within southern cottonwood–willow riparian forest along the south side of Castaic Creek (Dudek and Associates 2004G and 2006H). Within the Entrada planning area, this species is found in chaparral, coastal scrub, and alluvial scrub (Dudek and Associates 2004H, 2006G).  <b>No Southern California black walnuts were observed on the Entrada South Project Site during surveys in 2011 to 2019, including during comprehensive surveys in 2012 and 2019.</b>	Yes; although not detected during the most recent surveys, the species has been documented previously within the Entrada South Project Site.
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	None/None	<b>4; 4.2</b>	coastal dunes, meadows, seeps, marshes, and swamps/perennial herb/May–June	Within the Specific Plan area, southwestern spiny rush individuals were observed annually from 2001 through 2006 (Dudek and Associates 2004C,	No; does not occur on site based on results of focused surveys.

Table C-1. Special-Status Plant Species Observed in the RMDP/SCP Area

Scientific Name	Common Name	Status Federal/ State	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Occurrence on Site	Is Species Addressed in the Entrada South Supplemental Bio Report?
					2004F, 2006F, 2006I; FLx 2002A, 2002B, 2004A). Southwestern spiny rush is known to occur in secondary channels of the floodplain of the Santa Clara River. <b>This species does not occur on the Entrada South Project Site.</b>	
<i>Navarretia ojaiensis</i>	Ojai navarretia	None/None	1B; 1B.1	grasslands and openings in California sagebrush scrub/annual herb/May–July	The Ojai navarretia species was located in surveys of the Salt Creek watershed (the majority of the High Country SMA and the Salt Creek area) conducted from April to July of 2003 (Dudek and Associates 2004I). Two main populations totaling approximately 60,000 individuals were found growing on clay lenses with a gentle to moderate north-facing slope. <b>This species does not occur on the Entrada South Project Site.</b>	No; does not occur on site based on results of focused surveys.
<i>Nemophila parviflora</i> var. <i>quercifolia</i>	oak-leaved nemophila	None/None	4; 4.3	cismontane woodland, lower montane coniferous forest/annual herb/May–June	In 2003 and 2004, one occurrence of oak-leaved nemophila was found along a northeast-facing slope in an oak woodland east of Grapevine Mesa within the Specific Plan area (Dudek and Associates 2004C, 2004F). This species has not been observed within the VCC planning area (Dudek and Associates 2002C, 2004B, 2004G, 2006H, 2006K; Dudek 2007H) or within the Entrada planning area (Dudek and Associates 2002B, 2004E, 2004H, 2006G, 2006J; Dudek 2007G). <b>This species does not occur on the Entrada South Project Site.</b>	No; does not occur on site based on results of focused surveys.
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	mainland (holly-leaf) cherry	None/None	None	undifferentiated chaparral, big sagebrush scrub, and river wash/perennial/March–May	Mainland cherry was observed within the Entrada planning area as an occasional component of undifferentiated chaparral, big sagebrush scrub, and river wash in 2003, 2004, 2005, and 2006 (Dudek and Associates 2004E, 2004H, 2006G, 2006J). Within the Specific Plan area, mainland cherry was recorded annually from 2001 through 2006 within undifferentiated chaparral, big sagebrush scrub, and river wash (Dudek and Associates 2002A, 2004C, 2004F, 2006F, 2006I; FLx 2002A). Observations of this species were made within VCC in 2003, 2004, 2005, and 2006 within undifferentiated chaparral, big sagebrush scrub, and river wash (Dudek and Associates 2004B, 2004G, 2006H, 2006K). <b>During surveys in 2012 and 2019, five mainland cherries were documented on the Entrada South Project Site.</b>	Yes; present on Entrada South Project Site.
<i>Quercus</i> spp., including <i>Quercus agrifolia</i> , <i>Quercus berberidifolia</i> , <i>Quercus lobata</i> , <i>Quercus ×alvordiana</i> , and <i>Quercus wislizeni</i>	oak trees including coast live oak, scrub oak, valley oak, Alvord oak, and interior live oak	None/None	None	southern coast live oak riparian forest, coast live oak woodland, mixed oak woodland, valley oak/grass, and valley oak woodland/perennial shrub/tree/Spring	In total, 3,766 trees were inventoried and assessed within the development portion of the Specific Plan, VCC, and Entrada planning areas. The majority of these trees are native coast live oak trees, which are primarily associated with drainage bottoms, north-facing slopes, and along secondary drainages on non-north-facing slopes. Present at lower, but substantial, levels are valley oak trees are strongly associated with open grassland areas on gentler slopes and valley bottoms. Preserved trees outside the GPS inventory areas were estimated with sampling and regression analysis and total 156 trees in the River Corridor SMA (Impact Sciences 2006B, 2006C, 2006D; County of Los Angeles 1999; Land Design Consultants 2007; Richard Johnson & Associates 2007), 13,732 trees in the High Country SMA and 5,640 trees in the Salt Creek area (Dudek 2007K). <b>Given updates to the oak tree inventory in 2021, a total of 49 oak trees, including 2 heritage oaks, occur on the Entrada South Project Site.</b>	Yes; present on Entrada South Project Site.

**Notes:** RMDP/SCP = Resource Management and Development Plan/Spineflower Conservation Plan; CRPR = California Rare Plant Rank.  
Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take a bird’s eye or aerial view when ranking sensitive elements rather than simply counting element occurrences.

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

- <sup>a</sup> As noted in the 2017 State-Certified EIR, detection of individuals emerged from bulbs is related to annual environmental conditions such as rainfall amounts, timing, and extent of browsing by rodents, deer, and rabbits prior to flowering. By definition, cumulative acreage of occupied habitat increases when the species is observed in a new location but does not decrease even when the species is no longer observed in a location where it was formerly known.
- <sup>b</sup> *Calochortus weedii* var. *vestus* is now recognized as *C. fimbriatus* (CNPS 2022; Jepson Flora Project 2022a).
- <sup>c</sup> White rabbit-tobacco in the vicinity of the Entrada South Project Site was originally reported as undescribed everlasting (*Gnaphalium* sp. *nova*). It was believed that plants in Southern California are distinct from those farther east and should be considered a separate species due to several differences in plant structure (stature, pubescence, and phyllary characters; Dudek & Associates 2004f) and its geographic distribution. However, the plants more recently have been described as white rabbit-tobacco (*Pseudognaphalium leucocephalum*) by David Keil, the curator of vascular plants at California Polytechnic State University, San Luis Obispo, and author of the Asteraceae treatment in the Jepson Flora Project (2022b).
- <sup>d</sup> Undescribed sunflower (*Helianthus* sp. *nova*) has since been described as Newhall sunflower (*Helianthus inexpectatus*).

Legend

- SE: State listed as endangered
- CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
- CRPR 2A: Plants presumed extirpated in California but common elsewhere
- CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
- CRPR 3: Review List: Plants about which more information is needed
- CRPR 4: Watch List: Plants of limited distribution
  - .1 Seriously threatened in California (more than 80% of occurrences threatened/high degree and immediacy of threat)
  - .2 Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
  - .3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
Insects (Butterflies)					
monarch butterfly (wintering sites) <i>Danaus plexippus</i>	— FC	***	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	Individual monarchs have been observed within the Newhall Ranch Specific Plan area (NRSP), including the High Country (Compliance Biology 2004A, 2005; Dudek and Associates 2006B) and Entrada (Compliance Biology 2004C); due to sites distance from coast, it is unlikely that the Project site would be used by large numbers of overwintering adults (Compliance Biology 2004A). Not expected to occur in Salt Creek area or VCC.  <b>Monarch butterflies were observed during butterfly surveys in 2004 and incidentally during wildlife surveys in 2012, but winter roosting habitat is absent from the Entrada South Project Site.</b>	No; the status of the species on the Entrada South Project Site has not changed, and the species is not expected to occur in winter roosts.
San Emigdio blue butterfly <i>Plebulina emigdionis</i>	—	***	Often near streambeds, washes, or alkaline areas. Associated with four-wing saltbush ( <i>Atriplex canescens</i> ) and quail brush ( <i>Atriplex lentiformis</i> ).	A colony was observed in Potrero Canyon in NRSP in association with <i>Atriplex lentiformis</i> plants (Compliance Biology 2004A and 2005). Suitable habitat occurs within Salt Creek, VCC, and Entrada.  <b>The San Emigdio blue butterfly has not been observed on the Entrada South Project Site, and suitable habitat is absent.</b>	No; the status of the species on the Entrada South Project Site has not changed, and the species is not expected to occur.
Mollusks					
<i>Pyrgulopsis castaicensis</i> n. sp.	—	—	Occupies groundwater-dependent spring, occurring on muddy and gravelly substrate and in water of depths up to several centimeters.	This species was observed on the project site in 2006 at the Middle Canyon Spring complex (Dudek 2007C).  <b>This species has not been detected on the Entrada South Project Site.</b>	No; the species is not listed and is not proposed or a candidate for listing, and its status on the Entrada South Project Site has not changed.
Fish					
Santa Ana sucker <i>Catostomus santaanae</i>	FT	CSC	Occupies small- to medium-sized perennial streams with water ranging in depth from a few centimeters to a meter or more.	This species is known to occur in the Santa Clara River and has been sparsely observed in the portion of the river within NRSP (CDFG 2007A; Impact Sciences 2003A), and within or adjacent to Entrada (SMEA 1995A; Haglund and Baskin 2000; Impact Sciences 2003B). Population in the Santa Clara River system is not listed as threatened because it is introduced to the area. Not expected to occur in Salt Creek or VCC.  <b>The Entrada South Project Site does not support habitat for this species.</b>	Yes; although the Entrada South Project Site does not support habitat for this species, it is federally listed as threatened and is known to occur in the Santa Clara River in the vicinity of the Entrada South Project Site.
unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	FE	CE, CFP	Slow-moving and backwater areas.	This species is known to occur in the Santa Clara River and has been observed evenly distributed in the portion of the river within NRSP (Aquatic Consulting Services 2002B, 2002C; Impact Sciences 2003A, 2003B; ENTRIX 2006B) and within Entrada (Aquatic Consulting Services 2002D; SMEA 1995A; Haglund and Baskin 2000; Impact Sciences 2003B). It was also observed in Castaic Creek (Haglund 1989).  <b>The Entrada South Project Site does not support habitat for this species.</b>	Yes; although the Entrada South Project Site does not support habitat for this species, it is state and federally listed as endangered and state fully protected and is known to occur in the Santa Clara River in the vicinity of the Entrada South Project Site.
arroyo chub <i>Gila orcutti</i>	—	CSC	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 abundantly in the portion of the river within NRSP (Aquatic Consulting Services 2002B, 2002C; Impact Sciences 2003A, 2003B; ENTRIX 2005), within Entrada (Aquatic Consulting Services 2002D; SMEA 1995A; Haglund and Baskin 2000), and within VCC (Haglund 1989). Not expected to occur in Salt Creek.  <b>The Entrada South Project Site does not support habitat for this species.</b>	Yes; although the Entrada South Project Site does not support habitat for this species, it is known to occur in the Santa Clara River in the vicinity of the Entrada South Project Site.



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
Amphibians					
arroyo toad <i>Bufo californicus</i>	FE	CSC	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.	Numerous focused surveys have been conducted for the arroyo toad throughout the Project site and along the Santa Clara River east of the Project site. Surveys include SMEA (1995A); RECON (1999A); Aquatic Consulting Services (2002A, 2002B, 2002C, 2002D); Nancy Sandburg (2001); Impact Sciences (2001, 2002); Ecological Sciences (2003A, 2003B, 2003C, 2003D, 2003E, 2003F, 2004A, 2004B, 2004C, 2004D); Compliance Biology 2004D). Adult toads have been documented in limited numbers upstream of the Project area along the Santa Clara River and tributaries (Impact Sciences 2001; Sandburg 2001). 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; 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.  <b>The Entrada South Project Site does not support aquatic habitat for this species, and it is too isolated from suitable habitat in the Santa Clara River to support the species as upland habitat.</b>	Yes; although the Entrada South Project Site does not support habitat for this species, the species is federally listed as endangered and known to occur in the general vicinity of the Entrada South Project Site.
western spadefoot toad <b>western spadefoot</b> <i>Spea hammondi</i>	— under review	CSC	Open areas in lowland grasslands, chaparral, and pine–oak woodlands; requires temporary rain pools that last approximately three weeks.	Two pools were found with western spadefoot toad tadpoles, one near the western boundary of Mission Village and the other near Grapevine Mesa (Compliance Biology 2006C). Western spadefoot toad eggs and tadpoles were observed in VCC in an area that has now been developed (Dave Crawford, Compliance Biology, pers. comm., 2007; Compliance Biology, Inc. 2004G). Upstream of the Commerce Center Bridge, one western spadefoot toad was observed in an isolated pool (Aquatic Consulting Services 2002A).  Seasonal backwater areas within NRSP, as well as seasonal stock ponds and depressions within existing dirt roads, provide breeding habitat. Given documented occurrences of the species at several on-site locations, and the presence of suitable breeding habitat, the species could occupy additional suitable on-site habitats. Not expected to occur in Entrada.  <b>Although surveys since 2010 identified this species on the boundary of the Entrada South Project Site, the location of the occurrence was developed as part of the Mission Village Project Site. It has not been observed elsewhere on the Entrada South Project Site.</b>	Yes; although the status of the species has remained essentially unchanged, and suitability of habitat remains the same, western spadefoot is under review for federal listing and has been documented in the vicinity of the Entrada South Project Site.
Reptiles					
silvery legless lizard <i>Anniella pulchra pulchra</i> <b>California legless lizard</b> <i>Anniella</i> sp.	—	CSC	Stabilized dunes, beaches, dry washes, chaparral, scrubs, pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils.	This species has been observed within NRSP in 2004 (Impact Sciences 2006A) in leaf litter of coast live oak woodland; suitable habitat occurs within Salt Creek, VCC, and Entrada in association with California sagebrush scrub, chaparral, oak woodland, and riverbank habitats.  <b>What was formerly known as “silvery legless lizard” is now considered several species, including two that potentially occur within the RMDP/SCP Area: Northern California legless lizard (<i>Anniella pulchra</i>) and Southern California legless lizard (<i>Anniella stebbinsi</i>). No legless lizard species has been recorded on the Entrada South Project Site.</b>	Yes; although the status of legless lizards in general has not changed, this species is addressed because changes in our understanding of legless lizard taxonomy suggest these species may be more sensitive than previously believed.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
coastal western whiptail <b>San Diegan tiger whiptail</b> <i>Aspidoscelis tigris stejnegeri</i>	—	***	Open areas in semiarid grasslands, scrublands, and woodlands.	Observed within NRSP in the High Country (Dudek and Associates 2006B) and one was observed off site in Castaic Mesa (Compliance Biology 2006D); suitable habitat occurs within Salt Creek, VCC and Entrada in association with grassland, scrub, oak woodland and riverbank habitats.  <b>San Diegan tiger whiptail has been in observed in several locations within the Entrada South Project Site.</b>	No; although this species has been observed since 2010, these observations have not changed its occurrence status on the Entrada South Project Site, the species is not listed, and the regulatory status of this species has not changed.
southwestern pond turtle <i>Actinemys pallida</i>	— FPT	CSC	Streams, ponds, freshwater marshes, and lakes with growth of aquatic vegetation.	This species was observed in the reach of the Santa Clara River within NRSP (SMEA 1995A; Aquatic Consulting Services 2002D; Impact Sciences 2002; Compliance Biology 2004D), within the Santa Clara River in Entrada (Impact Sciences 2001; Ecological Sciences 2004A; Dudek and Associates 2006E), and in Salt Creek (Dudek and Associates 2006B); river and riparian habitats within NRSP, Salt Creek, and VCC provide suitable habitat.  <b>The southwestern pond turtle has not been observed on the Entrada South Project Site and is not expected to occur.</b>	Yes; although the status of this species has not changed, and it is unlikely to occur on the Entrada South Project Site, it is now under review for federal listing.
coast horned lizard <i>Phrynosoma coronatum</i> <b>Blainville's horned lizard</b> <i>Phrynosoma blainvillii</i>	—	CSC	Exposed gravelly-sandy soils with minimal shrubs, riparian woodland clearings, dry chamise chaparral, and annual grasslands with scattered seepweed or saltbush.	This species was also observed during reptile surveys in 2004 and 2006 (Impact Sciences 2006A). Suitable habitat occurs within NRSP, Salt Creek, VCC, and Entrada in association with scrub, chaparral, and riverbank habitats; species presumed to occur on site within suitable habitat.  <b>Blainville's horned lizard has not been observed on the Entrada South Project Site, but the site supports suitable habitat for the species, and it has potential to occur.</b>	No; the species is not listed or a proposed or candidate species for listing, and its potential for occurrence has not changed since 2010.
two-striped gartersnake <i>Thamnophis hammondi</i>	—	CSC	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 was observed in the reach of the Santa Clara River within and adjacent to the NRSP (Aquatic Consulting Services 2002C; Impact Sciences 2002; Compliance Biology 2004D, 2004F), within Entrada (Impact Sciences 2001), and within VCC (Ecological Sciences 2003A); river and riparian habitats within Salt Creek, VCC, and Entrada provide suitable habitat.  <b>Two-striped gartersnake has not been observed on the Entrada South Project Site, and it is not expected to occur there.</b>	No; the species is not listed or a proposed or candidate species for listing, and its potential for occurrence has not changed since 2010.
Birds					
Cooper's hawk (nesting) <i>Accipiter cooperii</i>	—	WL	Dense stands of live oak, riparian woodlands, or other woodland habitats near water.	This species is known to be a year-round resident within the NRSP (Bloom Biological 2007A) and Entrada and VCC (Guthrie 2001A); it occurs commonly along the Santa Clara River and in Potrero Canyon (Bloom Biological 2008). This species has been observed nesting within NRSP near Grapevine Mesa and in Entrada north of the Santa Clara River (Guthrie 2000B; Bloom Biological 2007A, respectively), and with active territories in NRSP (Bloom Biological 2007A). It has observed over multiple years foraging within Salt Creek, VCC, and Entrada adjacent to the Santa Clara River during annual bird surveys. The Project site provides foraging and nesting habitat for the species.  <b>Cooper's hawk was observed on the Entrada South Project Site prior to and following the analysis for the 2017 State-Certified EIR, including a nest at the edge of the Project Site in 2007.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
sharp-shinned hawk (nesting) <i>Accipiter striatus</i>	—	WL	Nests in woodlands and forages over dense chaparral and scrublands.	<p>This species has been observed within the NRSP hunting along agriculture fields along the Santa Clara River (Bloom Biological 2008) and was observed by Guthrie in the NRSP (Guthrie 1997B, 1999C) and Entrada (Guthrie 2002A). It was also observed east of the site along the Santa Clara River (Guthrie 1995A) and one individual was observed in Salt Creek (Bloom Biological 2008). All observations were thought to be migrants and/or wintering birds. The Project site is outside the known breeding range for this species. This species forages in woodlands, chaparral, scrublands, and edge/ecotone areas between habitats which occur throughout the Project site.</p> <p><b>Sharp-shinned hawk has a high potential for winter foraging on the Entrada South Project Site but has not been observed.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
tricolored blackbird (nesting colony) <i>Agelaius tricolor</i>	BCC, USBC	CSC ST	Freshwater marshes and riparian scrub (nesting). Grassland and agriculture (foraging).	<p>This species has been observed on the Project site during focused bird surveys. A flock of approximately 200 breeding pairs of tricolored blackbirds was observed in Castaic Junction (Guthrie 1994A). Another flock of approximately 20 breeding pairs of tricolored blackbirds was observed next to Castaic Creek (Guthrie 1994A). In 1995 (Guthrie 1995A) and 1996 (Guthrie 1996A) small flocks visited the Castaic Creek site again in April and May, but did not breed there. Labinger et al. (1995) observed a small nesting colony within the Project site (specific location is not known). Migrants have also been observed within the RMDP (Guthrie 1996B, 1999B), VCC (Guthrie 1999A, 2006C) and Entrada (Guthrie 2000E, 2001A, 2006A; Dudek and Associates 2006E) boundaries during surveys, but no breeding colonies have been observed since 1994, despite annual surveys through 2007. A flock of 20 tricolored blackbirds was observed in Potrero Canyon in 1994 (Guthrie 1994A), and a flock of 50 birds was seen on the Newhall Ranch property north of Mayo Crossing (County of Los Angeles 2003A).</p> <p><b>This species has not been observed on the Entrada South Project Site. It has potential to forage or winter there, but low potential to nest.</b></p>	Yes; although the occurrence status of tricolored blackbird on the Entrada South Project Site has not changed since 2010, the species is now state listed as threatened.
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	—	WL	Coastal scrub.	<p>This species has been observed over multiple years as a fairly common resident within the Coastal scrub within NRSP, Salt Creek, VCC, and Entrada during annual bird surveys and has been observed foraging in upland scrub on the south side of the Santa Clara River, and in upland areas (Bloom Biological 2008), and near the Santa Clara River (Guthrie 2000A, 2000B, 2001A, 2002C, 2004A, 2004D), and nesting in 2007 (Bloom Biological 2007A); the Project site provides suitable nesting and foraging habitat with large concentrations of coastal scrub in the northeastern portion of NRSP and southeastern portion of High Country.</p> <p><b>This species has been observed widely across the Entrada South Project Site, including observations prior to and following analysis for the 2017 State-Certified EIR.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
golden eagle (nesting and wintering) <i>Aquila chrysaetos</i>	BCC	WL CFP	Nests on cliff-walled canyons and large trees in open areas. Forage in open shrublands, agriculture, and grassland.	One pair was seen frequently in upper Potrero Canyon and a juvenile was seen once in the same area; this is likely a resident pair, but no nests have been observed to date (Bloom Biological 2008). An individual was observed over the Santa Clara River corridor in Castaic Junction area in 1993 and	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
				1995 (Guthrie 1993A, 1993B, 1995A) and another was flushed in a woodland west of Grapevine Mesa in the NRSP in 2000 (Guthrie 2000B); no nesting eagles have been observed on the Project site but suitable nesting and foraging habitat is present within NRSP, Salt Creek, VCC, and Entrada. These species have also been observed along Santa Clara River east and west of the project site (Guthrie 1993A, 1997A, 2004F, 2006A; Labinger et al. 1997A).  <b>Golden eagles have not been observed on the Entrada South Project Site. They are not expected to nest on the site, although they may forage there.</b>	
short-eared owl (nesting) <i>Asio flammeus</i>	USBC	CSC	Grassland, prairies, dunes, meadows, irrigated lands, saline and freshwater emergent wetlands.	This species was observed in the Salt Creek area just west of the Ventura/Los Angeles County line in the fall of 2005 (Dudek and Associates 2006B). 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 (Olson 2007). This species is likely a winter visitor and is not known to nest in the Project vicinity.  <b>Short-eared owls have not been observed on the Entrada South Project Site and are not expected to nest there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
long-eared owl (nesting) <i>Asio otus</i>	—	CSC	Dense, riparian and live oak thickets near meadow edges, nearby woodland and forest habitats. Also found in dense conifer stands at higher elevations. Forages in grassland and agriculture.	This species was observed within NRSP near Via Canyon in Fall 2005 (Dudek and Associates 2006B). Some suitable nesting habitat is present along the Santa Clara River and Castaic Creek, and foraging habitat is present throughout the NRSP, Salt Creek, VCC, and Entrada.  <b>Long-eared owl has not been observed on the Entrada South Project Site and has a low potential to nest there, due to the lack of suitable dense forest.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western burrowing owl (burrow sites) <i>Athene cunicularia</i>	BCC	CSC	Grasslands, open scrub, and agriculture, particularly with ground squirrel burrows.	A single individual was observed within NRSP (Babcock 2007). Given the timing of the sighting (winter 2006), the observed individual may have been wintering on site or temporarily using the site during migration. Another individual was observed in December 2006 and on April 11, 2007 (Miller 2007). NRSP, Salt Creek, VCC, and Entrada provide suitable foraging and nesting habitat for the species; California ground squirrel burrows occur on the Project site.  <b>No burrowing owls have been observed on the Entrada South Project Site, although suitable habitat occurs, as noted in the 2017 State-Certified EIR.</b>	Yes; although the species is not listed and has not been recorded on the Entrada South Project Site, it is considered highly sensitive and the Entrada South Project Site contains suitable habitat for the species.
oak titmouse (nesting) <i>Baeolophus inornatus</i>	USBC	***	Montane hardwood-conifer, montane hardwood, blue oak, valley oak and coastal oak woodlands, montane and valley foothill riparian habitats.	This species is a common resident and nests on site in cottonwood riparian and coast live oak communities; it has been observed over multiple years in the NRSP, Entrada and VCC sites. Recent observations have been in 2006 (Guthrie 2006C) and 2007 and 2008 (Bloom Biological 2007A, 2008).  <b>Oak titmouse is known to occur on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
ferruginous hawk (wintering) <i>Buteo regalis</i>	BCC	WL	Grasslands, agricultural fields, and open scrublands.	This species is an infrequent seasonal migrant. Individuals of this species were observed almost every day in east alfalfa fields, Wolcott fields, and Potrero Canyon, and other agriculture fields along the Santa Clara River in winter 2008 (Bloom Biological 2008). Although suitable foraging habitat is present on the Project site, this species has not been documented to nest in California and is expected to forage on the site.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
				Ferruginous hawk has not been observed on the Entrada South Project Site, although it has potential to occur there in winter.	
Costa’s hummingbird (nesting) <i>Calypte costae</i>	USBC	***	Shrubs and arid habitats. Edges of desert riparian and valley foothill riparian, coastal scrub, desert scrub, desert succulent scrub, arid shrublands, lower elevation chaparral, and palm oasis.	This species has been observed over multiple years within the NRSP, Entrada and VCC sites; it is thought to be a summer resident, although does not appear to be an abundant species within the Project site based on the number of sightings each year. Recent observations have been in 2006 (Guthrie 2006C).  This species was observed on the Entrada South Project Site both prior to and following the analysis for the 2017 State-Certified EIR.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Lawrence’s goldfinch <i>Carduelis lawrencei</i> <i>Spinus lawrencei</i>	BCC, USBC	***	Valley foothill hardwood, valley foothill hardwood–conifer; and in southern California, desert riparian, palm oasis, pinyon–juniper and lower montane habitats.	This species has been observed as a resident in the coastal scrub in the northern and northeaster portions of the Project site, and has been observed within the riparian habitats of the Santa Clara River over multiple years within NRSP and Entrada during annual bird surveys. Recent observations have been in 2006 (Guthrie 2006C) and 2007 and 2008 (Bloom Biological 2007A, 2008). Suitable nesting and foraging habitat is present within NRSP, Salt Creek, VCC, and Entrada.  This species was observed on the Entrada South Project Site in 2007 and 2022.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
turkey vulture <i>Cathartes aura</i>	—	†	Rangeland, agriculture, grassland; uses cliffs and large trees for roosting, nesting, and resting.	This species has been observed over multiple years within NRSP, Salt Creek, VCC, and Entrada; recent observations in the Project site have been made in 2006 (Guthrie 2006C; Bloom Biological 2007A); nesting opportunities are also present within the Project site.  This species occurs regularly on the Entrada South Project Site.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
northern harrier (nesting) <i>Circus cyaneus</i> <i>Circus hudsonius</i>	—	CSC	Coastal salt marsh, freshwater marsh, grasslands, and agricultural fields.	This species has been observed within NRSP in 1999 and 2000 (Guthrie 1999B, 2000A) and in 2007 and 2008 near the Santa Clara River in the NRSP and Entrada sites (Bloom Biological 2007A, 2008). This species has also been observed within the vicinity of the project site (Compliance Biology 2003B, 2006A); suitable foraging and nesting habitat is present within NRSP, Salt Creek, VCC, and Entrada.  Northern harriers have been observed on the Entrada South Project Site, but it has not been observed nesting.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western yellow-billed cuckoo (nesting) <i>Coccyzus americanus occidentalis</i>	FC FT BCC	CE	Nests along the broad, lower flood-bottoms of larger river systems. Also nests in riparian forests and riparian jungles of willow often mixed with cottonwoods, with an understory of blackberry, nettles, or wild grape.	One individual was heard at the Magic Mountain (Entrada) area in 1997 and thought to be a migrant (Labinger et al. 1997B). Single individuals (thought to be migrants) were observed along the Santa Clara River east of the Project site in 1997 and 1998 (Guthrie 1997A; Labinger and Greaves 1999A), and west of the Ventura County line (Guthrie 1997B); none have been observed since then; species has not been observed nesting on site; suitable nesting and foraging habitat present within NRSP, VCC and Entrada. This species has been observed historically in 1979, 1981 and 1992 (Labinger et al. 1997A).  The Entrada South Project Site does not support suitable habitat for this species.	Yes; although the species is not expected to occur on the Entrada South Project Site, it is included in this report because it is state listed as endangered, and since the analysis for the 2017 State-Certified EIR, has been federally listed as threatened.
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	Individuals of this species have been observed within or adjacent to the Specific Plan in 1994, 1996, and 2002 (Guthrie 1994B, 1996B, 2002C). All observations were thought to be migrants. The Project site is within this	No; this species is not listed and is not a candidate or proposed for listing. Its



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
<i>Setophaga occidentalis</i>			live oak woodlands and deciduous trees during migration, and valley foothill hardwood in winter.	species winter range. Suitable habitat for migration and wintering habitat occurs on site, but no suitable nesting occurs on site.  <b>This species has not been observed on the Entrada South Project Site.</b>	occurrence status has not changed since 2010.
yellow warbler (nesting) <i>Dendroica petechia brewsteri</i> <i>Setophaga petechia brewsteri</i>	—	CSC	Riparian thickets and woodlands.	This species has been observed over multiple years during annual bird surveys and nests in the riparian areas within NRSP, Salt Creek, VCC, and Entrada. These species have been observed both during nesting season and migration. Recent observations of these species within the Project site in 2006 (Guthrie 2006A, 2006B, 2006C) and 2007 (Bloom Biological, Inc. 2007A).  <b>This species has been observed on the Entrada South Project Site, during migration, but has a low potential to nest there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
white-tailed kite (nesting) <i>Elanus leucurus</i>	—	CFP	Inhabits herbaceous and open stages of most habitats, common in cismontane in California. Nests are placed near top of dense oak, willow or other tree stand; usually 6 to 20 meters (20 to 100 feet) above ground. Nest located near open foraging area.	This species has been observed successfully nesting on site and in the vicinity of the project site along the Santa Clara River over multiple years within NRSP, Salt Creek, VCC, and Entrada during annual bird surveys (Guthrie 1994A, 1995A, 1997A, 1998B, 2000E, 2000F, 2006B) and during focused survey (Bloom Biological 2007A, 2009); suitable foraging and nesting habitat is present on the Project site.  <b>This species was observed foraging on the Entrada South Project Site, prior to and following the analysis for the 2017 State-Certified EIR.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
willow flycatcher (nesting) <i>Empidonax traillii</i>	USBC	CE	Riparian woodlands that contain water and low willow thickets.	This species has been observed along the Santa Clara River over multiple years within the NRSP, Entrada and VCC project sites. The observations have usually been of individual species, thought to be migrants passing through the area based on their behavior and time of year (no observations occurred after June 22). Recent observations along the Santa Clara River within the NRSP, Entrada, and VCC have been made in 2005 and 2006 (Guthrie 2005B, 2006B). These species have also been observed adjacent to the project site. No nesting has been observed.  <b>Willow flycatcher has not been observed on the Entrada South Project Site, and the site does not support suitable nesting habitat.</b>	No; this species is discussed only with respect to the expected breeding species in the region, southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> ).
southwestern willow flycatcher (nesting) <i>Empidonax traillii extimus</i>	FE, USBC	CE	Riparian woodlands that contain water and low willow thickets.	Most of the observations of the willow flycatcher have not identified individuals to the subspecies level. Individuals were considered to be migrating through the site as they were not located after June 22. Within the vicinity of the project site, two individuals identified as southwestern willow flycatchers were observed in Castaic Creek in 2006 (Forde Biological Consultants 2006). These individuals, however, were not displaying any nesting behavior. Suitable nesting and foraging habitat is present within NRSP, VCC, and Entrada. The most recent observation of this subspecies displaying territorial behavior is downstream approximately 18 miles, near Saticoy (Labinger and Greaves 1999A).  <b>Southwestern willow flycatcher has not been observed on the Entrada South Project Site, and the site does not support suitable nesting habitat.</b>	Yes; although the Entrada South Project Site does not support suitable nesting habitat for this species, the southwestern willow flycatcher is both state and federally listed as endangered.
California horned lark <i>Eremophila alpestris actia</i>	—	WL	Grasslands, disturbed areas, agriculture fields, and beach areas.	This species has been observed within NRSP, Entrada, and VCC during annual bird surveys foraging in plowed and graded fields near the Santa Clara River and Castaic Creek over multiple years. In winter 2008 flocks of 250–500 individuals were observed in the Wolcott agriculture	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
				fields and east alfalfa field on several occasions (Bloom Biological 2008), and was observed in agriculture fields in 2007 (Bloom Biological 2007A); this species is thought to be a resident with recent observations (Guthrie 2000A, 2000C, 2001A, 2005B, 2006C); no nesting has been observed, but suitable foraging and nesting habitat is present on the Project site.  <b>Horned larks have been observed on the Entrada South Project Site. Nesting has not been observed, but the species is considered to have potential to nest there.</b>	
merlin (wintering) <i>Falco columbarius</i>	—	WL	Coastlines, wetlands, woodlands, agricultural fields, and grasslands.	Several individuals observed on different occasions hunting over agriculture fields along the Santa Clara River and in Potrero Canyon (Bloom Biological 2008). A male and female were observed flying over agriculture fields bordering riparian habitat near Indian Dunes in the NRSP in March 2007 (Bloom Biological 2007A). Although this species does not nest in California, CDFG considers wintering birds to be of Special Concern.  <b>Merlin has not been observed on the Entrada South Project Site, but it has the potential to occur there in winter and during migration.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
prairie falcon (nesting) <i>Falco mexicanus</i>	BCC	WL	Grasslands, savannas, rangeland, agricultural fields, and desert scrub; requires sheltered cliff faces for shelter and nesting.	At least 2 individuals were observed on several occasions in Potrero Canyon; and two other individuals were observed along the Santa Clara River on single occasions (Bloom Biological 2008). Individuals observed foraging within NRSP in 2000 (Guthrie 2000A), along Castaic Creek in 2001 (Guthrie 2001A), and Salt Creek in 2005 (Dudek and Associates 2006B); it was observed flying north over the NRSP on April 29, 2007 (Bloom Biological 2007A); all of these occurrences were thought to be migrants in the Project site; moderate potential to occur within Entrada. No nesting individuals have been observed and available nesting habitat is marginal.  <b>Prairie falcon has not been observed on the Entrada South Project Site, and it is unlikely to nest there, but it has potential to forage on the site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
American peregrine falcon <i>Falco peregrinus anatum</i>	BCC, Delisted	CE <b>Delisted</b> CFP	Nests near wetlands, lakes, rivers, or other water bodies, on cliffs, banks, dunes, and other human-made structures.	One individual was observed on one occasion over Wolcott agriculture field (Bloom Biological 2008). An individual was observed foraging over the Santa Clara River corridor near the Grapevine Mesa area within NRSP in 2000 (Guthrie 2000B); no other occurrences of this species have been documented on site during annual bird surveys. No nesting peregrine falcons have been observed on the Project site. Moderate potential for foraging within NRSP, Salt Creek, VCC, and Entrada. The species may nest in the Santa Susana Mountains, south of the Project site (Guthrie 2000B).  <b>A peregrine falcon was observed perching on a transmission tower at the southern edge of the Entrada South Project Site in 2012, and it was assumed to potentially occur there in the 2017 State-Certified EIR. One was also observed on the Entrada South Project Site in 2022.</b>	No; although this species was formerly federally listed as endangered, it is no longer listed or a candidate or proposed for listing. Its occurrence status has not changed since 2010.
California condor <i>Gymnogyps californianus</i>	FE, USBC	CE, CFP	Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags.	Until April 2008, California condors had not been known to nest or land within the Project area within the last 25 years (Bloom Biological 2007A, 2008). 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	Yes; although the occurrence status of California condor has not changed appreciably since 2010, the species is state and federally listed and could forage within the Entrada South Project Site.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
				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 area when moving between the Sespe Wilderness area to the northwest and the San Gabriel Mountains to the southeast of the Project area and that the species appears to be increasing its use of the area. It is expected to continue to foraging opportunistically in portions of the Project area for dead cattle and other large mammal carcasses.  <b>This species has not been observed on the Entrada South Project Site, although flight data show that it has flown over the site.</b>	
yellow-breasted chat (nesting) <i>Icteria virens</i>	—	CSC	Riparian thickets and riparian woodlands with a dense understory.	This species was observed nesting in riparian thickets in 2007 (Bloom Biological 2007A) and has been observed over multiple years along the Santa Clara River within dry riparian woodland habitat in the NRSP, Salt Creek, Entrada, and VCC during annual bird surveys. Recent observations were made within the Project site in 2006 (Guthrie 2006A, 2006C); suitable foraging and nesting habitat is present on the Project site.  <b>This species has not been observed on the Entrada South Project Site, and it has a low potential to nest there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
loggerhead shrike <i>Lanius ludovicianus</i>	BCC	CSC	Grasslands and open shrublands with scattered shrubs, trees, fences, or other perches.	This species is a resident on site (Bloom Biological 2007A, 2008). In winter 2008 it was observed regularly in Potrero Canyon, Tapo Canyon, near Magic Mountain ranch gate, and Wolcott agriculture fields (Bloom Biological 2008). Observed to be fairly common within California sagebrush scrub and grasslands in the NRSP and also observed within VCC (Guthrie 1995A, 2004H), Salt Creek (Dudek and Associates 2006B) and Entrada (Dudek and Associates 2006E); it was observed nesting near Potrero Canyon and near an agriculture field near the Santa Clara River in 2007 (Bloom Biological 2007A); it was thought to have nested within and adjacent to the Entrada site (Guthrie 2000D, 2004G); suitable nesting and foraging habitat is present on the Project site.  <b>Loggerhead shrike has been observed on the Entrada South Project Site. It also has potential to nest there, as acknowledged in the 2017 State-Certified EIR.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
black-crowned night-heron (rookery) <i>Nycticorax nycticorax</i>	—	***	Riparian; nests in dense-foliaged trees and dense emergent wetlands.	This species has been observed along the Santa Clara River within the NRSP, most recently in 2007 (Bloom Biological 2008), and in 2006 (Guthrie 2006A and Bloom Biological 2007A); within Entrada, in 2006 (Guthrie 2006C); and along Castaic Creek, in 2000 (Guthrie 2000E). This species was observed early in the year and is thought to be a wintering or migratory species within the Project site. No rookery sites have been detected on or near the site (Bloom Biological 2008). It is not known if this species has a rookery site within or adjacent to the Project site (Bloom Biological 2007A). Some suitable foraging and nesting habitat is present on site.  <b>Black-crowned night-heron has not been observed on the Entrada South Project Site, and nesting habitat is absent.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Nuttall’s woodpecker (nesting)	USBC	***	Lower elevation riparian deciduous and oak habitats.	This species is a common, year-round resident in cottonwood and willow riparian habitat along the Santa Clara River and Castaic Creek (Bloom	No; this species is not listed and is not a candidate or proposed for listing. Its

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
<i>Picoides nuttallii</i>				Biological 2007A, 2008). It has been observed nearly every year since surveys began in 1988 (see Guthrie, Bloom Biological, Woodstar, and Compliance Biology surveys). Nesting was documented as recently as 2021.  <b>Nuttall's woodpecker is known to occur on the Entrada South Project Site.</b>	occurrence status has not changed since 2010.
summer tanager (nesting) <i>Piranga rubra</i>	—	CSC	Cottonwood–willow riparian habitats, especially older, dense stands along rivers and streams.	Individuals have been observed during annual bird surveys within NRSP in 1994 (Guthrie 1994B), in Entrada in 1991 and 1993 (Guthrie 1991A, 1993A, 1993B); it has also been observed east of the project site in 2000 and 2003 (Guthrie 2000E, 2003A); suitable nesting and foraging habitat present along the Santa Clara River and Castaic Creek within NRSP, VCC, and Entrada.  <b>Summer tanager has not been observed on the Entrada South Project Site, which does not support suitable riparian nesting habitat.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
coastal California gnatcatcher <i>Polioptila californica californica</i>	FT, USBC	CSC	Various sage scrub communities, often dominated by California sage and buckwheat; generally avoids nesting in areas with a slope of greater than 40%, and typically less than 820 feet in elevation.	Suitable nesting and/or foraging habitat types are present on site, but all at higher elevations and/or with steeper slopes than typical of this species. The species has not been observed on site during numerous annual bird surveys (including USFWS protocol surveys). Focused protocol surveys have been conducted throughout the Project site in 2000 (Guthrie 2000A, 2000B, 2000D) 2004 (Guthrie 2004A, 2004B, 2004D, 2004E, 2004G) and 2007 (Dudek 2007B). Focused surveys have also been conducted off site in Legacy Village (Guthrie 2004C; Impact Sciences, Inc 2000; SAIC 2003) and other areas (Compliance Biology 2002, 2006A; PCR 1998). However, during the course of biological monitoring conducted in the VCC planning area, an individual California gnatcatcher was observed on October 5, 2007, by Dudek biologist Jeff Priest and biologist Ron Francis, a sub-consultant to Dave Crawford, Compliance Biology, Inc. (Priest 2007A). Given the time of year and the fact that no other California gnatcatchers have ever been observed within the Project site (despite extensive focused and general surveys), this observation is believed to have been that of a dispersing or transient individual.  <b>The only coastal California gnatcatchers observed on the Entrada South Project Site were a juvenile observed only once during six surveys in the spring 2015 and an individual observed only once in 2024. These occurrences were consistent with the conclusion in the State-Certified EIR that it had potential to occur.</b>	Yes; coastal California gnatcatcher is federally listed as threatened and has been documented within the Entrada South Project Site.
Vermilion flycatcher (nesting) <i>Pyrocephalus rubinus flammeus</i>	—	CSC	Breeding habitat includes riparian woodlands, riparian scrub, and freshwater marshes.	A single individual was observed along the Santa Clara River in 1993 (Guthrie 1993B); suitable breeding and foraging habitat present on site along the Santa Clara River in the NRSP and Entrada and along Castaic Creek in VCC; some suitable habitat exists in Salt Creek.  <b>This species has not been observed on the Entrada South Project Site and has only a low potential to nest there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Allen's/rufous hummingbird (nesting) <i>Selasphorus sasin/rufus</i>	USBC/ USBC, BCC	***	Breeds in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats. Migrates in woodland and scrub habitats.	This species has been observed along the Santa Clara River within and adjacent to the NRSP (Bloom Biological 2008; Guthrie 1998A, 1999B, and 2004F), in the upland area of the Entrada site (Guthrie 2004G), and along Castaic Creek in VCC (Guthrie 2004B). These observations were thought to be of migrants. The Project site provides suitable foraging, nesting, and	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
				migrating habitat throughout the NRSP, Entrada and VCC. The Project site is within this species' year-long range.  Hummingbirds identified as Allen's were observed on several occasions within the Entrada South Project Site, before and after analysis for the 2017 State-Certified EIR. A rufous hummingbird was identified on the Entrada South Project Site in 2022.	
Chipping sparrow (nesting) <i>Spizella passerina</i>	—	***	Open woodlands with sparse or low shrubs.	This species has been observed as a common migrant in the Project site (Bloom Biological 2007A); additional observations are within and adjacent to the NRSP near the Santa Clara River (Guthrie 1994B, 1997B, 1999B, and 2002A), near Grapevine Mesa (Guthrie 2000B) and Homestead Canyon (Guthrie 2004A), in Entrada (Guthrie 1991A, 1992, 1993A, and 1999A), and in VCC (Guthrie 1991B). Suitable habitat occurs on site, mostly in High Country with some open woodland areas in Potrero Canyon as well. The Project site is within this species' year-long range.  Chipping sparrow was detected once on the Entrada South Project Site, in 2012, but no evidence of nesting was noted.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i>	FE, USBC, BCC	CE	Riparian vegetation with extensive willows below 2,000 feet.	This species has been observed almost every year along the Santa Clara River within the NRSP and the Entrada North Project Site, and over multiple years in VCC. It has been observed nesting within NRSP and Entrada North, most recently in 2021 (Bloom Biological 2007A) during annual bird surveys; on-site nesting sites in willow riparian habitats associated with the Santa Clara River and Castaic Creek. Suitable nesting and foraging habitat present within NRSP, VCC, and Entrada North.  The Entrada South Project Site does not support suitable habitat for this species, and no least Bell's vireos have been detected there.	Yes; although this species is not expected to occur on the Entrada South Project Site, it is state and federally listed as endangered and is known to occur in the vicinity.
Mammals					
pallid bat <i>Antrozous pallidus</i>	—	CSC	Arid habitats, including grasslands, shrublands, woodlands and forests; prefers rocky outcrops, cliffs and crevices with access to open habitats for foraging.	This species was detected within NRSP during ANABAT surveys (Impact Sciences 2005) and in 2006 (Johnson 2006); on-site habitats and structures (e.g., oak woodlands, buildings, SR-126 bridge) provide suitable roosting habitat within NRSP, Salt Creek, VCC, and Entrada.  This species has not been detected on the Entrada South Project Site but has potential to forage there.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western mastiff bat <i>Eumops perotis californicus</i>	—	CSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub and urban.	This species was not detected within NRSP during ANABAT surveys (Impact Sciences 2005), but it was observed in 2006 (Johnson 2006) within the NRSP; suitable roosting and foraging habitat is present within the Project site.  Western mastiff bat was detected on the Entrada South Project Site in 2006 and 2012.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western red bat <i>Lasiurus blossevillii</i>	—	CSC	Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas.	There were three acoustic detections of the western red bat in the Project area. Two 2004 detections (Impact Sciences 2005) were in willow riparian habitat, and the 2006 detection was under The Old Road Bridge (Johnson 2006). Suitable roosting and foraging habitat is present throughout the Project site.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
				<b>Western red bat was detected on the Entrada South Project Site at two locations in 2012, and the site was assumed to provide suitable habitat in the 2017 State-Certified EIR.</b>	
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	—	CSC	Open chaparral and California sagebrush scrub, grassland and agriculture.	Observed at mouth of Potrero Canyon within NRSP (Impact Sciences 2005). Suitable habitat is present within California sagebrush scrub and chaparral habitats within NRSP, Salt Creek, High Country, VCC, and Entrada.  <b>This species has not been detected on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
fringed myotis <i>Myotis thysanodes</i>	—	***	Occurs in a wide variety of habitats. Optimal habitats include pinyon–juniper, valley foothill hardwood and hardwood-conifer woodlands. Forms maternity colonies and roosts in caves, mines, buildings and crevices.	This species was detected within NRSP in coast live oak habitat during ANABAT surveys (Impact Sciences 2005); suitable roosting and foraging habitat is present within the Project site in oak woodlands scattered throughout NRSP and larger concentrations in High Country.  <b>This species was detected near the Entrada South Project Site in 2004 but has not been detected since.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Yuma myotis <i>Myotis yumanensis</i>	—	***	Inhabits open forests and woodlands with sources of water. Species is closely tied to bodies of water, over which it feeds. Forms maternity colonies in caves, mines, buildings, or crevices.	This species was not detected within NRSP during ANABAT surveys (Impact Sciences 2005), but it was observed in 2006 (Johnson 2006) within the NRSP; suitable roosting and foraging habitat is present within the Project site.  <b>This species was detected on the Entrada South Project Site in 2006 and 2012, and suitable habitat was presumed to be present in the 2017 State-Certified EIR.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	—	CSC	Open chaparral, California sagebrush scrub, cactus patches and the understory of tree thickets.	A species of desert woodrat was observed during 2004 small mammal surveys within NRSP (Impact Sciences 2005). Single woodrat middens were observed within Entrada (Dudek and Associates 2006E) and within High Country (Dudek and Associates 2006B). Moderate potential to occur within Salt Creek and VCC. Based on the known range of this species, It is assumed that the animals observed were the San Diego ( <i>intermedia</i> ) subspecies.  <b>Although woodrat middens have been observed on the Entrada South Project Site, the species present have never been determined. Suitable habitat for San Diego desert woodrat occurs on the site, and the species is assumed to be present.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	—	CSC	Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas.	The pocketed free-tailed bat was acoustically detected in 2006 in lower Potrero Creek (Johnson 2006). It roosts in crevices in cliffs and forages in open air in all habitats. The Project area is at the extreme northwestern part of pocketed free-tailed bat range in California and does not contain the desert habitats typically used by this species. Though present on site, it is probably an occasional visitor.  <b>Pocketed free-tailed bat was detected on the Entrada South Project Site in 2012. However, the species is not expected to occur here frequently.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
mule deer <i>Odocoileus hemionus</i>	—	†	Variety of habitats including forests, woodlands, brush, meadows and standing waters.	This species has been observed during surveys within Entrada (Dudek and Associates 2006E), NRSP (Impact Sciences 2005), and High Country and Salt Creek (Dudek and Associates 2006B). Suitable habitat exists throughout the Project site.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
				<b>Mule deer are known to occur on the Entrada South Project Site, based on observations before and after the 2017 State-Certified EIR.</b>	
mountain lion <b>cougar</b> <i>Puma concolor</i>	—	★ CC	Occurs in a variety of scrub and forested habitats.	This species has been observed within NRSP (Impact Sciences 2005), and High Country and Salt Creek (Dudek and Associates 2006B); the Project site is expected to host transient individuals and to be part of local lion(s)' home range.  <b>Cougars were detected on the Entrada South Project Site in 2012 through sign and by direct observation in 2019.</b>	Yes; since the analysis for the 2017 State-Certified EIR, this species has been designated a candidate for state listing in the region.
American badger <i>Taxidea taxus</i>	—	CSC	Grasslands, agriculture, drier open stages of shrub, forest, and herbaceous habitats with friable soils.	Observed during small mammal surveys within NRSP (Impact Sciences 2005; Dudek and Associates 2006B). Suitable habitat exists within central portions of NRSP. Moderate potential to occur in some areas of VCC and Entrada.  <b>American badger has been detected on the Entrada South Project Site since the analysis for the 2017 State-Certified EIR, in 2018 during focused California gnatcatcher surveys (Dudek 2018). It was considered a potentially occurring species in the 2017 State-Certified EIR.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
black bear <i>Ursus americanus</i>	—	†	Dense forests; forages in brush forests, valley foothill riparian and wet meadows.	Observed within High Country in 2005 (Dudek and Associates 2006B). Some suitable habitat occurs within the southern portion of High Country.  <b>This species has not been detected on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

**Federal:**  
FE: Federally listed as endangered  
FT: Federally listed as threatened  
FC: Federal Candidate for listing as threatened or endangered  
BCC: Bird of Conservation Concern  
USBC: United States Bird Conservation Watch List

**State:**  
CE: California-listed (state-listed) as endangered  
CC: California candidate species  
CFP: California Fully Protected  
CSC: California Species of Special Concern  
WL: Watch List  
\*\*\*: Special Animal  
★: Specially protected mammal  
†: Trust resource

Table C-3. Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	Habitat Suitability	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
Fish					
southern steelhead <i>Oncorhynchus mykiss</i>	FE	—	As juveniles and for spawning: relatively cool freshwater streams, well oxygenated water with adequate depth and cover in the way of gravel, cobble, boulder, undercut banks, large and small woody debris, and overhanging vegetation. As non-spaw <u>n</u> ing adults: Pacific Ocean.	<p>Within the Santa Clara River drainage, southern steelhead historically inhabited Piru Creek, Sespe Creek, Santa Paula Creek, Hopper Creek, and possibly Pole Creek (Titus et al. 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 and Pole Creeks (Stoeker and Kelly 2005).</p> <p>Although reconnaissance surveys conducted along the Santa Clara River and tributary drainages within the Specific Plan area of the RMDP were negative in 2004 and 2005 (ENTRIX 2009), this species was included in this category (Potential to Occur on Site) due to potential downstream effects of the proposed Project.</p> <p><b>The Entrada South Project Site has no potential to support southern steelhead.</b></p>	Yes; although this species does not potentially occur on the Entrada South Project Site, it is federally listed as endangered in the region, and it potentially occurs downstream, in the Santa Clara River.
Terrestrial Mollusks					
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.	<p>Suitable microhabitats within coastal scrub, riparian, and chaparral occur throughout the RMDP development area and mitigation lands in the River Corridor SMA, High Country SMA, and Salt Creek area. 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) on site indicate that the special-status Trask shoulderband snail has potential to occur.</p> <p><b>This species has not been recorded on the Entrada South Project Site.</b></p>	No; this species is not listed, and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Amphibians					
California red-legged frog <i>Rana aurora draytonii</i>	FT	CSC	Water sources such as ponds, lakes, reservoirs, streams, and adjacent riparian woodlands.	<p>Field investigations indicate that potential breeding or summer habitat is generally absent from the portion of the Santa Clara River within the NRSP (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 1988). Not documented in the Santa Clara River (CDFG 2008E). Surveys for this species were conducted within the Santa Clara River in 1995 (SMEA 1995A) and 2001 (Sandburg 2001) with negative results.</p> <p>The species has been documented within the Piru Creek and San Francisquito Creek tributaries to the River; given the occurrence of California red-legged frog in nearby upstream and downstream tributaries, non-breeding frogs could occur within the portion of the Santa Clara River (and other drainages) on the Project site. Additionally, the stock ponds on the NRSP provide suitable habitat and could support breeding frogs, although none have been found there.</p> <p><b>California red-legged frog has not been observed on the Entrada South Project Site and is not expected to occur.</b></p>	No; although this species is federally listed as threatened, it has no potential to occur within the Entrada South Project Site.
Reptiles					
rosy boa <i>Charina trivirgata</i> ssp. <i>roseofusca</i> <b><i>Lichanura orcutti</i></b>	—	***	Inhabits desert and chaparral habitats with rocky soils in coastal canyons and hillsides, desert canyons, washes, and mountains.	<p>Suitable scrub and chaparral habitat occurs within the Project site with large concentrations in the northeastern portion of NRSP and southeastern portion of High Country, and some in Potrero Canyon; riverbank habitat occurs on site along the Santa Clara River and Castaic Creek; oak woodlands are sparsely scattered throughout the NRSP with larger concentrations in High Country; this species is known to occur in the Project region and presumed to occur on site.</p> <p><b>Rosy boa has not been observed on the Entrada South Project Site.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

Table C-3. Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	Habitat Suitability	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
San Bernardino ringneck snake <i>Diadophis punctatus modestus</i>	—	***	Inhabits open, relatively rocky areas, often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation.	Suitable habitat occurs within the Project site in association with oak woodland and riverbank habitats; riverbank habitat occurs on site along the Santa Clara River and Castaic Creek; oak woodlands are sparsely scattered throughout the NRSP with larger concentrations in High Country; species is known to occur in the Project region and presumed to occur on site.  <b>San Bernardino ringneck snake has not been observed on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	—	CSC	Inhabits brushy or shrubby vegetation. Requires small mammal burrows for refuge and overwintering sites.	Suitable habitat occurs throughout the Project site in association with shrub habitats (upland and riparian scrub, chaparral and riverwash); California ground squirrel and Botta’s pocket gopher burrows occur on site; species is known to occur in the Project region and presumed to occur on site.  <b>Coast patch-nosed snake has not been observed on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
south coast gartersnake <i>Thamnophis sirtalis</i> spp.	—	CSC	Inhabits scrub, chaparral, annual and native grassland, freshwater marsh, and agriculture.	Suitable habitat occurs throughout the Project site in association with scrub, chaparral, grassland, and agriculture habitats.  <b>South coast gartersnake has not been observed on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Birds					
grasshopper sparrow <i>Ammodramus savannarum</i>	—	***	Dense, dry or well-drained annual and native grasslands with mix of grasses and forbs. May occur in fallow agricultural fields, especially those periodically planted in oats and barley.	The Project site is just south of the southern edge of the portion of this species' summer range which occurs at approximately the Los Angeles/Kern County boundary. There is at least moderate potential for this species to breed/forage in grasslands and some agricultural areas which occur mostly in the central portion of NRSP, San Martinez Grande, along portions of the Santa Clara River and Castaic Creek, and some portions of VCC and Entrada.  <b>Grasshopper sparrow has not been observed on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Bell’s sage sparrow (nesting) <i>Amphispiza belli belli</i> <b>Bell’s sparrow</b> <i>Artemisiospiza belli</i>	BCC	WL	Coastal scrub and chaparral.	This species has been observed off site in Castaic Mesa (Compliance Biology 2006A), near Soledad Canyon in 2002 (Compliance Biology 2003B), and in the Legacy Village project site, adjacent to the NRSP and Salt Creek area (Guthrie 2004C). Suitable nesting and foraging habitat present within the Project site with concentrations of coastal scrub and chaparral in the northeastern portion of the NRSP and southeastern portion of High Country.  <b>Bell’s sparrow has been reported once on the Entrada South Project Site, in 2012, but nesting territories were not identified.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
black-chinned sparrow (nesting) <i>Spizella atrogularis</i>	BCC, USBC	***	Chaparral and sagebrush scrub.	Suitable habitat occurs within Project site in association with chaparral and coastal scrub habitats which are concentrated in the northeastern portion of the NRSP and the southeastern portion of High Country.  <b>Black-chinned sparrow has been reported once on the Entrada South Project Site, in 2012, but nesting territories were not identified.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Mammals					
ringtail <i>Bassariscus astutus</i>	—	CFP	Mixture of forest and shrubland in close association with rocky areas and riparian habitats; uses hollow trees, snags, and logs for cover and reproduction.	This species was surveyed for during the mammal surveys in 2004 (Impact Sciences 2005). Cameras, scent/track stations and spotlight survey techniques were used to detect these species. Low potential to occur based on lack of suitable habitat, such as hollow trees, logs, snags, and abundant rocky areas. In addition, these species are not usually found more than 1 kilometer away from permanent water; therefore, these species would most likely have been detected during the numerous studies performed near the Santa Clara River and its tributaries (Haglund & Baskin 2000; Impact Sciences 2005; Dudek and Associates 2006D, 2006E).  <b>Ringtail has not been observed on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.



Table C-3. Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	Habitat Suitability	Is Species Addressed in the Entrada South Supplemental Bio Report?
	Federal	State			
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	—	CSC	Utilizes a variety of communities, including conifer and oak woodlands and forests, arid grasslands and deserts and high-elevation forests and meadows. Requires appropriate roosting, maternity and hibernacula sites free from human disturbance.	This species was not detected within NRSP during ANABAT surveys (Impact Sciences 2005). Suitable roosting and foraging habitat is present within the Project site.  <b>Townsend's big-eared bat has not been confirmed on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western small-footed myotis <i>Myotis ciliolabrum</i>	—	CSC	Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas. Requires appropriate roosting, maternity, and hibernacula sites free from human disturbance.	Impact Sciences (2005) identified the 40 kHz frequency range species in 2004 as the western small-footed myotis, but without additional information (e.g., longer time-series recording or capture), this identification could not be confirmed because this frequency is characteristic of at least two other species that could occur on site: long-legged myotis and little brown bat. In 2006, 40 kHz bat species were recorded in all three survey locations along Potrero Creek, along the Santa Clara River at Walcott Road, and at the plant nursery site in upper Long Canyon. Without definitive presence/absence information, for the purpose of this analysis, it is assumed that the western small-footed myotis occurs in the Project area.  <b>Western small-footed myotis was detected on the Entrada South Project Site at several locations in 2012, consistent with the determination in the 2017 State-Certified EIR that it likely occurred.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
long-legged myotis <i>Myotis volans</i>	—	CSC	Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas. Requires appropriate roosting, maternity, and hibernacula sites free from human disturbance.	The presence of the long-legged myotis was not confirmed in the Project area during the acoustic and mist netting surveys conducted in 2004 and 2006 (Impact Sciences 2005; Johnson 2006). However, bats with acoustic signatures in the 40 kHz range, which is the range for the long-legged myotis, were detected on site in 2004 and 2006. Impact Sciences (2005) identified the 40 kHz frequency-range species in 2004 as the western small-footed myotis, but without additional information (e.g., longer time-series recording or capture), this identification could not be confirmed. Based on the frequency data alone, the 40 kHz species could be western small-footed myotis, long-legged myotis, or little brown bat; therefore, all three species should be considered to be potentially present on site. In 2006, 40 kHz bat species were recorded in all three survey locations along Potrero Creek, along the Santa Clara River at Walcott Road, and at the plant nursery site in upper Long Canyon.  <b>Long-legged myotis has not been detected on the Entrada South Project Site, but likely occurs there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
southern grasshopper mouse <i>Onychomys torridus ramona</i>	—	CSC	Inhabits desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	This species has not been detected within the NRSP during small mammal trapping (Impact Sciences 2005). This species has potential to occur at least in low densities on site within coastal scrub and grassland vegetation communities; it is not expected to occur within other habitats on the Project site.  <b>Southern grasshopper mouse has not been detected on the Entrada South Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

**Federal:**  
FE: Federally listed as endangered  
FT: Federally listed as threatened  
FC: Federal Candidate for listing as threatened or endangered  
BCC: Bird of Conservation Concern  
USBC: United States Bird Conservation Watch List

**State:**  
CE: California-listed (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



INTENTIONALLY LEFT BLANK

# References

- Aquatic Consulting Services. 2002a. *Aquatic Surveys along the Santa Clara River; Part II: Commerce Center Bridge Project Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. June 2002.
- Aquatic Consulting Services. 2002b. *Aquatic Surveys along the Santa Clara River; Part III: West of Commerce Center Bridge to the Ventura County Line, California*. Revised. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. June 18, 2002.
- Aquatic Consulting Services. 2002c. *Aquatic Surveys along the Santa Clara River; Part IV: Ventura County Line to Las Brisas Bridge, Ventura County, California*. Revised. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. June 25, 2002.
- Aquatic Consulting Services. 2002e. *Aquatic Surveys along the Santa Clara River; Part I: Castaic Junction Project Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. April 2002.
- Babcock, K. 2007. Telephone call from K. Babcock (Dudek) to C. Ford (Dudek). October 2007.
- Bloom Biological. 2007a. *Summary of Late Winter and Spring Avian Survey with Focus on the California Condor (Gymnogyps californianus) on Portions of Newhall Land and Farming Company Property, Los Angeles County, California*. Revised. Prepared for The Newhall Land and Farming Company. Ventura, California: Bloom Biological. July 13, 2007.
- Bloom Biological. 2008. *Interim Report of Winter Surveys of Special-Status Bird Species on Portions of Newhall Land and Farming Company Property (Including Newhall Ranch), Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Santa Ana, California: Bloom Biological. February 28, 2008.
- Bloom Biological. 2009. *Report on White-Tailed Kites on Portions of Newhall Land and Farming Company Property (including Newhall Ranch); Los Angeles and Ventura Counties, California*. Prepared for The Newhall Land and Farming Company. Santa Ana, California: Bloom Biological. January 22, 2009.
- Carlberg Associates. 2021.
- Carpenter, M. 2008. Personal communication by M. Carpenter (The Newhall Land and Farming Company) reporting that a California condor was observed feeding on a dead calf in a Potrero side canyon by wildlife biologist Chris Niemela.
- Causey, A. 2007. "Focused Surveys for the Undescribed Everlasting Species in Castaic Creek and the Santa Clara River in Los Angeles County, California." Memorandum from A. Causey (Dudek) to M. Carpenter (The Newhall Land and Farming Company). December 14, 2007.
- CDFG. 2007a. RareFind. Version 3. California Natural Diversity Database. Accessed October to December 2007. <http://www.dfg.ca.gov/bdb/html/cnddb.html>.

- CDFG. 2008e. RareFind. Version 3.1.0. California Natural Diversity Database. Accessed October 29, 2008. <http://www.dfg.ca.gov/bdb/html/cnddb.html>.
- CNPS (California Native Plant Society). 2022. "Species Details: *Calochortus fimbriatus* (late-flowered mariposa-lily)." *CNPS Rare Plant Inventory* [website]. <https://rareplants.cnps.org/Plants/Details/1601>.
- Compliance Biology. 2002. "Results of Focused Surveys for Coastal California Gnatcatcher Surveys; River Park Project. Santa Clarita, Los Angeles County, California." Letter report from D. Crawford (Compliance Biology) to S. Tebo (Impact Sciences). January 24, 2003.
- Compliance Biology. 2003b. "Results of Focused Survey for Coastal California Gnatcatcher Surveys [sic]; River Park Project, Santa Clarita, Los Angeles County, California." Letter report from D. Crawford (Compliance Biology) to S. Tebo (Impact Sciences). January 24, 2003 (February 5, 2003).
- Compliance Biology. 2004a. *Results of Butterfly Surveys on the Newhall Ranch Project Site, Los Angeles County, California*. Camarillo, California: Compliance Biology. September 16, 2004.
- Compliance Biology. 2004c. *Results of Butterfly Surveys on Magic Mountain Entertainment Site, Los Angeles County, California*. Camarillo, California: Compliance Biology. August 4, 2004.
- Compliance Biology. 2004d. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project; Newhall Ranch, Valencia, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology. October 2004.
- Compliance Biology. 2004f. *Results of Focused Surveys for Arroyo Toad and Special Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology. September 2004.
- Compliance Biology. 2004g. *Western Spadefoot Toad Habitat Enhancement and Monitoring Plan, Valencia Commerce Center Project, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology. November 2004.
- Compliance Biology. 2005. *Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology. July 31, 2005.
- Compliance Biology. 2006a. *Results of Focused Coastal California Gnatcatcher Surveys; Castaic Mesa Project, Los Angeles County, California*. Prepared for Impact Sciences. Camarillo, California: Compliance Biology.
- Compliance Biology. 2006c. *Results of the Focused Western Spadefoot Toad Surveys on the Mission Village Project Site*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology.
- Compliance Biology. 2006d. *Biological Resource Assessment, Castaic Mesa Project, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology. October 16, 2006.

Corps and CDFG (U.S. Army Corps of Engineers and California Department of Fish and Game). 2010. *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan Final Joint Environmental Impact Statement and Environmental Impact Report*. SCH No. 2000011025. Seven volumes. June 2010.

County of Los Angeles. 1999. *Environmental Impact Report for the Newhall Ranch Specific Plan and Water Reclamation Plant*. SCH No. 95011015. March 1999.

County of Los Angeles. 2003a. *Revised Draft Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Environmental Impact Report (Volumes 1 and 2) and Final Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Environmental Impact Report (Volumes 3–7)*. Project No. 94087, SCH No. 95011015. Seven volumes, November 2002 to May 2003. Prepared by Impact Sciences for Los Angeles County Department of Regional Planning. Agoura Hills, California: Impact Sciences.

Crawford, D. 2007. Telephone call from D. Crawford (Compliance Biology) to S. Miller (Dudek). November 2007.

Dudek & Associates. 2002a. *2002 Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. November 20, 2002.

Dudek & Associates. 2002b. *2002 Sensitive Plant Survey Results for Entrada [Magic Mountain Entertainment], Los Angeles County, California*. Draft. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. January 2003.

Dudek & Associates. 2002c. *2002 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California*. Draft. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. January 2003.

Dudek & Associates. 2004b. *2003 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2004.

Dudek & Associates. 2004c. *2003 Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2004.

Dudek & Associates. 2004e. *2003 Sensitive Plant Survey Results for the Magic Mountain Entertainment Site, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2004.

Dudek & Associates. 2004f. *2004 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2004.

- Dudek & Associates. 2004g. *2004 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2004.
- Dudek & Associates. 2004h. *2004 Sensitive Plant Survey Results for the Entrada Site, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2004.
- Dudek & Associates. 2004i. *2003 Sensitive Plant Survey Results for the Salt Creek Site, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2004.
- Dudek & Associates. 2006b. *Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area*. Prepared for The Newhall Land and Farming Company by Dudek & Associates.
- Dudek & Associates. 2006c. *Biological Resources Technical Report for the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company by Dudek & Associates.
- Dudek & Associates. 2006d. *Biological Resources Technical Report for the Valencia Commerce Center, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company by Dudek & Associates.
- Dudek & Associates. 2006e. *Biological Resources Technical Report for the Entrada Site, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company by Dudek & Associates.
- Dudek & Associates. 2006f. *2005 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek & Associates. 2006g. *2005 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek & Associates. 2006h. *2005 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek & Associates. 2006i. *2006 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek & Associates. 2006j. *2006 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.



- Dudek & Associates. 2006k. *2006 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek. 2007b. *Newhall Ranch – Noise Levels Monitored Along SR-126*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek. August 2007.
- Dudek. 2007c. *Draft Middle Canyon Spring Survey and Status Report*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. August 2007.
- Dudek. 2007f. *2007 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2007.
- Dudek. 2007g. *2007 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2007.
- Dudek. 2007h. *2007 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2007.
- Dudek. 2018. *Focused California Gnatcatcher Survey, Entrada South Project Site, Los Angeles County, California*. August 6, 2018.
- Ecological Sciences. 2003a. “Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Oxnard, California: Ecological Sciences. August 31, 2003.
- Ecological Sciences. 2003b. “Results of Focused Arroyo Toad Surveys, Castaic Reservoir Site, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Oxnard, California: Ecological Sciences. August 27, 2003.
- Ecological Sciences. 2003c. “Results of Focused Arroyo Toad Surveys, Hart/Pony Baseball Site and Hart/Pony Commercial Site, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Oxnard, California: Ecological Sciences. August 21, 2003.
- Ecological Sciences. 2003d. “Results of Focused Arroyo Toad Surveys, NRMP Project Area, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Oxnard, California: Ecological Sciences. August 31, 2003.
- Ecological Sciences. 2003e. “Results of Focused Arroyo Toad Surveys, Round Mountain Site, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Oxnard, California: Ecological Sciences. August 25, 2003.

- Ecological Sciences. 2003f. "Results of Focused Arroyo Toad Surveys, Soledad Site, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Oxnard, California: Ecological Sciences. August 23, 2003.
- Ecological Sciences. 2004a. "Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Santa Paula, California: Ecological Sciences. August 11, 2004.
- Ecological Sciences. 2004b. "Results of Focused Arroyo Toad Surveys, Portions of Santa Clara River/South Fork, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Santa Paula, California: Ecological Sciences. August 21, 2004.
- Ecological Sciences. 2004c. "Results of Focused Arroyo Toad Surveys, NRMP Soledad/Riverpark Area, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences) to Susan Tebo (Impact Sciences). Santa Paula, California: Ecological Sciences. August 29, 2004.
- Ecological Sciences. 2004d. "Results of Focused Arroyo Toad Surveys, San Francisquito Creek, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (The Newhall Ranch and Farming Company). Santa Paula, California: Ecological Sciences. August 25, 2004.
- ENTRIX. 2006b. *Focused Special-Status Aquatic Species Assessment—Santa Clara River, Landmark Village Project, Newhall Ranch, California*. Prepared for The Newhall Land and Farming Company. Ventura, California: ENTRIX.
- ENTRIX. 2009. *Focused Special-Status Fish Species Habitat Assessment—Santa Clara River and Tributary Drainages, Newhall Ranch, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Ventura, California: ENTRIX.
- FLx. 2002a. *Rare Plant Surveys: Newhall Ranch Specific Plan Project Sites, Los Angeles County, California*. Prepared for Impact Sciences. Santa Barbara, California: FLx. September 2002.
- FLx. 2002b. *Rare Plant Survey for Helianthus sp., River Village and Water Reclamation Plant, Los Angeles County, California*. Prepared for Impact Sciences. Santa Barbara, California: FLx.
- FLx. 2004a. *Sensitive Plant Species Surveys: Santa Clara River, Newhall Ranch/Valencia Company Project Sites, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Santa Barbara, California: FLx. October 2004.
- FLx. 2004b. "Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area." Letter report from N. Gale and A.K. Parikh (FLx) to C. Perez (The Newhall Land and Farming Company). Santa Barbara, California: FLx. May 8, 2004.
- FLx. 2005. "Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area." Letter report from N. Gale and A.K. Parikh (FLx) to C. Perez (The Newhall Land and Farming Company). Santa Barbara, California: FLx. May 7, 2004.

- FLx. 2006a. "Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area." Letter report from N. Gale and A.K. Parikh (FLx) to C. Perez (The Newhall Land and Farming Company). Santa Barbara, California: FLx. May 7, 2006.
- Forde Biological Consultants. 2006. *Least Bell's Vireo and Southwestern Willow Flycatcher Presence/Absence Survey; Castaic Creek below Castaic Lagoon to halfway between Lake Hughes Road and Tapia Canyon Road, Castaic, Los Angeles County, California*. Prepared for Compliance Biology, Camarillo, California. August 14, 2006.
- Guthrie, D.A. 1991a. *Surveys for Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: Joint Science Department, Claremont Colleges.
- Guthrie, D.A. 1991b. *Surveys along Castaic Creek for Least Bell's Vireo*. Claremont, California: Joint Science Department, Claremont Colleges.
- Guthrie, D.A. 1992. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: Joint Science Department, Claremont Colleges.
- Guthrie, D.A. 1993a. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center.
- Guthrie, D.A. 1993b. *Bird Surveys along the Santa Clara River, 1993; Castaic Creek Downstream to just below Newhall Ranch*. Prepared for B. Braly (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. August 4, 1993.
- Guthrie, D.A. 1994a. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 5, 1994.
- Guthrie, D.A. 1994b. *Bird Surveys along the Santa Clara River, 1994; Castaic Creek Downstream to just below Las Brisas Crossing*. Prepared for B. Braly (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. July 5, 1994.
- Guthrie, D.A. 1995a. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 12, 1995.
- Guthrie, D.A. 1996a. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 10, 1996.
- Guthrie, D.A. 1996b. *Bird Surveys along the Santa Clara River, 1996; Castaic Creek Downstream to just below Las Brisas Crossing*. Prepared for J. Harter (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. July 11, 1996.

- Guthrie, D.A. 1997a. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. June 23, 1997.
- Guthrie, D.A. 1997b. *Bird Surveys along the Santa Clara River, 1997; Castaic Creek Downstream to just below Las Brisas Crossing*. Prepared for J. Harter (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. June 23, 1997.
- Guthrie, D.A. 1998a. *Bird Surveys along the Santa Clara River, 1998; Castaic Creek Downstream to just below Las Brisas Crossing*. Prepared for M. Subbotin (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. July 28, 1998.
- Guthrie, D.A. 1998b. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 28, 1998.
- Guthrie, D.A. 1999a. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 1999*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 26, 1999.
- Guthrie, D.A. 1999b. *Bird Surveys in the Proposed Riverwood Project Area, near Valencia, California*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 26, 1999.
- Guthrie, D.A. 1999c. *Bird Surveys along the Santa Clara River, 1999; Ventura County Line Downstream to just below Las Brisas Crossing*. Prepared for M. Subbotin (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. August 26, 1999.
- Guthrie, D.A. 2000a. *Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area near Valencia, California*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 17, 2000.
- Guthrie, D.A. 2000b. *Bird Observations for Spring 2000 in the Proposed Mesa Development near Valencia, California*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 17, 2000.
- Guthrie, D.A. 2000c. *Bird Surveys along the Santa Clara River, 2000; Mouth of Castaic Creek Downstream to the Los Angeles/Ventura County Line*. Prepared for M. Subbotin (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. August 2, 2000.
- Guthrie, D.A. 2000d. *Bird Surveys in the Proposed Magic Mountain Entertainment Project Area, near Valencia, California, 2000*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 17, 2000.
- Guthrie, D.A. 2000e. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2000*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 2, 2000.

- Guthrie, D.A. 2000f. *Bird Surveys of Castaic Junction, an Area on the North Side of the Santa Clara River at the Junction of State Route 126 and Interstate 5, near Valencia, California*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 17, 2000.
- Guthrie, D.A. 2001a. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2001*. Corrected version. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. September 14, 2001.
- Guthrie, D.A. 2002a. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2002*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 16, 2002.
- Guthrie, D.A. 2002c. *Bird Surveys along the Santa Clara River, 2002; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing*. Prepared for M. Subbotin (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. August 16, 2002.
- Guthrie, D.A. 2003a. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2003*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 28, 2003.
- Guthrie, D.A. 2004a. *Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas, near Valencia, California*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004b. *Bird Observations in the Commerce Center Project Site, near Valencia, California, 2004*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004c. *Bird Observations in the Stevenson Ranch, Phase 5 Area, near Valencia, California, 2004*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. July 2, 2004.
- Guthrie, D.A. 2004d. *Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas near Valencia, California*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004e. *Bird Observations for Spring 2004 in the Proposed Mesa East and West Development near Valencia, California*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004f. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2004*. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004g. *Bird Observations in the Proposed Magic Mountain Entertainment Project Area, near Valencia, California, 2004*. Revised. Prepared for M. Subbotin (Valencia Corporation). Claremont, California: W.M. Keck Science Center. August 24, 2004.



- Guthrie, D.A. 2004h. *Bird Surveys along the Santa Clara River, 2004; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing*. Prepared for M. Subbotin (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2005b. *Bird Surveys along the Santa Clara River, 2005; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing*. Prepared for M. Subbotin (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center.
- Guthrie, D.A. 2006a. *Bird Surveys along the Santa Clara River, 2006; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing*. Final. Prepared for M. Carpenter (The Newhall Land and Farming Company). Claremont, California: W.M. Keck Science Center. October 11, 2006.
- Guthrie, D.A. 2006b. *Bird Surveys of The Old Road Phase III Environmental Project Study Area, near Valencia, California, 2006*. Claremont, California: W.M. Keck Science Center. July 20, 2006.
- Guthrie, D.A. 2006c. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California*. Prepared for M. Carpenter (Valencia Corporation). Claremont, California: W.M. Keck Science Center. October 11, 2006.
- Haglund, T.R. 1989. *Current Status of the Unarmored Threespine Stickleback (Gasterosteus aculeatus williamsoni) along Portions of the Santa Clara River Drainage*. Prepared for The Newhall Land and Farming Company. Los Angeles: University of California.
- Haglund, T.R., and J.N. Baskin. 2000. *Fish and Wildlife Survey and Habitat Assessment of the Santa Clara River at Interstate 5*. Prepared for Environmental Planning Branch, California State Department of Transportation. Pomona: California State Polytechnic University. October 2000.
- Hayes, M.P., and M.R. Jennings. 1988. "Habitat Correlates of Distribution of the California Red-Legged Frog (*Rana aurora draytonii*) and the Foothill Yellow-Legged Frog (*Rana boylei*): Implications for Management." In *Proceedings of the Symposium on the Management of Amphibians, Reptiles, and Small Mammals in North America*, technical coordinators R. Sarzo, K.E. Severson, and D.R. Patton, 144–158. U.S. Forest Service General Technical Report RM-166.
- Huntley, C. 2010. "Re: Snail Methods, etc." Email from C. Huntley (Aspen) to P. Behrends (Dudek), A.C. Lynch (Sohagi Law Group), D. Bedford (CDFG), K. Drewe (CDFG), S. White (Aspen), M. Carpenter (The Newhall Land and Farming Company), S. Rojas (The Newhall Land and Farming Company), and S. Miller (Dudek). March 12, 2010.
- Impact Sciences. 2000. "Results of Focused Surveys for the Coastal California Gnatcatcher, ±156-Acre Project Site, Santa Clarita, Los Angeles County, California." Letter report from S.D. Cameron (Impact Sciences) to M. Weinstein (Science Applications International Corporation). Agoura Hills, California: Impact Sciences. July 7, 2000.
- Impact Sciences. 2001. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area, Valencia, California*. Prepared for Valencia Company. Agoura Hills, California: Impact Sciences. September 19, 2001.

- Impact Sciences. 2002. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California*. Prepared for The Newhall Land and Farming Company. Agoura Hills, California: Impact Sciences. May 21, 2002.
- Impact Sciences. 2003a. *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch, Valencia, California*. Prepared for The Newhall Land and Farming Company. Agoura Hills, California: Impact Sciences. January 24, 2003.
- Impact Sciences. 2003b. *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area, Valencia, California*. Prepared for The Newhall Land and Farming Company. Agoura Hills, California: Impact Sciences. June 2003.
- Impact Sciences. 2005. *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Draft. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences. May 2005.
- Impact Sciences. 2006a. *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences. October 2006.
- Impact Sciences. 2006b. *Newhall Ranch Oak Tree Survey*. Camarillo, California: Impact Sciences.
- Impact Sciences. 2006c. *Mission Village Oak Tree Report, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences. December 2006.
- Impact Sciences. 2006d. *Landmark Village Planning Area Oak Tree Report, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences. September 2006.
- Jepson Flora Project. 2022a. *Jepson eFlora*. [https://ucjeps.berkeley.edu/eflora/search\\_eflora.php?name=](https://ucjeps.berkeley.edu/eflora/search_eflora.php?name=).
- Jepson Flora Project. 2022b. "Asteraceae (Compositae)." In *Jepson eFlora*, Revision 10. Prepared by D.J. Keil. [https://ucjeps.berkeley.edu/eflora/eflora\\_display.php?tid=58](https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=58).
- Johnson, H.L. 2006. "Bat Survey; August 7–10, 2006 for the Newhall Ranch, Valencia, California." Letter report prepared by H.L. Johnson for G. Ainsworth (Impact Sciences). October 10, 2006.
- Labinger, Z., and J. Greaves. 1999A. *Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring: Restoration Phase of the ARCO/Four Corners January 17, 1994 Oil Spill on the Santa Clara River, California*. Draft. Prepared for the U.S. Fish and Wildlife Service. Goleta, California: Labinger Biological Consulting. March 1, 1999.
- Labinger, Z., J. Greaves, and D. Haupt. 1995. *Preliminary Results of Avian Surveys Following the January 17, 1994, ARCO/Four Corners Oil Spill on the Santa Clara River, California*. Draft. Goleta, California: Labinger Biological Consulting.

- Labinger, Z., J. Greaves, and D. Haupt. 1997A. *1996 Avian Survey Results following the ARCO/Four Corners Oil Spill (January 17, 1994) on the Santa Clara River, California*. Draft. Prepared for the U.S. Fish and Wildlife Service. Goleta, California: Labinger Biological Consulting. January 9, 1997.
- Labinger, Z., J. Greaves, and D. Haupt. 1997B. *Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring: Restoration Phase of the ARCO/Four Corners January 17, 1994, Oil Spill on the Santa Clara River, California*. Draft. Prepared for the U.S. Fish and Wildlife Service. Goleta, California: Labinger Biological Consulting. November 30, 1997.
- Land Design Consultants. 2007. *Entrada Oak Tree Report*. Prepared for Newhall Land and Farming Company. February 2007.
- Miller, S. 2007. Verbal communication from S. Miller (Dudek) to C. Ford (Dudek). November 2007.
- Niemela, C. 2009. Memo from C. Niemela (Bloom Biological) to Jesse Grantham (USFWS) regarding observations of California condor in Potrero Canyon in January 2009. March 11, 2009.
- Olson, G. 2007. Letter containing comments on the Draft Environmental Impact Report for Landmark Village. Letter from G. Olson (Audubon California) to D. Fierros (County of Los Angeles, Department of Regional Planning), January 19, 2007.
- PCR (Planning Consultants Research). 1998. "Results of Focused California Gnatcatcher Surveys for the West Creek/East Creek Project Site, Valencia, Los Angeles County." Letter report from S.G. Nelson (PCR) to D. Krofta (U.S. Fish and Wildlife Service). Santa Monica, California: PCR. August 25, 1998.
- Priest, J. 2007A. "Documentation of California Gnatcatcher Observation at Newhall, Valencia Commerce Center Project on 10/5/07." Memorandum from J. Priest (Dudek) to D. Crawford and R. Francis (Compliance Biology), October 8, 2007.
- RECON. 1999A. *Survey for Arroyo Southwestern Toad for Newhall Ranch*. Prepared for Newhall Ranch Company. San Diego, California: RECON. July 12, 1999.
- Richard Johnson & Associates. 2007. *Arborist Survey Report for Valencia Commerce Center VTPM 18108, Los Angeles County, California*. Prepared for Valencia Company, Valencia, California. April 3, 2007.
- Root, R.P. 2008. "Acknowledgement of Request for Formal Consultation on the Proposed Newhall Ranch Specific Plan, Santa Clarita, Los Angeles County, California." Letter from R.P. Root (U.S. Fish and Wildlife Service) to A.O. Allen (U.S. Army Corps of Engineers), November 12, 2008.
- SAIC (Science Applications International Corporation). 2003. "Results of Focused Coastal California Gnatcatcher Surveys for the Stevenson Ranch Phase V Project Site, Los Angeles, California." Letter report from M. Blain (SAIC) to R. Farris (U.S. Fish and Wildlife Service). September 3, 2003.
- Sandburg, N.H. 2001. "Field Summary of Santa Clara River Surveys for *Bufo californicus* and *Rana aurora draytonii*, May 8 through May 29, 2001." Letter report from N.H. Sandburg (Biological Consultant). Santa Barbara, California. June 6, 2001.

SMEA (San Marino Environmental Associates). 1995A. *Sensitive Aquatic Species Survey; Santa Clara River and San Francisquito Creek; Newhall Land and Farming Company Property; Los Angeles, California*. Final report. Prepared for M. Subbotin, Valencia Company by J.N. Baskin and T.R. Haglund. San Marino, California: SMEA. December 1995.

Stoeker, M., and E. Kelly. 2005. *Santa Clara River Steelhead Trout: Assessment and Recovery Opportunities*. Prepared for The Nature Conservancy and The Santa Clara River Trustee Council.

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

INTENTIONALLY LEFT BLANK



---

## **Appendix D**

### Project Mitigation Measures and Project Design Features



The Newhall Ranch Resource -Management and Development Plan (RMDP)/Spineflower Conservation Plan (SCP) Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) adopted in 2010 used mitigation measures already adopted under the Newhall Ranch Specific Plan Program EIR as revised (March 1999), as well as a set of additional mitigation measures to minimize impacts to biological resources. The following mitigation measures include measures from the Specific Plan and the Newhall Ranch RMDP/SCP EIS/EIR that apply to the Entrada South Project. The Specific Plan measures use the format “SP-4.6-XX,” whereas the RMDP/SCP EIS/EIR measures use the format “RMDP/SCP-BIO-XX.” An additional mitigation measure (ES/VCC-MM-BIO-1) specific to surveys and relocation of California glossy snake and one (ES/VCC-MM-BIO-2) specific to surveys for and avoidance of nests of Crotch’s bumble bee, two species that were not considered special-status species at the time of the analysis for the 2017 State-Certified EIR, are also included. In addition, one project design feature (ES-PDF-BIO-1) regarding a conservation easement over preserved streambeds and riparian areas within Unnamed Canyon 2 is included.

Note that the Newhall Ranch Specific Plan Program EIR predated approval of the SCP and associated incidental take permit (ITP) by CDFW. Therefore, many of the spineflower-related mitigation measures adopted under the Newhall Ranch Specific Plan Program EIR have been fully satisfied and/or superseded by preparation, approval and, in some cases, implementation of the SCP, and do not apply to the Entrada South Project.

## Specific Plan Program EIR Biology Mitigation Measures Applicable to the Entrada South Project

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.

*(This measure applies to the Entrada South Project without change.)*

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.

*(This measure applies to the Entrada South Project without change.)*

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.

*(This measure applies to the Entrada South Project without change.)*

- 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.

*(This measure applies to the Entrada South Project without change.)*

- 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.

*(This measure applies to the Entrada South Project without change.)*

- 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.

*(This measure applies to the Entrada South Project without change.)*

- 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.

*(This measure applies to the Entrada South Project without change.)*

- 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.

*(This measure applies to the Entrada South Project without change.)*

- SP-4.6-9 Monitoring reports for the mitigation site shall be reviewed by the permitting State and/or Federal agency.

*(This measure applies to the Entrada South Project without change.)*

- SP-4.6-10 Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan.
- (This measure applies to the Entrada South Project without change.)*
- 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.).
- (This measure applies to the Entrada South Project without change.)*
- 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).
- (This measure applies to the Entrada South Project without change. The recommended plant species in Specific Plan Table 2.6-1 are superseded by the CDFW-approved species specified in Mitigation Measure RMDP/SCP-BIO-4, Table 14.)*
- 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.
- (This measure applies to the Entrada South Project without change.)*
- 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.
- (This measure applies to the Entrada South Project without change.)*
- 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.
- (This measure applies to the Entrada South Project without change.)*



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 MM SP-4.6-1 through MM SP-4.6-11 and MM SP-4.6-13 through MM SP-4.6-16, above.
- Mitigation requirements for oak tree replacement are set forth in MM SP-4.6-48, below.

*(This measure applies to the Entrada South Project without change.)*

SP-4.6-27 Removal of grazing from the High Country SMA except for those grazing activities associated with long-term resource management programs, is a principal means of enhancing habitat values in the creeks, brushland and woodland areas of the SMA. The removal of grazing in the High Country SMA is discussed below under (b) 4. Long Term Management. All enhancement activities for riparian habitat within the High Country SMA shall be governed by the same provisions as set forth for enhancement in the River Corridor SMA. Specific Plan Table 2.6-3 of the Resource Management Plan provides a list of appropriate plant species for use in enhancement areas in the High Country SMA.

*(This measure applies to the Entrada South Project without change.)*

SP-4.6-28 Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources, shall be conducted pursuant to the Oak Resource Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.

*(This measure applies to the Entrada South Project without change.)*

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.

*(This measure applies to the Entrada South Project without change.)*

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.

*(This measure applies to the Entrada South Project without change.)*

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.

*(This measure applies to the Entrada South Project without change.)*

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.

*(This measure applies to the Entrada South Project without change except that the requirement for the Specific Plan to conform does not apply.)*

SP-4.6-56 All lighting along the perimeter of natural areas shall be downcast luminaries with light patterns directed away from natural areas.

*(This mitigation measure applies to the Entrada South Project without change.)*

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.

*This mitigation measure applies to the Entrada South Project without change, except that the reference to the Specific Plan does not apply.)*

SP-4.6-62 When a map revision or Substantial Conformance determination on any subdivision map or Conditional Use Permit would result in changes to an approved oak tree permit, then the oak tree report for that oak tree permit must be amended for the area of change, and the addendum must be approved by the County Forester prior to issuance of grading permits for the area of the map or CUP being changed.

*(This measure applies to the Entrada South Project without change.)*

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.

*(This mitigation measure applies to the Entrada South Project without change.)*

## RMDP/SCP Final EIS/EIR Biology Mitigation Measures Applicable to the Entrada South Project

RMDP/SCP-BIO-1: Mitigation Measures SP-4.6-1 through SP-4.6-16<sup>1</sup> 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 RMDP/SCP 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.<sup>2</sup>

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 subnotification 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

---

<sup>1</sup> SP-4.6 mitigation measures were previously adopted by the Newhall Ranch Specific Plan Program EIR (1999, 2003) and the EIS/EIR for the RMDP/SCP (2010).

<sup>2</sup> 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.

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 RMDP/SCP BIO-2 and RMDP/SCP BIO-10. The detailed wetlands mitigation plans shall provide for the 3:1 replacement of any southern California black walnut to be removed from the riparian corridor for individual projects. The plan shall be subject to the approval of CDFG and the Corps and approved prior to the impact to riparian resources. RMDP/SCP BIO-4 describes that the functions and values will be assessed for the riparian areas that will be removed, and RMDP/SCP BIO-2 and RMDP/SCP BIO-10 describe the replacement ratios for the habitats that will be impacted.

*(This measure applies to the Entrada South Project with the following exceptions and/or changes: approval of mitigation plans will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*

**RMDP/SCP-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 RMDP/SCP BIO-4 and MM SW-3 of Section 4.6 of the Final EIS/EIR) on the Project Site, or as allowed under RMDP/SCP 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 RMDP/SCP BIO-2b.

- b. For permanent and temporary impacts to CDFG jurisdiction, consistent with the subnotification, quantities of mitigation acreage required shall be calculated in accordance with the criteria below:
- If suitable mitigation sites have met success criteria (RMDP/SCP 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 13. 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 13 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 13 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 subnotification 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 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 one 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 13. CDFG Jurisdictional Permanent Impacts Mitigation Ratios**

Ratios Listed by Vegetation Types & Quality				
		(Mit. Ratio)	(Mit. Ratio)	(Mit. Ratio)
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
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 using the HARC methods described in Section 4.2, Geomorphology and Riparian Resources, of the RMDP/SCP EIS/EIR.
- \*\* MEDIUM reach value indicates a portion of the Santa Clara River or main tributary that scored between 0.4 and 0.79 Total Score using the HARC methods described in Section 4.2 of the RMDP/SCP EIS/EIR.
- \*\*\* LOW reach value indicates a portion of the Santa Clara River or main tributary that scored below 0.4 Total Score using the HARC methods described in Section 4.2 of the RMDP/SCP EIS/EIR.

*(This measure applies to the Entrada South Project with the following exceptions and/or changes: mitigation ratios will be applied when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. Mitigation sites may be located within the Entrada South Project Site and/or within the larger RMDP/SCP area, subject to the site approval process described in Mitigation Measure RMDP/SCP-BIO-3.)*

**RMDP/SCP-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 creek bed or other disturbance shall receive the highest level of priority for vegetation community restoration. Restoration sites may 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 RMDP/SCP BIO-12). Sites will be approved when the detailed wetlands mitigation plans are submitted to the Corps and CDFG as part of the subnotification letters submitted for individual projects. Status of the sites will be addressed through agency review of the annual mitigation status report and mitigation accounting form 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.

*(This measure applies to the Entrada South Project with the following exceptions and/or changes: mitigation site approval will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. The mitigation accounting form referenced in the measure is not required.)*

**RMDP/SCP-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 14 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 14. 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>

**Table 14. Potential Plant Species for Vegetation Community Restoration in the River Corridor SMA and Tributaries**

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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 subnotification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation status report and mitigation accounting form.

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: restoration plans will be reviewed and approved when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*

**RMDP/SCP-BIO-6:** The revegetation site will be considered “complete” upon meeting all of the following success criteria. In a subnotification letter, the applicant may request modification of success criteria on a project by project basis. Acceptance of such request will be at the discretion of CDFG and the Corps.

1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion.
2. The percent cover and species richness of native vegetation shall be evaluated based on local reference sites established by CDFG and the Corps for the plant communities in the impacted areas.
3. Native shrubs and trees shall have at least 80% 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 Plan<sup>3</sup> for Waters of the United States.

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: modification of success criteria may occur when the Applicant obtain permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. In addition, the HARC assessment may be replaced by another agency-approved method.)*

**RMDP/SCP-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 provided for in RMDP/SCP 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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-BIO-9:** In areas where invasive exotic plant species control is authorized by CDFG in lieu of other riparian habitat mitigation (RMDP/SCP 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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 Environmental Impact Report, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval. 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

---

<sup>3</sup> 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.

mitigation status report and mitigation accounting form, along with a reporting of the status of exotic vegetation treatment.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-BIO-12:** An annual monitoring report shall be submitted to the Corps and CDFG by April 1 of each year until satisfaction of success criteria identified in RMDP/SCP BIO-6, and consistent with the requirements of RMDP/SCP BIO-12. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed “in-lieu fees,” restoration methods, and vegetation community restoration performance standards. For active vegetation community creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; an accounting of colonization by native plants; and photographs. The report shall also include the mitigation account form (see RMDP/SCP BIO-11), which outlines account 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.

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: The functional assessment of the compensatory mitigation site may use a method other than the HARC assessment methodology, subject to the approval of the Corps and CDFW. The mitigation account form referenced in this measure is not required because the Entrada South Project will not utilize the RMDP or the permits issued for the RMDP.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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, containerized 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 RMDP/SCP BIO-2. The growth and survival of the replacement trees shall meet the performance standards specified in RMDP/SCP 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 RMDP/SCP BIO-6, RMDP/SCP BIO-11, and RMDP/SCP BIO-12.



*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: mitigation accounting in accordance with Mitigation Measure RMDP/SCP-BIO-11 is not required because the Entrada South Project will not utilize or require any permits issued for the RMDP.)*

**RMDP/SCP-BIO-16:** Vegetation communities temporarily impacted by the proposed Project shall be revegetated as described in RMDP/SCP 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 on 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 RMDP/SCP BIO-1, RMDP/SCP BIO-2, and RMDP/SCP BIO-6. Annual monitoring reports on the status of the recovery or temporarily impacted areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (RMDP/SCP BIO-11 and RMDP/SCP BIO-12).

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: mitigation accounting in accordance with Mitigation Measure RMDP/SCP-BIO-11 is not required because the Entrada South Project will not utilize or require any permits issued for the RMDP.)*

**RMDP/SCP-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 (RMDP/SCP 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 MM RMDP/SCP BIO-21 will be implemented for coastal scrub restoration.

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: approximately 178.6 acres of coastal scrub shall be preserved on lands identified in the CMIP to offset impacts to coastal scrub associated with development of the Entrada South Project.)*

**RMDP/SCP-BIO-21:** Supplemental restoration of coastal scrub shall be conducted as an adaptive management measure pursuant to RMDP-SCP 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 RMDP-SCP 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 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.

*(This measure applies to the Entrada South Project without change.)*

## RMDP/SCP-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 (RMDP/SCP BIO-22b) and the additional measures required by this EIS/EIR (RMDP/SCP BIO-2 for woodlands in jurisdictional streambeds and RMDP/SCP BIO-22c and RMDP/SCP 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 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 RMDP/SCP BIO-22b and RMDP/SCP 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 eight 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.
  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 (RMDP/SCP BIO-22b), 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 15.

**Table 15. Additional RMDP/SCP 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 (RMDP/SCP BIO-22b).

General performance standards for woodland creation or enhancement sites include the following:

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 trees 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 16.

**Table 16. 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 invasive plant inventory (Cal-IPC 2006, 2007) will not be present on the revegetation site at the time that project success is determined.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to preserve management and funding requirements of the approved SCP and spineflower ITP for the Entrada Spineflower Preserve.)*

**RMDP/SCP-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 implementation of spineflower preserve management as described in the SCP and all mitigation measures listed in this document.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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 RMDP/SCP 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 MM 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 five 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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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 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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

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

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-BIO-31:** Spineflower preserves shall be protected prior to clearing and during construction with temporary construction fencing as described in RMDP/SCP 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 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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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 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>).

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve, except that the current Cal-IPC website is [www.cal-ipc.org/ip/inventory/](http://www.cal-ipc.org/ip/inventory/).)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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 with MM 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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-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 MM SP-4.6-69). Storm drains and permanent structural BMPs shall be designed by a licensed civil engineer. Requirements of RMDP/SCP BIO-29 and RMDP/SCP 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.

*(This mitigation measure applies to the Entrada South Project without change in regard to the Entrada Spineflower Preserve.)*

**RMDP/SCP-BIO-40:** The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan (Dudek 2007c) shall be revised and submitted to CDFG for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The revised plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open space (i.e., the Salt Creek area or High Country SMA, 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 feet elevational difference from the mitigation site, unless otherwise approved by CDFG. Bulbs may be salvaged and transplanted

from slender mariposa lily occurrences to be lost; alternately, seed may be collected from protected occurrences, following CDFG-approved seed collection guidelines (i.e., MOU for rare plant seed collection). No bulbs will be translocated into areas within 300 feet of proposed or existing development. 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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 in the field for more than five days without participating in the WEAP. Night work and use of lights on equipment shall not be allowed unless CDFG approves of the night work and use of lights. Lighting shall not be used where threatened or endangered species occur. Lights shall be directed from natural areas and remain 200 feet away from natural areas unless otherwise approved by CDFG. The qualified biologist shall provide ongoing guidance to construction personnel and contractors to ensure compliance with environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following:

- Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements.
- A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of non-compliance with these acts;
- Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts);
- Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction limitations (e.g., limitations on nighttime work) will be provided to the environmental monitors and construction crews prior to ground disturbance. This applies to preconstruction activities, such as site surveying and staking, natural resources surveying or reconnaissance, establishment of water quality BMPs, and geotechnical or hydrological investigations;

- Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife;
- Review/designate the construction area in the field with the contractor in accordance with the final grading plan;
- Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected);
- Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity;
- Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas;
- Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented;
- To reduce the potential for the spread of 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.

*(This measure applies to the Entrada South Project without change.)*

RMDP/SCP-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.

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.

*(This measure applies to the Entrada South Project with the following exceptions and/or changes: replacement habitat also may be created within areas of the Entrada South Project Site not subject to development, where approved by CDFW.)*

**RMDP/SCP-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 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.

*(This measure applies to the Entrada South Project without change. Note that coast horned lizard and coastal western whiptail are referred to as Blainville's horned lizard and San Diegan tiger whiptail, respectively, in this document.)*

#### RMDP/SCP-BIO-55

- a. As a supplement to RMDP/SCP BIO-1 through RMDP/SCP 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, in the RMDP/SCP EIS/EIR). 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 RMDP/SCP BIO-1 through RMDP/SCP 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 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 RMDP/SCP 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.

*(This measure applies to the Entrada South Project without change. Figure 4.5-86, Alternative 2 Impacts to Least Bell's Vireo Habitat, is provided in the 2017 State-Certified EIR.)*

**RMDP/SCP-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.

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  $L_{eq}$  at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician.

If the noise meets or exceeds the 60 dBA  $L_{eq}$  threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dBA  $L_{eq}$  hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. The qualified biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to CDFG and USFWS.

For coastal California gnatcatcher, the applicant shall conduct USFWS protocol surveys in suitable habitat within the Project area and all areas within 500 feet of access or construction-related disturbance areas. Suitable habitats, according to the protocol, include “coastal sage scrub, alluvial fan, chaparral, or intermixed or adjacent areas of grassland and riparian habitats.” A permitted biologist shall perform these surveys according to the USFWS’ (1997a) Coastal California Gnatcatcher Presence/Absence Survey Guidelines. If a territory or nest is confirmed, the USFWS and CDFG shall be notified immediately. If present, a 500-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. No Project activities may occur in these areas unless otherwise authorized by USFWS and CDFG. Construction activities in suitable gnatcatcher habitat will be monitored by a full-time qualified biologist. The monitoring shall be of a sufficient intensity to ensure that the biologist could detect the presence of a bird in the construction area.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-BIO-57:** Thirty days prior to construction activities, a qualified biologist shall conduct CDFG protocol surveys to determine whether the western burrowing owl is present at the site. The surveys shall consist of three site visits and shall be conducted in areas dominated by field crops, disturbed habitat, grasslands, and along levee locations, or if such habitats occur within 500 feet of a construction zone. If located, occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If the burrowing owl is detected but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95).

Unless otherwise authorized by CDFG, a 500-foot buffer, within which no activity will be permissible, will be maintained between Project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or at CDFG’s discretion and based upon monitoring evidence, until the young owls are foraging independently.

Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 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.

*(This measure applies to the Entrada South Project without change. Note that in this document, the mountain lion is referred to as cougar.)*

**RMDP/SCP-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 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-BIO-68:** Any common or special-status species bat day roost sites found by a qualified biologist during pre-construction surveys conducted per RMDP/SCP 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 (RMDP/SCP 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.
- 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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 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 RMDP/SCP BIO-32 for dust control requirements related to spineflower preserves.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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).

*(This measure applies to the Entrada South Project without change, except that the current Cal-IPC website is <https://www.cal-ipc.org/plants/inventory/>.)*

**RMDP/SCP-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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the Entrada South Project without change with respect to modified tributaries or other potential habitat for the identified species within the Entrada South Project Site.)*

#### **RMDP/SCP-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 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 CDFW and USFWS. All condor sightings in the Project area will be reported to CDFW 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 1 hour before sunset to 1 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 CDFW 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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, storm drains, and any other BMP measures that apply to surface water entering the preserve areas.
6. Using drought-resistant plants in FMZs and minimizing irrigation to the extent feasible.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP-SW-3:** The applicant shall create or expand Corps jurisdictional wetlands on site, so that the acreage of wetlands on site would exceed the acreage that existed prior to Project implementation. In order to ensure that created wetlands persist in the long-term, wetlands shall be constructed in locations where suitable hydrology can be created by using existing streamflow, without the need for artificial water sources. New or expanded wetland areas shall be created in one or more of the following locations:

- The Salt Creek drainage within the High Country SMA or the Salt Creek area in Ventura County. This area is the first priority for creation of mitigation wetlands, as the entire watershed would be preserved in perpetuity. The lower reach of this drainage supports year-round surface flows, and the presence of an existing, high-quality wetland shows that the topographic and hydrologic conditions are suitable for the persistence of wetlands. Approximately 23.3 acres of new wetlands would be created in the Salt Creek drainage, unless it is determined that a lesser acreage would be sufficient to ensure that the project does not result in a net loss of federally protected wetlands.

- Lower or middle Potrero Canyon. These reaches support intermittent to perennial surface flows, and the broad, flat Potrero canyon bottom provides opportunities for expanded wetlands acreage through the creation of palustrine fringe wetlands. In the event that the proposed creation of 23.3 acres of wetlands in the Salt Creek watershed is insufficient to ensure that the proposed project does not result in a net loss of wetlands, any remaining mitigation acreage would be provided in these two locations.

Although the river supports substantial surface flows, with the exception of the conversion of portions of the existing agricultural fields to wetlands outside of the active channel area (above the ordinary high water mark), the creation of mitigation wetlands along the Santa Clara River mainstem is not proposed due to the extreme scouring that occurs within the mainstem at relatively frequent intervals. The geomorphic character of the river is derived from large flood events that move large amounts of sediment, scour vegetation, and reshape the active channel. Because of this, it is uncertain whether mitigation wetlands created along the river mainstem within the active channel would persist in the long run. However, existing agricultural fields along the Santa Clara River mainstem above the OHWM, Salt Creek, and Potrero Canyon locations offer ample opportunities to create the wetlands acreage necessary to mitigate the Project's impacts on federally protected wetlands. This mitigation measure would result in short-term adverse impacts associated with wetland creation, including construction-related noise, emissions from equipment; and loss of upland habitats in areas where wetlands creation is proposed.

*(This measure applies to the Entrada South Project without change, except that the mitigation acreage requirements in the measure do not apply because they indicate the minimum acreage required to compensate for wetlands impacts of the RMDP, which is not part of the current Project.)*

**RMDP/SCP-SW-4:** All areas where temporary construction impacts affect Corps or CDFG jurisdictional areas (generally, these are areas where impacts would occur due to the construction of Project facilities, but that are outside the permanent footprint of the actual facility), shall be revegetated with appropriate native vegetation after completion of construction in the area. A revegetation plan shall be prepared and implemented in accordance with the terms set forth in mitigation measures SP-4.6-1 through SP-4.6-15 and SP-4.6-63.

*(This measure applies to the Entrada South Project without change. Note that the process for verifying that revegetation plans comply with the terms set forth in Mitigation Measures SP-4.6-1 through SP-4.6-15 and SP-4.6-63 is implemented through Mitigation Measures RMDP/SCP-BIO-1, RMDP/SCP-BIO-3, and RMDP/SCP-BIO-12.)*

**RMDP/SCP-SW-6:** To the extent that on-site mitigation for impacts to jurisdictional tributary drainages is insufficient to meet the mitigation ratios required by revised Mitigation Measure BIO-2, then the remaining mitigation obligation shall be met at off-site properties within the Santa Clara River watershed, via use of one or more of the following mitigation approaches (at applicant's option): (a) creation of additional jurisdictional acreage in tributaries to the Santa Clara River occurring off site such that the mitigation site has an equal or greater value than the impacted site; (b) preservation of property containing jurisdictional tributaries to the Santa Clara River having an equal or greater value than the impacted site via a conservation easement or analogous method; or (c) habitat enhancement

activities in jurisdictional tributaries for the necessary acreage (e.g., exotic species removal under the terms and conditions specified in Mitigation Measures BIO-9 and BIO-10).

*(This measure applies to the Entrada South Project without change.)*

## Additional Project Design Features and Biology Mitigation Measures Specific to the Entrada South Project

ES-PDF-BIO-1: Within six months following completion of development within the Entrada South Project Site, the Applicant shall offer a conservation easement (as defined in Civil Code Section 815.1) over preserved streambeds and riparian areas within Unnamed Canyon 2 that are subject to CDFW's jurisdiction under Fish and Game Code Sections 1602 et seq. to ensure those areas are maintained in an undeveloped, open space condition in perpetuity. The conservation easement shall be offered to a qualified natural lands management organization or other entity qualified to hold conservation easements under Civil Code Section 815.3.

ES/VCC-MM-BIO-1: Prior to construction, the Applicant shall develop a relocation plan for California glossy snake to be incorporated into the relocation plan developed for other special-status reptile species, according to requirements in RMDP/SCP-BIO-54.

ES/VCC-MM-BIO-2: Should Project ground-disturbing activities be scheduled to occur during the Crotch's bumble bee colony active period, a qualified biologist shall conduct a habitat assessment to identify areas containing suitable habitat for Crotch's bumble bee. The qualified biologist shall conduct pre-construction surveys for Crotch's bumble bee in the areas identified, using a methodology (including number and timing of surveys) accepted by California Department of Fish and Wildlife (CDFW).

If Crotch's bumble bee are not detected, no further measures are required. A qualified biologist shall be present during ground-disturbing Project activities that occur during the Crotch's bumble bee colony active period.

If Crotch's bumble bee are detected:

1. Ground-disturbing activities shall be prohibited within 100 feet of any known, occupied Crotch's bumble bee nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The prohibition will continue for the duration of the Crotch's bumble bee colony active period, unless the nest is determined to be inactive by a qualified biologist or is relocated or removed with CDFW authorization.
2. The Project proponent shall prepare a Crotch's Bumble Bee Avoidance and Minimization Plan for review and approval by CDFW, which shall include additional, site-specific measures to avoid take of Crotch's bumble bee during Project ground-disturbing activities during the colony active period.

3. If the Crotch's bumble bee remains a candidate for listing, or has been listed, as endangered or threatened under the California Endangered Species Act ("CESA"), and Project activities will cause "take" of Crotch's bumble bee, as that term is defined for purposes of the CESA, the Project proponent shall obtain authorization for such take pursuant to Fish and Game Code Section 2081 or any other applicable provision of law providing such authorization.

## **Appendix 5.2b**

---

### Valencia Commerce Center Bio Report





---

Supplemental Biological Resources  
Technical Report

# Valencia Commerce Center Project

---

**AUGUST 2024**

*Prepared for:*

**THE NEWHALL LAND AND FARMING COMPANY**

25124 Springfield Court, Suite 300

Valencia, California 91355

*Contact: Alex Herrell*

*Prepared by:*

**DUDEK**

605 Third Street

Encinitas, California 92024

*Contact: Megan Enright*



---

# Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	iii
1 Introduction .....	1
2 Site Description .....	3
2.1 General Project Site Characteristics .....	3
2.2 Geologic and Soil Characteristics .....	3
2.3 Drainage Patterns .....	4
3 Description of the Modified Project .....	5
3.1 Disturbance Footprint .....	5
3.2 Land Uses .....	6
4 Methods and Survey Limitations.....	7
4.1 Literature Review.....	7
4.2 Field Reconnaissance Methods .....	7
5 Results of Surveys.....	15
5.1 Botany – Vegetation Communities and Floral Diversity .....	15
5.2 Zoology – Wildlife Diversity .....	18
5.3 Special-Status Biological Resources .....	19
5.3.1 Special-Status Plant Species .....	19
5.3.2 Special-Status Wildlife Species.....	23
5.3.3 Wildlife Corridors and Habitat Linkages .....	39
6 Effects of the Modified Project.....	41
6.1 Impacts to Vegetation Communities, Land Covers, and General Wildlife .....	41
6.1.1 Vegetation Communities and Land Covers .....	41
6.1.2 General Wildlife.....	49
6.2 Impacts to Special-Status Species .....	52
6.2.1 Special-Status Plant Species .....	52
6.2.2 Special-Status Wildlife Species.....	61
6.3 Impacts to Wildlife Corridors and Habitat Linkages .....	104
7 Cumulative Impacts .....	107
7.1 Methods of Analysis .....	107
7.2 Crotch’s Bumble Bee.....	112
7.3 California Glossy Snake .....	113
8 Thresholds of Significance .....	115

9	Acknowledgments.....	119
10	Documents Cited.....	121

## TABLES

1	Summary of Biological Surveys Conducted on the VCC Project Site, 2011 to Present.....	9
2	Vegetation Communities and Land Cover Types on the VCC Project Site .....	16
3	Vegetation Community Impacts – Modified Project Compared to 2017 Approved Project .....	43
4	Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in Study Area.....	108

## FIGURES

1	Project Location .....	135
2	2017 Approved Project.....	137
3	Modified Project .....	139
4	Project Comparison.....	141
5	Topography.....	143
6	Soils .....	145
7	Drainage Patterns .....	147
8a	2017 Approved Project Vegetation Communities and Land Cover Types.....	149
8b	Modified Project Vegetation Communities and Land Cover Types .....	151
9	Special-Status Plants.....	153
10a	2017 Approved Project Special-Status Wildlife on Site and Within 0.5 Miles of the VCC Project Site Prior to 2010 .....	155
10b	Modified Project Special-Status Wildlife on Site and Within 0.5 Miles of the VCC Project Site since 2010 .....	157
11	California Condor .....	159
12	South Coast Wildlands Open Space Connectivity and Linkage.....	161
13	RMDP/SCP Existing Regional Wildlife Connectivity Corridors .....	163
14	Oak Tree Impacts .....	165

## APPENDICES

A	Plant Compendium
B	Wildlife Compendium
C	Plant and Wildlife Species Potential to Occur
D	Project Mitigation Measures and Project Design Features
E	Significant Ecological Area Program Consistency Analysis for the Valencia Commerce Center Project (Submitted under Separate Cover)

---

# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
BMP	best management practice
CC&Rs	covenants, conditions, and restrictions
CCA	Candidate Conservation Agreement
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CLAOTO	County of Los Angeles Oak Tree Ordinance
CNDDDB	California Natural Diversity Database
CRPR	California Rare Plant Rank
dbh	diameter at breast height
DPS	distinct population segment
EIR	environmental impact report
EIS	environmental impact statement
ESA	federal Endangered Species Act
GAP	Gap Analysis Program
HUC	hydrologic unit code
I	Interstate
ITP	Incidental Take Permit
LEDPA	least environmentally damaging practicable alternative
NRMP	Natural River Management Plan
ORMP	Oak Resources Management Plan
PCE	Primary Constituent Element
PDF	project design feature
RMDP	Resource Management and Development Plan
SCP	Spineflower Conservation Plan
SEA	Significant Ecological Area
SMA	Special Management Area
SOAR	Save Open Space and Agricultural Resources
SR	State Route
USCRW	Upper Santa Clara River Watershed
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VCC	Valencia Commerce Center



INTENTIONALLY LEFT BLANK

---

# 1 Introduction

In the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP) Joint Environmental Impact Statement and Environmental Impact Report (EIS/EIR) (Corps and CDFG 2010), the California Department of Fish and Wildlife (CDFW) conducted environmental review of development facilitated by the RMDP/SCP within the Valencia Commerce Center (“VCC”) planning area. The 2010 EIS/EIR contained the best available biological information, including vegetation mapping and special-status plant and wildlife surveys, current through 2009. In June 2017, after publishing additional environmental analysis of certain impacts addressed in the 2010 EIS/EIR (2017 Final Additional Environmental Analysis), CDFW certified the EIS/EIR (SCH No. 2000011025; “State-Certified EIR”) and adopted findings affirming its approval of the RMDP/SCP and related CDFW permits. This Supplemental Biological Technical Report (“Report”) refers to the VCC development analyzed in the State-Certified EIR as the “2017 Approved Project.”

Subsequent to CDFW’s approval, The Newhall Land and Farming Company (“Newhall”), a wholly owned subsidiary of FivePoint Holdings, LLC, proposed minor changes and refinements to the 2017 Approved Project, referred to in this Report as the “Modified Project.” The proposed refinements reduce the permanent impacts of the Modified Project compared to the 2017 Approved Project, particularly in Hasley Canyon and Castaic Creek, the main streams that traverse the Project Site. The Modified Project also incorporates habitat restoration activities in the Castaic Creek drainage that will provide mitigation for unavoidable impacts to portions of the two streams. This Report has been prepared to support the preparation of a supplemental environmental review document that will evaluate the environmental effects of the changes incorporated in the Modified Project, as well as any relevant new information or changes in circumstances not reflected in the State-Certified EIR.

This Report incorporates and takes into account the analysis and mitigation measures related to biological resources in the State-Certified EIR. The State-Certified EIR provided a comprehensive analysis of potential impacts to biological resources, including effects on land cover types and natural vegetation communities, common wildlife species, special-status species, and wildlife movement, and provided mitigation measures to mitigate those effects to a less-than-significant level. To address the long-term nature of the RMDP/SCP and related permits, and the potential for site conditions and resources to exhibit natural variability over time, the State-Certified EIR conservatively assumed that sensitive resources documented to occur on site, or with known potential to occur on site, could be present during authorized development activities.

The State-Certified EIR included mitigation measures requiring assessments for those resources prior to development activities (e.g., pre-construction surveys), avoidance and minimization measures should the resources be present (e.g., construction buffers), and/or compensatory mitigation requirements where applicable. Thus, minor changes in the presence of habitat, plant species, or wildlife species documented in this Report that are consistent with the information and/or assumptions contained in the State-Certified EIR are presumed to be adequately addressed by the existing mitigation measures found in the State-Certified EIR and are not expected to require changes to the analysis in that document or to result in new or substantially more severe significant impacts to biological resources.

INTENTIONALLY LEFT BLANK

---

## 2 Site Description

### 2.1 General Project Site Characteristics

Both the 2017 Approved Project and the Modified Project involve development within the VCC planning area, which is referred to in this Report as the “VCC Project Site.”<sup>1</sup> The VCC Project Site is located in an unincorporated portion of the Santa Clara River Valley in northwestern Los Angeles County (Figure 1, Project Location). The VCC Project Site lies roughly in the northwest corner of the junction of Interstate (I) 5 and State Route (SR) 126, east of Commerce Center Drive. The northwestern edge of the City of Santa Clarita is located east of I-5 and the VCC Project Site.

The VCC Project Site supports direct disturbance from past sand and gravel mining, cattle grazing, and agricultural operations; of these, only agricultural operations are currently ongoing. Also, Southern California Edison and Southern California Gas Company have distribution lines and access roads within easements on site. The VCC Project Site is dominated by north-south-trending ridges that lie north of Castaic Creek, near the confluence with Hasley Canyon. Site elevations range from approximately 990 feet above mean sea level in the Castaic Creek bottom to approximately 1,210 feet above mean sea level at the top of the north-central ridge (Figure 5, Topography). The ridge is generally rounded at the top, with slopes that vary from steep to gentle. In addition to the ridge, Castaic Creek and Hasley Canyon wash areas on the VCC Project Site contain numerous benches and braided channels with associated riparian/wash scrub vegetation.

### 2.2 Geologic and Soil Characteristics

Geologically, the VCC Project Site is located within the Transverse Range geomorphic province of Southern California in the eastern portion of the Ventura depositional basin. This basin “was produced by tectonic downwarping in the geologic past to produce a large-scale synclinal structure in which a thick sequence of Cenozoic sediments has accumulated. These sediments have been lithified into a sequence of sedimentary rock that has subsequently been uplifted, tilted, and tectonically deformed” (Allen E. Seward 2002, 2004). The Holser fault traverses the Project Site (Allan E. Seward 2002, 2004).

Soils on the VCC Project Site include Castaic-Balcom silty clay loams (30% to 50%) eroded; Cortina sandy loam (0% to 2% slopes); Cortina sandy loam (2% to 9% slopes); Hanford sandy loam (0% to 2% slopes); Hanford sandy loam (2% to 9% slopes); Metz loamy sand (0% to 2% slopes); river wash, sandy alluvial land; Sorrento loam (2% to 5% slopes); and Zamora loam (2% to 9% slopes) (USDA 2022). The locations of the mapped soil polygons are shown on Figure 6, Soils.

---

<sup>1</sup> The VCC planning area as described in the State-Certified EIR included 321.3 acres, all of which was part of the 2017 Approved Project (Figure 2, 2017 Approved Project). The VCC tract map boundary has subsequently undergone minor modifications, including the addition of a portion of Castaic Creek and adjacent uplands in the northern portion of the site, and boundary adjustments located along Commerce Center Drive, SR-126, The Old Road, Live Oak Road, Biscailuz Drive, and the northern and eastern tract map edges, which are reflected in the Modified Project boundary (Figure 3, Modified Project). The revised tract map boundary includes 336.9 acres. Figure 4, Project Comparison, highlights the differences between the 2017 Approved Project and the Modified Project.

## 2.3 Drainage Patterns

The VCC Project Site is located within the Santa Clara River basin. The Santa Clara River flows to the south of the Project Site, from east to west. The watershed of the Santa Clara River basin is 1,634 square miles in area. The portion of the watershed in which the Project Site lies is located generally east of the Ventura/Los Angeles County line and is approximately 640 square miles in area, with the remainder of the watershed west of the Ventura/Los Angeles County line. It drains portions of the Los Padres National Forest from the north, the Angeles National Forest from the northeast and east, and the Santa Susana Mountains from the south and southeast. The VCC Project Site is located within a smaller, 202.4-square-mile (129,551-acre) tributary watershed.

Castaic Creek and Hasley Canyon run roughly north-south through the VCC Project Site and join at the southwestern end of the Project Site. Natural stream flows within Castaic Creek are regulated by a large earthen dam and reservoir located 4.5 miles upstream of the Project Site. Castaic Creek and Hasley Canyon eventually drain to the Santa Clara River (Figure 7, Drainage Patterns).



---

## 3 Description of the Modified Project

### 3.1 Disturbance Footprint

The Modified Project would incorporate several refinements to the 2017 Approved Project that would reduce the development impacts of the VCC Project overall, while incorporating habitat creation/enhancement activities that would provide compensatory mitigation for unavoidable project impacts.<sup>2</sup> These revisions include a change from permanent to temporary impacts within jurisdictional waters to reduce environmental impacts, particularly within Hasley Canyon; minor adjustments to the boundaries of the VCC Project Site itself; and the identification of specific portions of the Castaic Creek drainage where existing disturbed communities would be restored to riparian habitat for compensatory mitigation purposes. In addition to these enhancements, preparation of more detailed development plans to implement the conceptual land use plan that was analyzed in the State-Certified EIR has resulted in a more refined identification of areas within the VCC Project Site that would be impacted or avoided by development activities, including post-construction maintenance activities within Hasley Canyon and Castaic Creek. These refinements result in updates to the total acreage of permanent and temporary disturbance associated with the VCC Project but do not reflect changes in the VCC Project design or land use plan.

**Additional Avoidance of Stream Impacts.** The Modified Project includes incremental changes to the land use plan to better protect jurisdictional streams, including associated waters of the United States, and related biological resources within the VCC Project Site. The Modified Project would largely replace permanent impacts to Hasley Canyon, which traverses the VCC Project Site, with temporary impacts by limiting permanent fills to those necessary for bank stabilization, crossings, and other essential flood control and public safety purposes (Figure 4, Project Comparison). Portions of Hasley Canyon and Castaic Creek temporarily impacted during construction would be revegetated after construction pursuant to the Modified Project design. This environmentally beneficial modification would result in increased open space with restored drainage areas providing more habitat for species. Under Project Design Feature (PDF) VCC-PDF-BIO-1, jurisdictional streambeds and riparian habitat within Hasley Canyon and Castaic Creek would be permanently conserved following completion of VCC Project Site development by recording conservation easements over these areas.

**Minor Boundary Adjustments.** The footprint of the Modified Project reflects adjustments to the VCC tract map boundary along Commerce Center Drive, SR-126, The Old Road, Live Oak Road, Biscailuz Drive, Franklin Parkway, Thornton Lane, and along the northern and eastern VCC Project Site boundaries (Figure 3, Modified Project). These adjustments reduce the footprint of the VCC Project Site by 2.4 acres along Commerce Center Drive and SR-126, which were areas of permanent impact, and expand the boundary to incorporate an additional 1.7 acres along the

---

<sup>2</sup> The 2017 Approved Project described in this Report is defined as that portion of the “Approved Project” described in CDFW’s California Environmental Quality Act (CEQA) Findings of Fact and Statement of Overriding Considerations for the Master Streambed Alteration Agreement and Incidental Take Permits Associated with the RMDP and SCP, dated December 3, 2010 (CEQA Findings), that is located within the 2017 Approved Project Site as depicted on Figure 2. The Approved Project is further described in the Final RMDP/SCP and is depicted on Figure 8 of the Final RMDP/SCP. As explained in the CEQA Findings, the final Approved Project was consistent with the project analyzed in the RMDP/SCP Draft EIS/EIR with additional refinements to further reduce environmental impacts, which resulted from the U.S. Army Corps of Engineers’ efforts to identify the least environmentally damaging practicable alternative (LEDPA) for the RMDP. With respect to the VCC planning area, the Approved Project is substantially identical to the Draft LEDPA analyzed in the RMDP/SCP Final EIS/EIR. While the overall Proposed Project analyzed in the RMDP/SCP Draft EIS/EIR as Alternative 2 would have had significant and unavoidable impacts to certain biological resources, including San Fernando Valley spineflower, southwestern pond turtle, and San Emigdio blue butterfly, the Draft LEDPA analyzed in the RMDP/SCP Final EIS/EIR, and the final Approved Project, reduced those impacts to less than significant with mitigation.

northern, eastern, and southern boundaries of the VCC Project Site, west of I-5, that would be permanently impacted. In addition, the boundary adjustments add 4.6 acres of temporary impacts related to off-site improvements and utility connections to areas surrounding the VCC Project Site, with the addition of 11.4 acres of Castaic Creek and adjacent uplands to the VCC Project Site in the northeast portion of the site (Figure 3). No project impacts to Castaic Creek are proposed in this added area, because only a very small portion of this additional area, within and adjacent to Live Oak Road, would be impacted by development. Therefore, the addition of this area to the VCC Project Site would have very little effect on the disturbance footprint or impact acreage of the Modified Project.

**Mapping Refinements.** Implementation of the Modified Project reflects refinements to the mapping of areas within the VCC Project Site that are impacted, or avoided, by VCC Project development activities, which are reflected in the Modified Project land disturbance area (Figure 3). These more refined plans also identify specific areas outside the VCC tract map boundary where planned utility connections and minor roadway improvements would occur, consistent with the 2017 Approved Project plan for buildout of the VCC Project Site. These off-site improvements are associated with The Old Road, Commerce Center Drive, and Live Oak Road (Figure 3). Because most of the affected areas would continue to consist of the same land cover types that currently exist in those locations (i.e., developed or disturbed), these temporary impacts would not affect natural vegetation communities (Figure 3).

**Riparian Mitigation.** The Modified Project includes habitat creation/enhancement in areas adjacent to Castaic Creek, which would restore upland habitat of lesser value (such as short-podded mustard fields) to riparian habitat as compensatory mitigation for unavoidable impacts to aquatic resources and habitat from implementation of the Modified Project or other RMDP/SCP-authorized development (Figure 3). These areas are classified as temporary impacts, since the existing land cover would be replaced with native vegetation, and some areas may be re-contoured as part of the mitigation implementation. However, the net result of this work would be an improvement in biological values, as disturbed upland communities such as short-podded mustard stands would be restored to riparian habitat, or disturbed versions of natural communities would be enhanced or restored. Additional compensatory mitigation, including mitigation for impacts associated with the VCC Project, may occur in the areas conserved pursuant to VCC-PDF-BIO-1, consistent with RMDP/SCP Mitigation Measures RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10 and RMDP/SCP-BIO-12 through RMDP/SCP-BIO-16 (these RMDP/SCP mitigation measures will be referred to as simply “RMDP/SCP-BIO-XX” in the remainder of this Report).

The disturbance footprints of the 2017 Approved Project and the Modified Project are shown on Figures 3 and 4, respectively, and in comparison on Figure 4. As the two figures show, the Modified Project has a smaller permanent impact area than does the 2017 Approved Project: 189.8 acres, compared to 209.4 acres for the 2017 Approved Project. The Modified Project would have temporary impacts to approximately 35.9 acres for development activities, but much of this area would either be in already developed areas, such as roadways, or would be revegetated following construction and retained as undeveloped areas, thereby providing long-term benefits to biological resources. In addition to development impacts, the Modified Project would include temporary impacts to 5.3 acres for the habitat creation or enhancement described in the previous paragraph, which would also provide a net benefit to biological resources.

## 3.2 Land Uses

The State-Certified EIR analyzed the environmental impacts from development of 3.4 million square feet of industrial/business park on approximately 164 acres, approximately 144 acres of open space, and about 13.7 acres of public facilities. The Modified Project still includes 3.4 million square feet of industrial/business park development.

---

## 4 Methods and Survey Limitations

To evaluate whether the natural resources found or potentially occurring on the VCC Project Site have changed significantly compared to the information presented in the State-Certified EIR, Dudek reviewed various literature sources and databases, as well as the results of field surveys conducted after the surveys presented in the State-Certified EIR, as described in more detail below.

### 4.1 Literature Review

Dudek initially searched the technical literature and reviewed several available databases that were used to prepare the State-Certified EIR and that have been updated since the State-Certified EIR. The literature searches used for general floristic and special-status botanical resources present or potentially present in the VCC Project Site vicinity are described in the 2006 Sensitive Plant Survey Results for the Valencia Commerce Center Site, Los Angeles County, California (Dudek & Associates 2006a). For the analysis informing the State-Certified EIR, Dudek consulted Guthrie (2006) for information on special-status bird species and Ecological Sciences (2005) for information on the federally listed endangered arroyo toad (*Anaxyrus californicus*) along Castaic Creek.

In addition, for the previous analysis as well as the current analysis, the most recent versions of the California Natural Diversity Database (CNDDDB; CDFW 2024) and the California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2024) were reviewed for the following U.S. Geological Survey (USGS) 7.5-minute quadrangle maps: Newhall, Val Verde, Mint Canyon, Warm Springs Mountain, Whitaker Peak, Green Valley, San Fernando, Oat Mountain, and Santa Susana.

### 4.2 Field Reconnaissance Methods

Numerous biological surveys specific to the VCC Project Site have been conducted, including surveys conducted between 1988 and 2009 as part of the RMDP/SCP baseline data development in support of preparation of the State-Certified EIR. These included seven special-status plant surveys, vegetation mapping, a general wildlife survey, and focused surveys for riparian birds and arroyo toad (as cited in Dudek & Associates 2006b; Corps and CDFG 2010). The results are reported in the State-Certified EIR. Additional surveys have been conducted on the VCC Project Site since early 2010, including vegetation mapping, general plant surveys, and focused surveys for special-status/regulated plant and wildlife species. The surveys conducted on the VCC Project Site from 2010 to present provide additional and up-to-date project-specific information. Specifically, updated surveys were conducted to verify and/or update mapping of vegetation communities and land covers documented in prior reports. In addition, comprehensive surveys for special-status plant species were conducted in 2 years, including 2019 surveys (a year with above-average rainfall). Focused surveys for specific plant species were conducted as well, including annual surveys for San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) conducted as part of the SCP and surveys for slender mariposa lily (*Calochortus clavatus* var. *gracilis*) in 2022. The most recent comprehensive plant surveys were conducted in 2019, but since multiple rounds of comprehensive plant surveys have been conducted, including in 2003, 2004, 2015, and 2019, all returning similar results, it is very unlikely that additional surveys would identify any previously unreported special-status plant species; therefore, the 2019 results remain a valid indicator of the occurrence of special-status plants on site. Finally, surveys and/or habitat assessments were conducted for specific special-status wildlife species known to occur or with potential to occur on site, to provide up-to-date information relevant to the VCC Project's potential impacts to these species. Table 1 includes surveys that have been conducted within the VCC Project Site since 2011.

Note that for this Report no focused surveys were conducted for wildlife species that were not found during previous surveys or were considered to have low potential to occur (e.g., due to lack of suitable habitat or the site being outside a species' known range). Also, no focused surveys were conducted for (1) highly mobile species that may occur in the VCC Project area but are unlikely to be directly impacted (e.g., cougar [*Puma concolor*]), or (2) cryptic species unlikely to be detected even if present, as such surveys were not likely to produce meaningful data. The analysis regarding such species in the State-Certified EIR remains valid, and that document's avoidance/mitigation measures for such species remain applicable.

**Table 1. Summary of Biological Surveys Conducted on the VCC Project Site, 2011 to Present**

Survey Focus	Study Title	Survey Dates	Survey Methods
Vegetation Map Update	2015 Sensitive Plant Survey Results for the Valencia Commerce Center Project Site (Dudek 2016a)	May 2015	The vegetation map was updated by overlaying the existing polygons onto the latest available aerial photography, revised to match current vegetation signatures, and spot-checked in the field to confirm trends (Dudek 2016a). The vegetation map was further revised to reflect the wetlands delineation performed by URS in 2014.
	2019 Botanical Survey Results for the Valencia Commerce Center Project Site (Dudek 2019a)	May 2019	The entire Valencia Commerce Center (VCC) Project Site was reviewed in the field to determine whether significant changes had occurred since the previous vegetation map update.
General Special-Status Plants/San Emigdio Blue Butterfly Habitat Assessment	2015 Sensitive Plant Survey Results for the Valencia Commerce Center Project Site (Dudek 2016a)	May 2015	Focused plant surveys were conducted throughout the VCC Project Site by Dudek in 2015 and 2019. The surveys were floristic in nature and were conducted according to accepted protocols. The extent of all California Rare Plant Rank 1 and 2 species, as well as mainland cherry and Southern California black walnut, were recorded along with a count of individuals and other relevant information. Host plants for San Emigdio blue butterfly were recorded concurrent with these botanical surveys (Dudek 2016a, 2019a).
	2019 Botanical Survey Results for Valencia Commerce Center Site. (Dudek 2019a)	May 2019	
San Fernando Valley Spineflower ( <i>Chorizanthe parryi</i> var. <i>fernandina</i> )	2011 Sensitive Plant Survey Results for Valencia Commerce Center, Los Angeles County, California (Dudek 2012a)	August 2011	Focused plant surveys were conducted in areas supporting San Fernando Valley spineflower (spineflower) within the VCC Project Site. The outer perimeter of each spineflower polygon was searched in one continuous direction until return to the starting point, with plants being located within at least every 1 to 4 meters (3 to 13 feet) along the boundary. Points were manually stored with a Trimble GPS (which has submeter accuracy) to form the boundaries of the polygon. Each spineflower polygon was given a unique identifier (i.e., numbers and/or letters). Data were recorded using mobile data collection application for each of the spineflower polygons and included data on plant count or estimate, individual plant size, microhabitat, vegetation composition, and phenology (Dudek 2012a, 2012b, 2013, 2014a, 2015a, 2016b, 2017, 2018, 2019b).
	2012 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles, County, California (Dudek 2012b)	June 2012	
	2013 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles County, California (Dudek 2013)	May to September 2013	
	2014 Survey Results for San Fernando Valley Spineflower	May 2014	



**Table 1. Summary of Biological Surveys Conducted on the VCC Project Site, 2011 to Present**

Survey Focus	Study Title	Survey Dates	Survey Methods
	within the Spineflower Conservation Plan Area, Los Angeles County, California (Dudek 2014a)		
	2015 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan, Los Angeles County, California (Dudek 2015a)	May 2015	
	2016 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area (Dudek 2016b)	June 2016	
	2017 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area (Dudek 2017)	June 2017	
	2018 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2018)	June 2018	
	2019 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2019b)	June 2019	
	2020 Survey Results for San Fernando Valley Spineflower within the Spineflower	June 2020	Focused plant surveys were conducted in areas supporting San Fernando Valley spineflower within the Modified Project Site. Methods were similar to methods used previously but followed the

**Table 1. Summary of Biological Surveys Conducted on the VCC Project Site, 2011 to Present**

Survey Focus	Study Title	Survey Dates	Survey Methods
	Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2020)		SCP monitoring methods (McGraw 2020; Dudek 2020, 2021, 2022, 2023a, 2024a).
	2021 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2021)	May 2021	
	2022 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves (Dudek 2022)	May 2022	
	2023 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area outside of Actively Managed Preserves (Dudek 2023a)	June 2023	
	2024 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area outside of Actively Managed Preserves (Dudek 2024a)	May 2024	
Slender mariposa lily ( <i>Calochortus clavatus</i> var. <i>gracilis</i> )	2022 Focused Survey Results for Slender Mariposa Lily on the Valencia Commerce Center Project Site (Dudek 2023b)	April–May 2022	Surveys focused on identification of slender mariposa lily. Information regarding site-specific characteristics of occurrences was recorded, such as associated species; microhabitat; phenology; and cover of native, non-native, and bare ground for representative polygons (Dudek 2023b).

**Table 1. Summary of Biological Surveys Conducted on the VCC Project Site, 2011 to Present**

Survey Focus	Study Title	Survey Dates	Survey Methods
Oak Trees	Arborist Survey Report for Valencia Commerce Center VTPM 18108 Los Angeles County, California (sb horticulture 2015)	2015	Sb horticulture reevaluated the oak tree inventory originally conducted in 2007 by Richard Johnson & Associates. Diameter at breast height of oak trees and their health conditions were ascertained (sb horticulture 2015).
	Carlberg Associates	July and August 2017	Carlberg Associates' arborists conducted an oak tree inventory that supersedes sb horticulture (2015). The inventory was conducted over several days in July and August 2017.
	Carlberg Associates	June 2021	Carlberg Associates' arborists conducted an updated oak tree inventory on June 25, 2021, that superseded its previous inventory (Carlberg Associates 2021).
Crotch's bumble bee	2024 Crotch's Bumble Bee Reconnaissance Survey Report for the Valencia Commerce Center Project (Dudek 2024b)	July 2024	The survey method consisted of determining appropriate nectar/pollen resources and focusing survey effort in those locations. Biologists walked meandering transects through these resources with a goal of observing bumble bees and detecting bumble bee nest sites associated with small mammal burrows or other appropriate soil cavities. When a bumble bee was observed, photos were taken to allow for identification.
Aquatic Habitat Assessment	Results of 2019 Aquatic Habitat Assessment for Special-Status Species—Valencia Commerce Center, Castaic Creek (Compliance Biology 2019a)	July 2019	Pedestrian survey of Castaic Creek to assess habitat for native fish and other aquatic species, in Castaic Creek, between The Old Road and State Route 126 (Compliance Biology 2019a).
Aquatic and Semi-aquatic Species	Summary of Special-Status Biological Resource Surveys in Portions of Valencia Commerce Center Project Area (Compliance Biology 2024)	Spring and Summer 2024	Aquatic surveys completed or underway include arroyo toad, California red-legged frog, southwestern pond turtle, western spadefoot, and fish. The arroyo toad and California red-legged frog surveys followed USFWS protocols. Fish surveys were limited to visual surveys.
Riparian birds	Santa Clara River Riparian Bird Surveys. 2015 Final Report (Bloom Biological 2015)	April to July 2015	Biologists conducted protocol surveys for least Bell's vireo and southwestern willow flycatchers in the Natural River Management Plan (NRMP) area, the Resource Management and Development Plan (RMDP) area, and Castaic Creek within the VCC Project Site. Concurrently recorded observations of other special-status riparian bird species and brown-headed cowbird (Bloom Biological 2015; Woodstar Biological 2017, 2018).
	Santa Clara River and Major Tributaries. Riparian Bird Surveys: Valencia NRMP Areas, Newhall Ranch RMDP Areas, and Other	April to July 2017	

**Table 1. Summary of Biological Surveys Conducted on the VCC Project Site, 2011 to Present**

Survey Focus	Study Title	Survey Dates	Survey Methods
	Newhall Ranch Areas (Woodstar Biological 2017)		
	Santa Clara River and Major Tributaries. Riparian Bird Surveys: Valencia NRMP Areas, Newhall Ranch RMDP Areas, and Other Newhall Ranch Areas (Woodstar Biological 2018)	April to July 2018	
	2019 Riparian Birds Survey Report – Castaic Creek (Woodstar Biological 2019a)	April to July 2019	Biologists conducted protocol surveys for least Bell’s vireo and southwestern willow flycatcher along Castaic Creek from SR-125 upstream to I-5 (Woodstar Biological 2019a).
	Summary of Riparian Bird Surveys. Castaic Creek: Santa Clara River Confluence to I-5. Santa Clarita. Los Angeles County (Compliance Biology 2022a).	April to July 2022	Woodstar Biological LLC/Compliance Biology Inc. conducted surveys in spring 2022 for state and federally listed riparian bird species along Castaic Creek from the Santa Clara River Confluence to I-5 (Compliance Biology 2022a).
	Summary of Special-Status Biological Resource Surveys in Portions of Valencia Commerce Center Project Area (Compliance Biology 2024)	April to July 2024	Woodstar Biological LLC/Compliance Biology Inc. conducted surveys in spring 2024 for state- and federally listed riparian bird species along Castaic Creek from the Santa Clara River Confluence to I-5 (Compliance Biology 2024).
Coastal California Gnatcatcher	Focused California Gnatcatcher Survey, Valencia Commerce Center (Dudek 2014b)	October 2013 to March 2014	Dudek conducted focused protocol winter season surveys for the federally listed threatened coastal California gnatcatcher in three areas, one of which included all areas on the Project Site. Dudek conducted nine visits to each survey area (Dudek 2014b).
	Summary of California Gnatcatcher ( <i>Polioptila californica</i> ) Surveys, Valencia Commerce Center, Los Angeles County, Spring 2019 (Compliance Biology 2019b)	May to June 2019	Compliance Biology conducted focused protocol breeding season surveys for California gnatcatcher in a single survey area that included the Project Site (Compliance Biology 2019b, 2022b)
	Summary of California Gnatcatcher ( <i>Polioptila californica</i> ) Surveys: Valencia Commerce Center.	April to May 2022	

**Table 1. Summary of Biological Surveys Conducted on the VCC Project Site, 2011 to Present**

Survey Focus	Study Title	Survey Dates	Survey Methods
	Los Angeles County (Compliance Biology 2022b)		
	Focused California Gnatcatcher Survey Results for the Valencia Commerce Center Project, Los Angeles County, California (Dudek 2024c)	May to June 2024	Dudek conducted focused surveys in accordance with USFWS (1997) protocol, including six survey passes of the single survey area encompassing all suitable habitat on the VCC Project Site (Dudek 2024c).
Burrowing Owl	Wildlife Report for the Valencia Commerce Center Project Site, 2015, Los Angeles County, California (Dudek 2015b)	June 2015	Dudek conducted a single-pass pedestrian burrowing owl survey according to California Department of Fish and Wildlife protocol methods, walking parallel transects spaced a maximum of 20 meters (60 feet) apart, covering all suitable habitat on the site. Dudek recorded any burrowing owls as well as sign (scat, pellets, feathers) of burrowing owl, focusing on areas supporting suitable burrows (Dudek 2015b).
Grasshopper Sparrow and General Wildlife	Grasshopper Sparrow Surveys, Valencia Commerce Center, Los Angeles County, California (Dudek 2014c)	June 2013	Dudek conducted a focused survey for the special-status grasshopper sparrow, as well as other wildlife species, on the VCC Project Site in 2013. There is no accepted survey protocol for grasshopper sparrow. Dudek conducted two surveys in June during morning daylight hours (prior to 11:00 a.m.), walking through all areas of suitable habitat, listening and watching for grasshopper sparrows. The timing of the surveys coincided with the breeding period for grasshopper sparrows, when this species is regularly singing, but was after the period when most migrants are believed to pass through (Dudek 2014c).
American Badger	Wildlife Report for the Valencia Commerce Center Project Site, 2015, Los Angeles County, California (Dudek 2015b)	June 2015	Dudek performed single-pass pedestrian transect surveys providing 100% visual coverage of all suitable habitat on the site, conducting surveys concurrently with burrowing owl surveys where habitat overlapped. Surveys recorded the location of any badgers or badger burrows observed during surveys (Dudek 2015b).
Wildlife Movement	2013/2014 Wildlife Corridor Surveys for the Mission Village Project Site, Los Angeles County, California (Dudek 2016c)	September to November 2013, June and July 2015	Dudek installed wildlife cameras at 32 locations in along or near the Santa Clara River and Castaic Creek within the RMDP/Spineflower Conservation Plan area, including 8 within or immediately adjacent to the VCC Project Site. Data were collected at each location for approximately a month each in fall and summer (Dudek 2016c).

**Note:** VCC = Valencia Commerce Center.



---

## 5 Results of Surveys

### 5.1 Botany – Vegetation Communities and Floral Diversity

Vegetation mapping conducted for the State-Certified EIR was updated in May 2015 and revised to reflect a wetlands delineation performed by URS in 2014. In 2015, the vegetation mapping nomenclature was revised to reflect the September 2010 update to the List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database (CDFG 2010). The vegetation map presented in the State-Certified EIR was generally based on the List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database (CDFG 2003, 2007). The vegetation map was updated again in May 2019 to remap any observable changes that had occurred since the previous vegetation map update, but without changing the overall vegetation classification system.

Figure 8a, 2017 Approved Project Vegetation Communities and Land Cover Types, provides the results of the 2006 vegetation mapping for the 2017 Approved Project and Figure 8b, Modified Project Vegetation Communities and Land Cover Types, provides the results of the 2015 and 2019 updated vegetation mapping for the Modified Project.

Table 2 compares the vegetation community and land cover information for the VCC Project Site presented in the State-Certified EIR to the results of the updated vegetation mapping for the VCC Project Site and off-site improvements associated with the Modified Project. This comparison reflects both changes to the VCC Project footprint since the State-Certified EIR was prepared and changes in the vegetation communities and land cover types within that footprint. The updated results include new 2019 mapping of three vegetation communities considered sensitive by CDFW (2023a): valley oak woodland, scale broom scrub, and blue elderberry scrub.

Overall, there are currently 13.3 acres more natural or naturalized vegetation communities and 0.3 acres more man-made land cover types within the area affected by the Modified Project, compared to the resources within the VCC Project Site as described in the State-Certified EIR. This increase is mostly due to the inclusion of additional areas within the footprint of the Modified Project, such as the off-site improvement areas that have now been identified and the portion of Castaic Creek that has been included within the VCC tract map boundary, rather than new natural vegetation communities replacing man-made land cover types. In portions of the VCC Project Site common to both the 2017 Approved Project and the Modified Project, the Modified Project has 2.7 acres less of natural vegetation communities and 5.0 acres more man-made land cover types. While eight new vegetation community and land cover types have been mapped since the State-Certified EIR was prepared, consisting of short-podded mustard stand, disturbed California buckwheat scrub, valley oak woodland, scale broom scrub, blue elderberry stands, tamarisk thickets, disturbed rubber rabbitbrush scrub, and ornamental, none of these vegetation communities introduced a new species that had not been previously identified on site and these vegetation communities and land cover types do not provide suitable habitat for special-status species that were not already identified as having suitable habitat in the State-Certified EIR. In addition, these changes are within the normal range of variability expected in a natural environment due to factors such as wildfire, land use changes, vegetation colonization and succession, and annual weather conditions, such as drought or large storm events that may affect riparian resources. Overall, any given change in a General Physiognomic and Physical Location category is not more than approximately 20 acres, which is not significant in the context of an overall project site covering more than 300 acres. Therefore, the vegetation communities and land cover types remain substantially similar to that reported in the State-Certified EIR.

**Table 2. Vegetation Communities and Land Cover Types on the VCC Project Site**

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance/Association	State-Certified EIR Acreage <sup>a</sup>	Current Acreage <sup>b</sup>	Overall Change in Acreage <sup>c</sup>
Grass and Herb Dominated Communities	Non-Native Grassland	California annual grassland	71.1	50.8	-20.3
	Mustard Stand	Short-podded mustard stand	—	6.7	+6.7
Grass and Herb Dominated Communities Subtotal <sup>c</sup>			71.1	57.5	-13.6
Scrub and Chaparral	Coastal Scrub	California sagebrush scrub	35.6	33.1	-2.5
		California sagebrush-California buckwheat scrub (including disturbed forms)	6.0	12.1	+6.1
		Disturbed California buckwheat scrub	—	3.9	+3.9
Scrub and Chaparral Subtotal <sup>c</sup>			41.5	49.1	+7.6
Broad Leafed Upland Tree Dominated	Oak Woodland and Forest	Valley oak woodland	—	1.8	+1.8
Broad Leafed Upland Tree Dominated Subtotal <sup>c</sup>			—	1.8	+1.8
Riparian and Bottomland Habitat	Other Riparian/ Wetland	River wash	37.5	24.7	-12.8
		Scale broom scrub (including disturbed forms)	—	13.4	+13.4
		Herbaceous wetlands	0.9	—	-0.9
	Low to High Elevation Riparian Scrub	Mulefat scrub (including disturbed forms)	0.5	4.3	+3.8
		Blue elderberry stands	—	0.7	+0.7
		Tamarisk thickets	—	1.4	+1.4
		Disturbed rubber rabbitbrush scrub	—	1.1	+1.1
	Riparian Forest and Woodland	Southern cottonwood-willow riparian	63.4	74.1	+10.7
Riparian and Bottomland Habitat Subtotal <sup>c</sup>			102.2	119.7	+17.5

**Table 2. Vegetation Communities and Land Cover Types on the VCC Project Site**

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance/Association	State-Certified EIR Acreage <sup>a</sup>	Current Acreage <sup>b</sup>	Overall Change in Acreage <sup>c</sup>
Man-Made Land Cover Types		Agriculture	40.5	34.4	-6.1
		Developed	2.2	23.7	+21.5
		Disturbed land	63.7	47.5	-16.2
		Ornamental	—	1.1	+1.1
<i>Man-Made Land Cover Types Subtotal<sup>c</sup></i>			<i>106.4</i>	<i>106.7</i>	<i>+0.3</i>
<b>Total<sup>c</sup></b>			<b>321.3</b>	<b>334.7</b>	<b>+13.4</b>

**Notes:** VCC = Valencia Commerce Center; EIR = Environmental Impact Report.

- <sup>a</sup> Includes all areas within the footprint of the 2017 Approved Project, including 2.4 acres of developed land that are not a part of the Modified Project footprint due to tract boundary adjustments.
- <sup>b</sup> Includes all areas within the footprint of the Modified Project, including 15.8 acres that were not described in the State-Certified EIR, including 1.8 acres of California annual grassland, 2.5 acres of river wash, 6.2 acres of southern cottonwood-willow riparian forest, 4.0 acres of developed, and 1.3 acres of disturbed land.
- <sup>c</sup> Overall change in acreage, subtotals, and totals may not sum precisely due to rounding.

The VCC Project Site is situated at the nexus of the Transverse, Coast, and Sierra Nevada ranges; the Mojave Desert; and coastal plains (Hickman 1996). Ecotone areas such as this are often characterized by higher biological diversity than similar-sized areas within the core of a physiographic region (Boyd 1999); as such, a high diversity of plant species is expected. In total, 342 plant species were identified within the VCC Project Site in 2002, 2003, 2004, 2005, 2006, and 2007. Of these, 262 species (77%) are native to the region and 80 species (23%) are non-native (Dudek & Associates 2006b). From 2015 to 2019, approximately 52 additional species were identified. None of these newly identified species is special status. Given the relatively few newly identified species, floral diversity on site remains substantially similar to the conditions reported in the State-Certified EIR.

The cumulative list of plant species identified on the VCC Project Site in 2002–2007, 2015, and 2019 is provided as Appendix A, Plant Compendium.

## 5.2 Zoology – Wildlife Diversity

The VCC Project Site supports habitat for a diverse number of upland and riparian wildlife species. As of August 2024, a cumulative total of 161 wildlife species have been documented on the Project Site, including 143 bird species (mostly in the riparian habitat), 5 amphibians and reptiles, 8 fish, 7 mammals, 3 bumble bees, and 5 butterflies. The cumulative list of wildlife species identified on the VCC Project Site is provided as Appendix B, Wildlife Compendium. Based on the comparative vegetation and land cover types shown in Table 2, the wildlife habitats on the VCC Project Site remain substantially similar to those analyzed in the State-Certified EIR.

A direct comparison of results of wildlife surveys since the State-Certified EIR with previous surveys is not possible because of the differences in survey types and methods. Surveys prior to 2010 focused mostly on riparian birds and amphibians, and very little survey effort occurred in upland habitats on the VCC Project Site. However, wildlife surveys since the State-Certified EIR included surveys focused on several upland species had not previously been the subject of on-site surveys, although biologists also conducted additional surveys for riparian and aquatic species (Table 1). As a result, it would not be appropriate to draw the conclusion that the status of biological resources on the VCC Project Site has changed, compared to conditions described in the State-Certified EIR, based solely on a comparison of the number and diversity of the wildlife species on the VCC Project Site reported in the State-Certified EIR and those observed since then. However, the survey data do provide useful information for evaluating whether wildlife species previously documented to occur, or assumed to occur, within the VCC Project Site continue to be present or to have a high likelihood of occurring, and in some cases may confirm the occurrence of a species that was previously only assumed to occur.

As described in Section 5.1, Botany – Vegetation Communities and Floral Diversity, the VCC Project Site currently supports vegetation communities similar to those mapped on the site in 2015 at the level of General Physiognomic and Physical Location. Although there have been some changes in the types of natural communities present on the VCC Project Site, as described above, the portions of the VCC Project Site common to both the 2017 Approved Project and the Modified Project have experienced a reduction in natural vegetation communities, overall, of only 2.7 acres, or about 1% of the site. Therefore, the changes do not materially affect the quality and quantity of wildlife habitat provided on site. The grassland, shrubland, and riparian vegetation present within the VCC Project Site, as well as the intermittent aquatic habitat associated with Castaic Creek and the 1.8 acres of newly mapped oak woodland, continue to provide a diversity of suitable habitats for a large number of wildlife species. Based on the comparison shown in Table 2, the wildlife habitats within the VCC Project Site remain substantially similar to those analyzed in the State-Certified EIR.

## 5.3 Special-Status Biological Resources

### 5.3.1 Special-Status Plant Species

The State-Certified EIR reported the following special-status plant species as occurring on the VCC Project Site: San Fernando Valley spineflower (spineflower), slender mariposa lily, Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), undescribed everlasting (*Gnaphalium* sp. *nova*), Peirson's morning glory (*Calystegia peirsonii*), and mainland cherry (*Prunus ilicifolia* ssp. *ilicifolia*). The Coulter's goldfields were likely introduced as part of a hydroseed mix for erosion control and have not been observed since 2006; therefore, this subspecies is not further addressed in this Report. The undescribed everlasting has since been described as white rabbit-tobacco (*Pseudognaphalium leucocephalum*). Since 2010, Southern California black walnut (*Juglans californica*) has been recorded on site. Based on the number of surveys conducted on the VCC Project Site, no other special-status plant species have a moderate or high potential to occur. The locations of California Rare Plant Rank (CRPR) 1 and 2 special-status plants on the VCC Project Site are shown on Figure 9, Special-Status Plants.<sup>3</sup> Appendix C, Plant and Wildlife Species Potential to Occur, lists all species observed in the RMDP/SCP area, according to the State-Certified EIR, and notes species included or not included in this analysis.

#### 5.3.1.1 San Fernando Valley Spineflower

Spineflower is state listed as endangered and is a CRPR 1B.1 species. Spineflower occurs within the VCC Project Site, as well as in the adjacent Newhall Ranch Specific Plan (Specific Plan) area and the Entrada South Project Site, as described in the State-Certified EIR. All of these areas are within the area covered by the approved SCP.

Surveys for spineflower were conducted throughout the VCC Project Site, as well as in the Specific Plan area and Entrada South Project Site, annually from 2002 through 2007. As reported in the State-Certified EIR, population counts and estimates for spineflower have varied widely over survey years on the VCC Project Site, as well as throughout the SCP area. Estimates of the number of spineflower individuals on the VCC Project Site have ranged from 60 individuals in 2007 to 170,181 individuals in 2003.

Surveys conducted in 2011–2024, pursuant to the SCP, generally reflect spineflower populations that vary within the range recorded prior to 2011, despite a multi-year drought between 2012 and 2016. Estimates of the number of spineflower individuals on the VCC Project Site have ranged from 336 individuals in 2012 to 21,638 individuals in 2015. Methods used to record spineflower in 2020 through 2024 did not provide an estimated number of individuals. Similar magnitudes of population fluctuations, largely related to the amount of annual rainfall, have been observed throughout the SCP over the same period.

Under the SCP and the associated Incidental Take Permit (ITP), Newhall is required to undertake a number of conservation activities for spineflower, including permanently conserving seven areas containing approximately 75% of the existing spineflower occurrences within the SCP area, funding the long-term management of those areas, and funding the long-term management of the spineflower population at the former Ahmanson Ranch (also

<sup>3</sup> The California Native Plant Society provides a ranking system for rare plants. Those with a CRPR of 1A are extirpated or extinct. Those plants with a CRPR of 1B are considered rare, threatened, or endangered in California or elsewhere. Of those, species with a threat rank of 0.1 (1B.1 plants) are “seriously threatened” in California and species with a threat rank of 0.2 (1B.2 plants) are moderately threatened in California. Plants with a CRPR of 2 are rare, threatened, endangered, or extirpated in California, but common elsewhere. CRPR 2A plants are presumed extirpated in California, while CRPR 2B plants are rare, threatened, or endangered in the state.



known as Laskey Mesa).<sup>4</sup> Newhall has already carried out many of these activities, including granting conservation easements over all seven spineflower preserves, providing approximately \$4 million in endowments for management of spineflower preserves, and providing an additional \$1.15 million for management of the Laskey Mesa spineflower population.

Newhall has also entered into a Candidate Conservation Agreement (CCA) for spineflower with the U.S. Fish and Wildlife Service (USFWS), as contemplated in the State-Certified EIR. Under the CCA, Newhall has committed to conserving six additional areas within the species' historical range that contain potentially suitable habitat for spineflower, and introducing spineflower to the additional areas, with the goal of establishing new, self-sustaining spineflower populations to increase the number and geographic distribution of such populations. Although these activities are not required as mitigation for impacts of the VCC Project or of SCP-authorized development, they provide additional benefits to spineflower and enhance the status of the species.

When the State-Certified EIR was prepared, spineflower was a candidate for listing under the federal Endangered Species Act (ESA). In September 2016, USFWS issued a proposed rule to list the spineflower as threatened under the ESA. However, in March 2018, USFWS withdrew the proposed rule and found that listing of spineflower was not warranted, taking into account ongoing conservation measures for the species, including the SCP, as well as the CCA entered into with Newhall.

Overall, taking into account SCP-required measures and the voluntary conservation activities under the CCA, the status of spineflower remains the same or improved compared to its status as analyzed in the State-Certified EIR. Its regulatory status is also similar, as it remains listed as endangered under the California Endangered Species Act (CESA).

### 5.3.1.2 Slender Mariposa Lily

Slender mariposa lily is a CRPR List 1B.2 plant but is not listed federally or by the state. This species is typically found in chaparral, coastal scrub, and grasslands (CNPS 2024). Populations of this species have been documented in the vicinity and on the VCC Project Site. Within the VCC Project Site, the slender mariposa lily was found primarily on steep north-facing slopes in California sagebrush scrub (Dudek 2006a). As reported in the State-Certified EIR, the documented population varied from 116 to 997 individuals between 2003 and 2005. The mapped acreage of this species within the VCC Project Site as reported in the State-Certified EIR was 3.3 acres.

In 2015, botanical surveys were conducted on the VCC Project Site (Dudek 2016a). A total of approximately 3.7 acres of slender mariposa lily was mapped. The number of individuals recorded totaled approximately 320 individuals. In 2019, botanical surveys were conducted over the entire VCC Project Site (Dudek 2019a). In 2019, a total of 0.1 acres of slender mariposa lily was recorded, totaling approximately 155 individuals. In 2022, focused surveys for slender mariposa lily were conducted over all of the undeveloped portions of suitable habitat within the VCC Project Site (Dudek 2023b). In 2022, a total of 0.8 acres of slender mariposa lily was recorded, numbering approximately 1,290 individuals. Surveys conducted in 2015, 2019, and 2022 increased the total cumulative occupied footprint within the VCC Project Site by 1.7 acres, for a total cumulative occupied acreage of 5.0 acres.<sup>5</sup> Overall, the 2015, 2019, and 2022 survey results are consistent with expectations based on the information

---

<sup>4</sup> None of the spineflower preserves is located within the VCC Project Site.

<sup>5</sup> As noted in the State-Certified EIR, detection of individuals emerged from bulbs is related to annual environmental conditions such as rainfall amounts, timing, and extent of browsing by rodents, deer, and rabbits prior to flowering. By definition, cumulative acreage of occupied habitat increases when the species is observed in a new location but does not decrease even when the species is no longer observed in a location where it was formerly known.

presented in the State-Certified EIR and the known life history of the species in the vicinity of the VCC Project Site, and do not provide evidence of a material change in the status of slender mariposa lily within the VCC Project Site compared to the analysis in the State-Certified EIR.

### 5.3.1.3 Peirson's Morning Glory

Peirson's morning-glory is a CRPR 4.2 plant but has no state or federal status. This species is typically found in chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, and grasslands (CNPS 2024). The State-Certified EIR reported that Peirson's morning-glory was observed during surveys from 2003 to 2006 on the VCC Project Site. Given the low sensitivity status of the species, the exact locations of individuals of this species within the Project Site were not mapped.

Peirson's morning-glory was not observed during surveys in 2015 but was observed during surveys in 2019. The locations of this species were not mapped due to its low sensitivity.

Suitable habitat for Peirson's morning-glory includes chaparral, coastal scrub, and grassland vegetation communities. Suitable habitat for Peirson's morning-glory under the 2017 Approved Project was 112.6 acres, compared to 106.5 acres under the Modified Project, a 5% decrease. Overall, the status of Peirson's morning-glory in the VCC Project Site has not changed significantly compared to the information presented in the State-Certified EIR.

### 5.3.1.4 Mainland Cherry

Mainland cherry has no state or federal sensitivity status, but it is locally protected through the County of Los Angeles ("the County"). Mainland cherry occurs on the VCC Project Site and is known in the vicinity. Given the low sensitivity status of the species, individual mainland cherry trees were not mapped prior to 2010.

More recent surveys have mapped locations of mainland cherry with a minimum diameter at breast height (dbh) and outside of jurisdictional areas. In 2015, a single mainland cherry individual with a dbh greater than 1 inch was documented on the VCC Project Site (Dudek 2016a). The mainland cherry on site occurs east of the road that runs north-south between Castaic Creek and Hasley Canyon. No additional mainland cherries were documented on the VCC Project Site in 2019 (Dudek 2019a).

Overall, the status of mainland cherry in the VCC Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.1.5 Southern California Black Walnut

Southern California black walnut ("California black walnut" in the State-Certified EIR) is a CRPR 4.2 plant but has no state or federal status. This perennial deciduous tree occurs in alluvial chaparral, cismontane woodland, coastal scrub, and riparian woodland in Southern California (CNPS 2024). Southern California black walnut was observed during surveys for the VCC Project Site conducted from 2002 to 2007 in support of the State-Certified EIR (Dudek & Associates 2006b; Dudek 2007). However, given the low sensitivity status of the species, the exact locations of all individual Southern California black walnut trees were not mapped.

More recent surveys have mapped locations of individual Southern California black walnut trees with a minimum dbh of 1 inch. Four individual Southern California black walnuts were mapped just north of the agricultural field in the eastern portion of the VCC Project Site in 2015 and 2019.

#### 5.3.1.6 White Rabbit-Tobacco

White rabbit-tobacco is a CRPR List 2B.2 plant but is not listed federally or by the state. This species is typically found in chaparral, cismontane woodland, coastal scrub, or riparian woodland with sandy or gravelly substrates (CNPS 2024). White rabbit-tobacco on the VCC Project Site was originally reported as undescribed everlasting (*Gnaphalium* sp. *nova*). It was believed that plants in Southern California are distinct from those farther east and should be considered a separate species due to several differences in plant structure (stature, pubescence, and phyllary characters; Dudek & Associates 2004) and its geographic distribution. However, the plants more recently have been described as white rabbit-tobacco by David Keil, the curator of vascular plants at California Polytechnic State University, San Luis Obispo, and author of the Asteraceae treatment in the Jepson Flora Project (2019).

As reported in the State-Certified EIR, white rabbit-tobacco was documented within the VCC Project Site during the 2004, 2005, and 2007 field seasons. During the 2004 surveys, about 270 individuals were observed within the VCC Project Site. In 2005, about 65 individuals were recorded on the VCC Project Site. During 2007 surveys, approximately 350 individuals were found on the VCC Project Site.

Since the fieldwork that was conducted for the State-Certified EIR, comprehensive botanical surveys have been conducted on the VCC Project Site in both 2015 and 2019. There were approximately 7,000 to 9,000 individuals recorded on site in 2015. In 2019, there were approximately 3,410 individuals within 3.2 acres.

#### 5.3.1.7 Oak Trees

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

Carlberg Associates updated the oak tree inventory in June 2021. The State-Certified EIR reported a total of 32 oak trees, including 1 heritage oak, within the VCC Project Site. These oak trees included 29 valley oaks (*Quercus lobata*) and 3 MacDonald oaks (*Q. ×macdonaldii*). According to updates to the oak tree inventory in 2021, a total of 28 oak trees, including 1 heritage oak, occur on the VCC Project Site (Carlberg Associates 2021).<sup>6</sup> Changes from the oak data supporting the State-Certified EIR resulted from the passage of time, drought conditions, fire impacts, and changes in the geographic scope of the Project Site boundaries (Carlberg Associates 2019, 2021). Of the 28 oak trees, 25 are valley oaks and 3 are hybrid valley oaks (*Quercus lobata* × *Q. douglasii*). Despite a decrease in the number of oak trees recorded, the overall status of oaks relative to the VCC Project Site has not changed significantly from that reported in the State-Certified EIR.

---

<sup>6</sup> An additional six oak trees are dead, according to the oak inventory, including four valley oaks and two valley oak hybrids (Carlberg Associates 2021). No mitigation is proposed for dead trees, so they are not included in this analysis.

### 5.3.2 Special-Status Wildlife Species

This section discusses the status of special-status wildlife species that have been documented to occur on or in the vicinity of the VCC Project Site, or have the potential to occur there, and that meet at least one of the following criteria: (1) the species is state and/or federally listed as threatened or endangered; (2) the species has been listed, proposed for listing, or petitioned for listing as threatened or endangered since its analysis in the State-Certified EIR; or (3) updated scientific studies suggest that the species may be more sensitive than it was considered in the State-Certified EIR or the species is otherwise considered to have heightened sensitivity. Species meeting these criteria include arroyo chub, Santa Ana sucker, southern steelhead (*Oncorhynchus mykiss irideus*), unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), arroyo toad, western spadefoot (*Spea hammondi*), California legless lizard (*Anniella* spp.), southwestern pond turtle (*Actinemys pallida*), burrowing owl (*Athene cunicularia*), California condor (*Gymnogyps californianus*), coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), tricolored blackbird (*Agelaius tricolor*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), cougar, Crotch's bumble bee (*Bombus crotchii*), and California glossy snake (*Arizona elegans occidentalis*). With two exceptions, all of these species were analyzed in the State-Certified EIR. The two exceptions are Crotch's bumble bee, which was recently designated a candidate for listing as endangered under CESA, and California glossy snake, which was designated as a California Species of Special Concern by CDFW in 2016.

As shown in Table 1, focused surveys were conducted within the VCC Project Site for grasshopper sparrow (*Ammodramus savannarum*) and American badger (*Taxidea taxus*), in addition to surveys for the species listed above. Surveys for both grasshopper sparrow and American badger were negative. In addition, neither species is listed, proposed for listing, or expected to be listed in the foreseeable future. Therefore, these species do not meet the criteria for consideration in this Report and are not discussed further.

The total acreages of suitable habitat on the VCC Project Site for most of the species listed above have changed somewhat, compared to the information presented in the State-Certified EIR, due to minor changes in the footprint of the VCC Project Site itself and due to changes in the vegetation communities occurring within the VCC Project Site. Section 5.1 describes these vegetation changes. Table 2 compares the acreages of vegetation communities and land covers analyzed in the State-Certified EIR with the current acreages.

This section discusses whether the status of each species has changed since the analysis for the State-Certified EIR, including noting any new occurrences on the VCC Project Site, and also discusses the status of two species not considered special-status species at the time of the analysis for the State-Certified EIR: Crotch's bumble bee and California glossy snake. To inform the discussion of each species' potential to occur, this section also includes occurrences outside the tract boundary when relevant to updating the potential occurrence on the VCC Project Site. Figure 10a, 2017 Approved Project Special-Status Wildlife on Site and within 0.5 Miles of the VCC Project Site prior to 2010, and Figure 10b, Special-Status Wildlife on Site and within 0.5 Miles of the VCC Project Site since 2010, show the locations of special-status wildlife species observed on and near the VCC Project Site. Appendix C includes tables for special-status wildlife species observed and special-status wildlife species considered to have potential to occur, in the State-Certified EIR, with explanations of why each species was included or was not included in this analysis. Common wildlife species, although not discussed individually in this Report, are addressed in Section 6.1.2, General Wildlife.

### 5.3.2.1 Crotch's Bumble Bee

Crotch's bumble bee recently became a candidate for listing as endangered under CESA. It formerly ranged throughout much of Central and Southern California, along the Central and Southern California coasts, through the Central Valley, and in the surrounding foothills. However, it now appears to be absent from much of its former range, and its population appears to have declined drastically, especially in its former stronghold in the Central Valley (Xerces Society et al. 2018; CDFW 2019). The Xerces Society, Defenders of Wildlife, and the Center for Food Safety petitioned the California Fish and Game Commission to list Crotch's bumble bee and three other species in the genus *Bombus* under CESA in October 2018, citing a "significant reduction in both the range and relative abundance" of the four species (Xerces Society et al. 2018). In April 2019, CDFW (2019) concluded that the petition provided sufficient scientific information to indicate that the petition action may be warranted, and CDFW recommended that the California Fish and Game Commission accept the petition for further evaluation. In June 2019, the Fish and Game Commission officially accepted this recommendation, making Crotch's bumble bee and the three other species candidate species for listing as endangered. Subsequent to the Commission's determination, a consortium of agricultural and pesticide industry interests mounted a legal challenge to the species' candidacy that led to a November 2020 court ruling that insects could not be listed under CESA. But this ruling was overturned on appeal to the Third District Court of California in May 2022, a decision upheld when the state supreme court elected not to review the decision in September 2022. Therefore, Crotch's bumble bee and three other bumble bee species were restored to state candidate status.

Crotch's bumble bee is a habitat generalist. In general, the species has the potential to occur in any native vegetation community or non-native grassland supporting suitable nesting microhabitats and floral resources (CDFW 2021). Queens emerge first from hibernation and are active from February to early October (Thorp et al. 1983). The flight period for workers is from March through August (Thorp et al. 1983; CDFW 2023b). Daughter queens (gynes) usually leave the nest by September and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to other suitable areas beyond that have suitable hibernacula resources.

Because of its short tongue, Crotch's bumble bee is best suited to foraging at open flowers with short corollas. Data from a variety of resources included observations most commonly associating the species with plants, in descending order based on number of observations, from the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae (Richardson et al., as cited in Xerces Society et al. 2018). Williams et al. (2014) cited the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* as example food plants. The species nests in microhabitats that include small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, rock walls, and brush piles. Little is known about winter hibernacula, but the species is presumed to rely on microhabitats for overwintering similar to those of other bumble bees, including loose, disturbed soil; leaf litter; and other debris (Xerces Society et al. 2018; CDFW 2019). The decline of Crotch's bumble bee population has been attributed to several factors, including habitat modifications, pesticides, and herbicides. Much of Crotch's bumble bee's former habitat has been converted to agricultural and urban uses. The conversion of much of the Central Valley to agriculture and the associated use of pesticides and herbicides are thought to have reduced available habitat and lowered the diversity of flowering plants on which the species depends, as well as causing direct mortality and sublethal effects (CDFW 2019). Competition with managed bees used for agricultural purposes may also have affected Crotch's bumble bee populations (Xerces Society et al. 2018; CDFW 2019). The petitioners for the listing estimated a 97.7% decline in the abundance of the species in California from the historical period (1805–2001) to the recent period (2002–2012), and Koch et al. (2012, as cited in CDFW 2019) considered the species to be uncommon.



The State-Certified EIR did not address Crotch's bumble bee as a special-status species, as the species had no special status at the time the document was prepared and did not become a candidate for state listing until June 2019. For the same reason, no focused surveys were conducted for the species prior to 2010. Dudek conducted a preliminary assessment and survey for Crotch's bumble bee floral resources and for Crotch's bumble bees in 2024. Although the species was identified on the VCC Project Site in 2024, biologists conducting other wildlife surveys in the RMDP/SCP area prior to 2024, including spineflower insect pollinator surveys and focused butterfly surveys, did not report Crotch's bumble bee in the area, including within the VCC Project Site (Jones et al. 2004; Dudek 2012c, 2019c; RECON 1999; Compliance Biology 2004a, 2004b, 2004c, 2004d, 2005). However, bumble bee species, including Crotch's bumble bee, can be difficult to visually identify to species level in the field, so it is possible the species was observed but not identified. The CNDDDB includes an occurrence for Crotch's bumble bee from 1962, mapped generally as "Castaic" and as near as 1.4 miles north of the VCC Project Site (CDFW 2024). A second occurrence from 1970 was less than a mile from the RMDP/SCP area and approximately 3.2 miles south of the VCC Project Site. However, a more recent occurrence involved a female photographed 6.4 miles south southeast of the Project Site in 2017. A cluster of four occurrences from 2020 are from approximately 9.5 miles southwest of the Project Site. The CNDDDB includes two additional occurrences prior to 1970 between 7.0 and 9.0 miles from the VCC Project Site (CDFW 2024). Crotch's bumble bee was first identified on the VCC Project Site on June 14, 2024, when one was observed incidentally in the northern part of the site, on the main north-south ridge, between Hasley Canyon and Castaic Creek, during California gnatcatcher surveys (Figure 10b; Dudek 2024b). During focused surveys, two Crotch's bumble bees were observed on the west side of Hasley Canyon on July 9, 2024, on branching phacelia (*Phacelia ramosissima*) (Figure 10b; Dudek 2024b). All three observations were within or adjacent to coastal scrub communities. No Crotch's bumble bee nests were detected.

The VCC Project Site supports 203.3 acres of native vegetation communities and non-native grassland that may be suitable for Crotch's bumble bee, depending on the presence of suitable nesting microhabitats and floral resources. If the species were to occur on the VCC Project Site, foraging likely would be limited to areas supporting adequate floral resources that include plant species suitable for feeding by the species. Several species in the genera cited as potential food plants have been documented on site, including milkweed species (*Asclepias eriocarpa*, *A. fascicularis*), yellow pincushion (*Chaenactis glabriuscula*), lupine species (*Lupinus arizonicus*, *L. bicolor*, *L. excubitus* var. *hallii*, *L. formosus* var. *formosus*, *L. hirsutissimus*, *L. microcarpus* var. *densiflorus*, *L. microcarpus* var. *microcarpus*, *L. sparsiflorus*, *L. succulentus*, *L. truncatus*), burclover (*Medicago polymorpha*), alfalfa (*Medicago sativa*), phacelia species (*Phacelia cicutaria*, *P. distans*, *P. minor*, *P. parryi*, *P. ramosissima*, *P. tanacetifolia*), deerweed (*Acmispon glaber*), California buckwheat (*Eriogonum fasciculatum*), and sage species (*Salvia apiana*, *S. columbariae*, *S. leucophylla*, *S. mellifera*), although specific mapping of potential food plants has not been conducted. More importantly, microhabitats that could support nesting, described above, have not been mapped and may occur at different locations from year to year, and these microhabitats could occur in any natural community or disturbed lands occurring on site.

Although Crotch's bumble bee was not analyzed in the State-Certified EIR and its life cycle is different from those of other invertebrate species analyzed in the EIR, it likely occupies vegetation communities occupied by several special-status terrestrial vertebrate species addressed in the State-Certified EIR. These include a reptile species, Blainville's horned lizard (*Phrynosoma blainvillii*) (=coast horned lizard [*Phrynosoma coronatum*]), and two bird species, burrowing owl and grasshopper sparrow, all of which are California Species of Special Concern that occupy grasslands and some other relatively open scrub habitats that support potential food plants for Crotch's bumble bee.

### 5.3.2.2 Arroyo Chub

Arroyo chub is a California Species of Special Concern and Los Angeles County (LA County) sensitive species that is native to several streams from San Diego County north to Los Angeles County, and is introduced in other Southern California streams, including the Santa Clara River. It occurs in slow-moving or backwater segments of warm to cool streams with mud or sand substrates. Prior to analysis for the State-Certified EIR, the species was recorded throughout the reach of the Santa Clara River within the RMDP/SCP area, where it is considered introduced. The most recent surveys at the time of the State-Certified EIR preparation, in 2005, found the arroyo chub to be the most dominant fish species throughout the area (ENTRIX 2009). This species has no potential to occur in Hasley Canyon, which does not support persistent aquatic habitat within the VCC Project Site. However, Haglund (1989) found the species in Castaic Creek within the VCC Project Site in 1988. Since the analysis for the State-Certified EIR, a habitat assessment was conducted in Castaic Creek on the VCC Project Site in 2019 and fish surveys were conducted in 2024 (Cardno 2015a; Compliance Biology 2019a). The habitat assessment in July 2019 confirmed that habitat in Castaic Creek within the Modified Project boundary is limited, with only approximately 1,500 feet of aquatic habitat observed that year. No arroyo chub and no native fish species were observed during the assessment, and the creek was considered to provide low-quality habitat for arroyo chub (Compliance Biology 2019a). However, flows within Castaic Creek on the VCC Project Site continued through at least early July in 2024, following two winters of high rainfall (Compliance Biology 2024). Small arroyo chubs were observed during visual surveys of Castaic Creek that year, consistent with the 1988 observations. The species is more easily and consistently found in the Santa Clara River, where it was observed at 9 of 27 sample locations in the RMDP area in 2014 (Cardno 2015a). While arroyo chub is known to occur in Castaic Creek in years when more aquatic habitat is available, such as periods following storm events and springtime dam releases from Castaic Lake reservoir, the species likely is often absent due to the limited aquatic habitat in many years. Because the segment of Castaic Creek occurring within the Modified Project boundary is the same segment that was analyzed in the State-Certified EIR, and occurrence information has not changed for this area, the status of arroyo chub in the RMDP/SCP area relative to the VCC Project Site has not changed in a way that would invalidate the analysis in the State-Certified EIR.

### 5.3.2.3 Santa Ana Sucker

Santa Ana sucker is a federally listed threatened fish species within its range in the San Gabriel, Santa Ana, and Los Angeles River basins (50 CFR 17.11), but is a California Species of Special Concern elsewhere in its current range. It is also an LA County sensitive species. At the time of the analysis for the State-Certified EIR, the species was not believed to be native to the Santa Clara River. However, an unpublished study recently found that the population in the Santa Clara River east of the Dry Gap near the Piru Creek confluence was genetically distinct from known native populations, suggesting the species was not introduced in the VCC Project vicinity and nearby reaches of the Santa Clara River in the past century, as previously thought (Richmond et al. 2016a, 2016b). In the most recent recovery plan for the species, USFWS acknowledged the unpublished Richmond et al. (2016a, 2016b) study, but noted that the current listing applies only to the previously listed populations, and that the listing of the Santa Clara River population in Los Angeles County would have to be evaluated through a separate rulemaking process under the ESA (USFWS 2017). Therefore, where it potentially occurs within the VCC Project Site, the species is not listed under the ESA, although it retains the other state and County designations for the species.

Santa Ana sucker had been documented throughout the Santa Clara River within the RMDP/SCP area. In 2005, ENTRIX (2009) found that the Santa Ana sucker was common in the Specific Plan area in the RMDP area. Surveys from Salt Creek Canyon upstream to The Old Road Bridge along the Santa Clara River, for example, collected approximately 100 Santa Ana suckers (ENTRIX 2009). Santa Ana sucker had not been observed in Castaic Creek

within the VCC Project Site, and the State-Certified EIR considered tributaries to the Santa Clara River within the RMDP/SCP area to be unsuitable for the species because of the absence of perennial aquatic habitat. This species has no potential to occur in Hasley Canyon, which supports no persistent aquatic habitat within the VCC Project Site. After the analysis in the State-Certified EIR, in 2015, the species was found to be widely distributed in the Santa Clara River throughout the Specific Plan area (Cardno 2015a). An aquatic habitat assessment for Castaic Creek within the VCC Project Site in July 2019 resulted in the observation of only approximately 1,500 feet of aquatic habitat within the stream channel (Compliance Biology 2019a). No Santa Ana suckers were observed, and no other native fish species were observed. However, a fish survey in 2024 within the VCC Project Site resulted in observations of numerous suckers, some of which were identified as Santa Ana sucker. Many of the suckers, which were large compared to past observations of this species in the Santa Clara River, were likely non-native Owens suckers (*Catostomus fumeiventris*) or Sacramento suckers (*C. occidentalis*) that escaped Castaic Lake during water releases through Castaic Dam (Compliance Biology 2024). Although the occurrence of Santa Ana sucker in 2024 confirmed its presence in Castaic Creek for the first time, conditions in 2024 were not typical for Castaic Creek, which is often dry for much of the year. Combined with past negative results, the detections from 2024 suggest the species occurs only sporadically, when conditions are suitable. The State-Certified EIR concluded that the VCC Project Site did not support suitable habitat for Santa Ana sucker. Although the species has since been detected, it likely occurs only sporadically, and then only during periods of high flows. Because the segment of Castaic Creek occurring within the Modified Project boundary is the same as occurred within the VCC Project Site analyzed in the State-Certified EIR, and Santa Ana sucker occurrence information has not substantially changed for this area, the status of Santa Ana sucker in the RMDP/SCP area relative to the VCC Project Site has not changed in a way that would invalidate the analysis in the State-Certified EIR.

#### 5.3.2.4 Southern Steelhead

Southern steelhead refers to a distinct population segment (DPS) of steelhead (an ocean-going, or anadromous, form of rainbow trout) that is federally listed as endangered and is an LA County Sensitive Species. In addition, California Trout (2021) petitioned the California Fish and Game Commission in June 2021 to list southern steelhead, or “Southern California steelhead,” as endangered under CESA. The California Fish and Game Commission accepted the petition for consideration on May 11, 2022, making the species a CESA candidate species pending the commission’s determination on whether listing is warranted. Southern steelhead spends most of its life at sea but breeds in streams throughout Southern California north to Santa Barbara County. Critical habitat was designated for the species in 2005 (70 FR 52488–52627). Critical habitat included the Santa Clara River from the confluence with Piru Creek (west of the Specific Plan area) westward to the Pacific Ocean. In 2000, the National Marine Fisheries Service, the agency responsible for recovery of southern steelhead, clarified the species’ status in the Santa Clara River, stating that “the Santa Clara River basin upstream from its confluence with Piru Creek is unlikely to be occupied or accessible to steelhead,” providing the justification for excluding the upper part of the basin, including Castaic Creek within the VCC Project Site, from critical habitat (Lecky, pers. comm., 2000). No additional evidence since 2010 has suggested that southern steelhead occurs in the Santa Clara River upstream of Piru Creek. In addition, no perennial aquatic habitat that could support southern steelhead occurred within Castaic Creek or Hasley Canyon at the time the State-Certified EIR was prepared, and Castaic Lake Dam, approximately 4.6 miles upstream of The Old Road, blocks access to upstream habitat that may otherwise be suitable for spawning. Because the segment of Castaic Creek occurring within the Modified Project boundary is the same as occurred within the VCC Project Site analyzed in the State-Certified EIR, the status of southern steelhead in the RMDP/SCP area relative to the VCC Project Site remains the same (not expected to occur) and is therefore consistent with the analysis in the State-Certified EIR.

### 5.3.2.5 Unarmored Threespine Stickleback

Unarmored threespine stickleback is a state-listed and federally listed endangered fish species, a state fully protected species, and an LA County sensitive species. The species generally may occur anywhere in the Santa Clara River within the RMDP/SCP area. It was observed during surveys within the Santa Clara River portion of the Specific Plan area in 1988, 1995, 2000, 2002–2005, and 2007 (Aquatic Consulting Services 2002a, 2002b, 2002c, 2002d; ENTRIX 2009; Haglund 1989; Haglund and Baskin 2000; SMEA 1995; Impact Sciences 2003a, 2003b, 2003c). The species also has been recorded in Castaic Creek within the VCC Project Site in the past and was recorded historically (1975) just below Castaic Lake Dam (Haglund 1989; Bell 1975, as cited in Haglund 1989).

The State-Certified EIR considered suitable habitat to be limited to the Santa Clara River. The State-Certified EIR did not quantify the species' habitat, which occupies a small portion of the wetland/riparian habitat in the Santa Clara River and has high temporal variability. Within Castaic Creek, the absence of perennial aquatic habitat limits the species' potential occurrence to flow conditions following winter or early spring storm events or during prolonged regulated dam releases during springtime. Since 2010, unarmored threespine sticklebacks were observed in 2014 in the Santa Clara River "in good numbers" and in all size classes between The Old Road and the Valencia Water Treatment Plant outflow, upstream of the confluence with Castaic Creek (Cardno 2015a).

This species has no potential to occur in Hasley Canyon, which does not support persistent aquatic habitat within the VCC Project Site. During an aquatic habitat assessment of Castaic Creek on the VCC Project Site in July 2019, only approximately 1,500 feet of aquatic habitat was observed. No unarmored threespine sticklebacks or any other native fish species were observed. Flows within Castaic Creek on the VCC Project Site continued through at least early July in 2024, following two winters of high rainfall (Compliance Biology 2024). However, no unarmored threespine stickleback were observed. The segment of Castaic Creek occurring within the Modified Project boundary is the same as that which was analyzed in the State-Certified EIR, and unarmored threespine stickleback occurrence information has not changed for this area. For this reason, the status of the species in the VCC Project Site remains consistent with the analysis in the State-Certified EIR.

### 5.3.2.6 Arroyo Toad

The arroyo toad is an amphibian species that is listed as endangered under the ESA, is a California Species of Special Concern, and is an LA County sensitive species. It occurs along low-gradient streams in coastal and desert drainages as well as high-elevation valleys. It uses aquatic, riparian, and upland habitats to different degrees depending on an individual's stage of development, the time of year, and the weather. When not occupying aquatic breeding habitat, most individuals remain on sandy terraces adjacent to breeding habitat. Smaller numbers of juveniles and adults range widely into surrounding upland habitats and may move up to 1 kilometer (0.6 miles) or more from breeding sites (Holland and Sisk 2001; Bloom 2007).

As reported in the State-Certified EIR, arroyo toad tadpoles were observed in the Specific Plan area during surveys conducted in 2000, within the Santa Clara River, upstream and downstream of the proposed Commerce Center Drive Bridge site, and near the Valencia Water Treatment Plant (Aquatic Consulting Services 2002a, 2002b, 2002c, 2002d). Farther upstream, arroyo toads were known from various locations along the Santa Clara River and its tributaries east of I-5, including an arroyo toad adult that was captured and released in the Santa Clara River just east of I-5 in 1994 (CDFW 2024). Additional occurrences were from Castaic Creek both above and below the Castaic Lake Reservoir, about 3.5 miles upstream of the VCC Project Site; observations of adults and eggs near the

confluence of the Santa Clara River and San Francisquito Creek from 2001 to 2003; several locations along San Francisquito Creek; and a report from Soledad Canyon in 2001 (70 FR 19562–19633; unpublished notes sent to USFWS; Impact Sciences 2002; Sandburg 2001).

Castaic Creek supports aquatic habitat in some years with high flows, which could support arroyo toad breeding pools, as well as riparian vegetation suitable for supporting upland phases of the species' life cycle. Hasley Canyon supports some riparian vegetation, but no aquatic habitat capable of supporting reproduction and development of arroyo toads. URS (2014) reported that the Hasley Canyon substrate appeared "exceedingly well-drained" and that "indicators of persistent surface water were absent," indicating that formation of pools of sufficient duration to support breeding arroyo toads is unlikely. Vegetation is sparse within the dry channel bottom, "probably due to a combination of the ephemeral flow regime and a high incidence of scouring flows" (URS 2014).

Although arroyo toad has been detected upstream of the Project Site in Castaic Creek, it had not been observed in the reach on the VCC Project Site prior to the analysis for the State-Certified EIR, despite surveys conducted in 2001, 2003–2005, and 2007 (Ecological Sciences 2001, 2003, 2004, 2005; Bloom 2007).

Surveys of the RMDP/SCP area since 2010 have resulted in no additional observations of arroyo toad (Compliance Biology 2014; Dudek 2012d, 2014d). An aquatic habitat assessment of Castaic Creek on the VCC Project Site in July 2019 identified approximately 1,500 feet of aquatic habitat along the entire reach, and the only amphibians observed were the common Baja California treefrog (*Pseudacris hypochondriaca*), western toad (*Anaxyrus boreas*), and the African clawed frog (*Xenopus laevis*), the latter species a potential predator of arroyo toad (Compliance Biology 2019a). Castaic Creek was determined to provide poor breeding habitat for arroyo toad, because of a combination of the rapid flows during water releases and the abundance of African clawed frogs in areas of persistent aquatic habitat. Although more extensive and persistent aquatic habitat was present during focused protocol surveys for arroyo toad in 2024, no arroyo toads were detected. Although arroyo toad tadpoles were detected in the RMDP/SCP area and arroyo toads had previously been observed well upstream of the VCC Project Site in Castaic Creek, the State-Certified EIR, based on the Impact Sciences (2002) habitat suitability analysis, determined that no areas of suitable habitat occurred on the VCC Project Site. The results of the surveys and habitat assessment conducted since then do not provide any basis to revise the determination of the State-Certified EIR.

No critical habitat was designated for arroyo toad in the VCC Project vicinity at the time of the analysis for the State-Certified EIR, but the USFWS designated critical habitat on February 9, 2011 (76 FR 7246–7467). Subunit 6b of critical habitat includes approximately 4 miles of the Santa Clara River, from its confluence with San Francisquito Creek downstream to approximately 1 mile below its confluence with Castaic Creek; approximately 2.6 miles of Castaic Creek, from The Old Road to its confluence with the Santa Clara River; and a portion of Hasley Canyon within the VCC Project Site. The Project Site includes 180.6 acres of federally designated critical habitat for arroyo toad, although as noted above much of this area occurs in Hasley Canyon, which does not support suitable aquatic habitat.

Because the VCC Project Site remains unlikely to support suitable habitat for arroyo toad, the status of the species within the VCC Project Site remains consistent with the analysis in the State-Certified EIR.

### 5.3.2.7 Western Spadefoot

The western spadefoot is a California Species of Special Concern and LA County sensitive species that is also proposed for listing under the ESA (88 FR 84252–84278). It occurs in lowlands and some foothill and mountain habitats across much of Central and Southern California. As described in the State-Certified EIR, the species is



known to be present in the vicinity of the VCC Project Site. The species had not been observed on the VCC Project Site at the time the dataset for the State-Certified EIR was analyzed, but no focused surveys for the species had been conducted prior to 2010 or since that time. However, an assessment of the VCC Project Site for suitable habitat, based on evidence of ponding, was performed in 2019, a wetter-than-normal year with periodic storms throughout the winter and early spring (Compliance Biology 2019a). Although environmental conditions were generally conducive to formation of breeding habitat, the assessment found no areas on the VCC Project Site that were suitable for the development of seasonal rain pools necessary for western spadefoot breeding. Surveys in 2024 further supported this conclusion, following 2 years of high rainfall. Soils were deemed too rocky or sandy for ponding of a duration suitable to supported western spadefoot breeding (Compliance Biology 2024). Because western spadefoot was considered present in the RMDP/SCP area in 2010, including likely present on the VCC Project Site, and it had been recorded in several locations, its overall status has not changed from that analyzed in the RMDP/SCP (i.e., assumed present) in a way that would indicate new significant impacts.

### 5.3.2.8 California Glossy Snake

The California glossy snake was designated as a California Species of Special Concern by CDFW in 2016 (Thomson et al. 2016), after the analysis for the State-Certified EIR. Because the species had no regulatory status in 2010, it was not analyzed in the State-Certified EIR. The California glossy snake occurs primarily in grasslands, fields, coastal scrub, and chaparral. It is largely nocturnal and preys mostly on lizards and small mammals, but also on small birds and other snakes (Rodríguez-Robles et al. 1999). No focused surveys have been conducted for this species in the RMDP/SCP area, and no focused terrestrial reptile surveys have been conducted on the VCC Project Site. However, pitfall surveys for terrestrial reptiles conducted in the Specific Plan Area both prior to the analysis for the State-Certified EIR (in 2004) and subsequently in portions of the RMDP/SCP area (in 2015 and 2017) should provide some indication of the potential for occurrence of the species on the VCC Project Site (Impact Sciences 2004, 2006, 2015a; Compliance Biology 2017). No California glossy snakes were captured during these surveys. The CNDDDB (CDFW 2024) includes three occurrences within 5.0 miles east and north of the VCC Project Site, but none since 1946. Therefore, the species likely is not common in the vicinity, including the VCC Project Site. However, the VCC Project Site supports 106.5 acres of grassland, coastal scrub, and chaparral habitat suitable for the California glossy snake, and thus the species has the potential to occur in these areas. Although California glossy snake was not analyzed in the State-Certified EIR, the other special-status reptile species analyzed in the State-Certified EIR occur in some or all of the habitats potentially occupied by California glossy snake, including San Bernardino ring-necked snake [San Bernardino ringneck snake] (*Diadophis punctatus modestus*), San Diegan tiger whiptail [=coastal western whiptail] (*Aspidoscelis tigris stejnegeri*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), and Blainville's horned lizard. The latter three of these species, like California glossy snake, are California Species of Special Concern. Because the State-Certified EIR assumed that these species were likely present in suitable habitats on the VCC Project Site, California glossy snake should similarly be assumed to be present in the grassland, coastal scrub, and chaparral communities on the VCC Project Site.

### 5.3.2.9 California Legless Lizard

The California legless lizard (*Anniella* spp.) refers to several species that were formerly known as “silvery legless lizard” (*Anniella pulchra*). All legless lizard species are California Species of Special Concern, and those occurring in Los Angeles County are considered LA County sensitive species. The State-Certified EIR analyzed the then-recognized subspecies *A. p. pulchra*. After the State-Certified EIR was prepared in 2010, Papenfuss and Parham (2013) proposed a taxonomic revision for legless lizards that named four new species, which was later accepted by CDFW. While it is unknown which of these four new species occurs in the RMDP/SCP area because

discrete geographic boundaries have not been established, it is likely either the Southern California legless lizard (*Anniella stebbinsi*) or the Northern California legless lizard (*Anniella pulchra*). In any case, the species present is special status and arguably more sensitive than was recognized in 2010 due to a splitting of the species, smaller geographic ranges, and possibly a higher threat of habitat loss. Legless lizards occur primarily in areas with sandy or loose soils, where they typically are found beneath leaf litter. They occur in a variety of sparsely vegetated habitats, including stabilized dunes, beaches, dry washes, chaparral, scrubs, and pine, oak, and riparian woodlands. Prior to preparation of the State-Certified EIR, limited focused surveys for legless lizards were conducted, and none were conducted within the VCC Project Site. Legless lizards are known to be present in riparian, scrub, and woodland habitats in the vicinity of the VCC Project Site. Suitable habitat in the RMDP/SCP area was considered to include upland woodlands (i.e., valley oak woodland, California walnut woodland), river wash, riparian scrub (i.e., arrow weed scrub, big sagebrush scrub, mulefat scrub, southern willow scrub, alluvial scrub, big sagebrush–California buckwheat, Mexican elderberry, and shrub tamarisk), riparian woodland (i.e., southern cottonwood–willow riparian forest, southern coast live oak riparian forest), chaparral (i.e., undifferentiated chaparral, chamise chaparral, scrub oak chaparral), and California sagebrush scrub (i.e., California sagebrush scrub and associations, California sagebrush–black sage, California sagebrush–California buckwheat scrub, California sagebrush scrub–undifferentiated chaparral). While no legless lizards were detected within the VCC Project Site prior to 2010, the site supported approximately 142.9 acres of habitat that was potentially suitable for legless lizard. No focused surveys were conducted on the VCC Project Site. However, California legless lizard was assumed to be present in the State-Certified EIR and is still assumed to be present. Based on current vegetation mapping, the VCC Project Site supports 170.5 acres of habitat potentially suitable for California legless lizard, an increase of 27.6 acres compared to the 2017 Approved Project, partly due to the 15.6-acre increase in the area encompassed by the tract boundary. Although the number and distribution of occurrences within the RMDP/SCP area have increased substantially since the analysis for the State-Certified EIR, the State-Certified EIR assumed that the species was present, which the new observations further confirm. Therefore, the status of California legless lizard in the RMDP/SCP area relative to the VCC Project Site has not changed significantly from that described in the State-Certified EIR.

### 5.3.2.10 Southwestern Pond Turtle

When the State-Certified EIR was prepared in 2010, the southwestern pond turtle (*Actinemys marmorata pallida*) was a recognized subspecies of the western pond turtle (*Actinemys marmorata*). Although CDFW considers this taxon and the northwestern pond turtle (*Actinemys marmorata*) to be a single species, the western pond turtle, USFWS recently has designated both as species, and both are now proposed for listing as threatened under ESA (88 FR 68370–68399). Therefore, it will be referred to as southwestern pond turtle in this discussion. The southwestern pond turtle, as western pond turtle, is also a California Species of Special Concern. The southwestern pond turtle requires aquatic habitat, but also requires adjacent upland habitat for nesting, for overwintering, and as refuge during severe flooding. Suitable wetland/riparian habitat in the RMDP/SCP area for this species is located along the Santa Clara River. Also, the State-Certified EIR specifically identified the Homestead South, Landmark Village, and Mission Village Project Sites as supporting upland habitats, but did not quantify these habitats for these villages or elsewhere within the RMDP/SCP area. At the time of the analysis for the State-Certified EIR, southwestern pond turtles had been observed at locations along the Santa Clara River and in Salt Creek (Aquatic Consulting Services 2002a, 2002c, 2002d; Impact Sciences 2001, 2002; Compliance Biology 2004a; Ecological Sciences 2004; Dudek & Associates 2006c; Carpenter, pers. comm., 2009). No southwestern pond turtles had been observed in Castaic Creek within the VCC Project Site, despite numerous aquatic surveys between 2001 and 2007 (Ecological Sciences 2001, 2003, 2004, 2005; Bloom 2007). Since 2010, additional southwestern pond turtles have been observed in the same areas where the species had previously been observed. In addition, a study was

conducted in 2014 in which turtles occupying aquatic habitats along the Santa Clara River were fitted with GPS transmitters to determine the upland movements of these turtles during potential nesting forays. The study recorded relatively limited use of upland habitat, with only three of nine turtles nesting in upland habitat, and none of these three apparently nesting more than approximately 80 meters (about 260 feet) from aquatic habitat (Cardno 2015b). An aquatic habitat assessment of Castaic Creek within the VCC Project Site in July 2019 resulted in no observations of southwestern pond turtle (Compliance Biology 2019a). Although aquatic habitat persisted into July 2024, following 2 years of high rainfall, no southwestern pond turtles were observed in focused surveys that year (Compliance Biology 2024). The species also has not been recorded there incidentally during other surveys, although regular incidental observations have been recorded during riparian bird surveys along the Santa Clara River. In addition, the 2019 Castaic Creek habitat assessment concluded that the VCC Project reach of Castaic Creek is historically dry much of the year, and therefore provides poor habitat for southwestern pond turtle, which requires persistent deep ponded areas for foraging and basking. Because of the lack of occurrences and intermittent aquatic habitat, the species has a very low potential to occur within upland habitats adjacent to Castaic Creek. Because Castaic Creek was not considered to support habitat for the species in the State-Certified EIR, combined with the lack of recent observations of the species and the conclusions of the habitat assessment, the available information reconfirms the status of southwestern pond turtle described in the State-Certified EIR analysis. Therefore, the status of southwestern pond turtle in the VCC Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.11 Burrowing Owl

Burrowing owl is a federal Bird of Conservation Concern, a California Species of Special Concern, and an LA County sensitive species. In California, it typically inhabits annual and perennial grasslands and scrublands characterized by low-growing vegetation and may occur in areas that include trees and shrubs if the cover is less than 30% (CBOC 1993). Burrowing owls also require the availability of mammal burrows of suitable size, which they use for nesting and shelter (Coulombe 1971). Although breeding burrowing owls in the VCC Project Site region are typically non-migratory, most burrowing owls in the more northerly parts of their breeding range vacate breeding areas for the winter, and some of these winter in California. At the time of the analysis for the State-Certified EIR, the VCC Project Site supported 175.3 acres of habitat suitable for burrowing owl breeding or wintering, including grassland, disturbed land, and agriculture. Although no focused burrowing owl surveys had been conducted in the RMDP/SCP area at the time of analysis for the State-Certified EIR, the species is readily detected when present, and numerous biological surveys had been conducted in upland communities across the RMDP/SCP area during which the species could have been observed. At the time of the analysis for the State-Certified EIR, no burrowing owls were known to have occurred on the VCC Project Site. However, a winter season (December 2007) occurrence for Hasley Canyon within the VCC Project Site now included in the CNDDB was not known at the time (CDFW 2024). Still, no breeding burrowing owls had been observed on the VCC Project Site or anywhere in the RMDP/SCP area at the time of the analysis for the State-Certified EIR. Focused burrowing owl surveys were conducted in 2015 on the VCC Project Site (Dudek 2015b). To provide some regional context to the species' status on the VCC Project Site, other surveys in the region are relevant. Focused surveys were conducted on other Project Sites in the RMDP/SCP area since 2010 (Dudek 2012c, 2014e, 2015c, 2015d; Impact Sciences 2015b; Compliance Biology 2017). No burrowing owls and no burrows with sign (evidence of use) of burrowing owl were observed during any of these surveys. In addition, although burrowing owl is a species readily detected when aboveground, as well as easily identified, no burrowing owls have been detected during other biological surveys conducted on the VCC Project Site. The State-Certified EIR assumed that burrowing owl could occasionally occur in the RMDP/SCP area, including the VCC Project Site, for wintering and migration, but because the site is within its breeding range, the analysis also assumed that burrowing owl could nest on the site. The results cited above for the RMDP/SCP area, including the VCC Project Site, generally

reinforce these assumptions. Based on 2019 vegetation data, the amount of suitable habitat has declined, with 132.7 acres of suitable habitat now occurring within the VCC Project Site, compared to 175.3 acres previously. Despite the decline in suitable habitat, the assumption in the analysis for the 2017 Approved Project (of occasional use of the site for wintering, migration, and breeding) remains applicable. Therefore, the overall status of burrowing owl in the relative to the VCC Project Site has not changed significantly from that reported in the State-Certified EIR.

### 5.3.2.12 California Condor

California condor is federally and state listed as endangered, is a state fully protected species, and is an LA County sensitive species. California condors require vast expanses of open savanna, grasslands, and foothill chaparral, with cliffs, large trees, and snags for roosting and nesting (Zeiner et al. 1990a). As opportunistic scavengers, California condors travel up to 225 kilometers (140 miles) per day (Koford 1953; Wilbur 1978; Meretsky and Snyder 1992; Snyder and Snyder 2000). The California condor requires an adequate food supply, open habitat in which food can readily be found and accessed, and reliable air movements that allow extended soaring flight (Finkelstein et al. 2020). The State-Certified EIR concluded that California condors were not likely to nest in the RMDP/SCP area, including on the VCC Project Site, because of the absence of suitable nesting habitat (cliffs and large trees), but acknowledged that they may occasionally forage in the RMDP/SCP area and that use of the area by the species was likely to increase. The State-Certified EIR determined that suitable foraging habitat was present in the upper regions of the High Country Special Management Area (SMA) and the Salt Creek area, where suitable carrion (cattle, deer) may occur. Although the species was considered unlikely to forage on the VCC Project Site, it was determined that California condors could forage opportunistically for large mammal carcasses anywhere in the RMDP/SCP area, including the VCC Project Site. No California condors had been observed on the VCC Project Site at the time of the analysis for the State-Certified EIR, but California condors had been observed in Potrero Canyon twice, in April 2008 and January 2009. Five condors were observed feeding on a dead calf on the latter date (Niemela, pers. comm., 2009). Also, several condors fitted with GPS transmitters had been recorded landing on Newhall Ranch between April and July 2008 (Root 2008). USFWS supplied flight data from GPS transmitters in 2009 showing that California condors flew frequently over the RMDP/SCP area while moving between the Sespe Wilderness and the San Gabriel Mountains. Flight data for the 2005–2023 period also show regular California condor flights over the RMDP/SCP area, when the species moves between the Sespe Wilderness area to the northwest and the San Gabriel Mountains to the southeast of the area. However, the data show only a single overflight point for the VCC Project Site, prior to 2010. None were recorded flying directly over the site after 2009 (USGS 2023; Figure 11, California Condor). In addition, flights in the vicinity are generally at high altitude and not for the purpose of foraging. However, California condors landed in the RMDP area on several occasions well southwest of the VCC Project Site in 2017, once in 2018, and at least once in 2019, reconfirming their opportunistic use of the area. Nonetheless, the potential for California condors to forage opportunistically in the RMDP/SCP area, including on the VCC Project Site, when large mammal carcasses are available remains unchanged. Overall, the status of California condor relative to the VCC Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.13 Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally listed threatened species, a California Species of Special Concern, and an LA County sensitive species. The northern limit of the species' range is in Ventura County and northern Los Angeles County. Coastal California gnatcatcher occurs in or near sage scrub habitat that is composed of relatively low-growing, dry-season deciduous and succulent plants. Characteristic plants of this community include California sagebrush (*Artemisia californica*), various species of sage (*Salvia* spp.), California buckwheat (*Eriogonum fasciculatum*), lemonade berry (*Rhus integrifolia*), California brittle bush (*Encelia californica*), and cactus. Coastal



California gnatcatchers also occur in chaparral, grassland, and riparian habitats where sage scrub is adjacent (Bontrager 1991). Numerous surveys for upland birds were conducted from 1995 to 2008, and focused surveys for coastal California gnatcatchers were conducted in several locations, including on the VCC Project Site in 2008 (Compliance Biology 2008). At the time of the analysis for the State-Certified EIR, coastal California gnatcatchers had been recorded only twice in the RMDP/SCP area, both during construction monitoring. One of these observations occurred on the VCC Project Site on October 5, 2007; the other occurred along Del Valle Road in Chiquita Canyon from August 8 to August 15, 2008. In addition, suitable habitat occurs on the VCC Project Site and elsewhere in the RMDP/SCP area. Approximately 41.5 acres of suitable coastal scrub communities occurred on the VCC Project Site at the time of the State-Certified EIR analysis, according to vegetation data at the time. Since 2010, focused protocol surveys for coastal California gnatcatcher have been conducted at several RMDP/SCP development areas, including on the VCC Project Site in 2013–2014, 2019, 2022, and 2024 (Dudek 2014b, 2024c; Compliance Biology 2019b, 2022b). Surveys recorded no additional observations of coastal California gnatcatcher on the VCC Project Site, either during protocol surveys or incidentally during other focused wildlife surveys. Although surveys elsewhere have resulted in no evidence of nesting by coastal California gnatcatchers, focused surveys in 2012 resulted in observations of a male-female pair in the northern part of the Mission Village Project Site, approximately 0.75 miles southeast of the VCC Project Site, including an observation of a single male on June 1, 2012, and both the male and female on June 13, June 20, and June 29, 2012 (Dudek 2012e). During all observations, the pair foraged together but did not exhibit breeding behavior. Single juvenile coastal California gnatcatchers were also observed on May 6, 2015, at the Entrada South Project Site and on June 11, 2015, on the Legacy Village Project Site adjacent to the RMDP/SCP area (Dudek 2015e, 2015f). Each was detected during only one of the six surveys. Since 2010, winter surveys in 2013–2014 and breeding-season surveys in 2019, 2022, and 2024 resulted in no observations of coastal California gnatcatcher (Dudek 2014b, 2024c; Compliance Biology 2019b, 2022b). These results indicate that although the VCC Project Site has potential to support coastal California gnatcatchers on occasion, it does not currently support a population or breeding pairs of the species. Suitable habitat remains on the VCC Project Site, based on the most recent vegetation mapping, with 49.1 acres of coastal scrub habitat available to coastal California gnatcatchers. This constitutes an increase of 7.6 acres of suitable habitat. However, the status of the species remains approximately the same as prior to 2010, with the VCC Project Site supporting suitable habitat but no resident population of the species. Overall, the status of coastal California gnatcatcher relative to the VCC Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.14 Least Bell's Vireo

Least Bell's vireo is federally and state listed as endangered, is a California Species of Special Concern, and is an LA County sensitive species. As a breeding migrant, it is present in the RMDP/SCP area, primarily along the Santa Clara River and Castaic Creek, during the breeding season from approximately March through August or the first part of September. Least Bell's vireos primarily nest in riverine riparian habitats along water, including dry portions of intermittent streams, that typically provide dense cover within 1 to 2 meters (3.3 to 6.6 feet) of the ground, often adjacent to a complex, stratified canopy. In addition to nesting and foraging in riparian habitats, they may also forage in adjacent upland habitats. USFWS designated critical habitat for the least Bell's vireo on February 2, 1994 (59 FR 4845–4867). The Santa Clara River critical habitat unit includes all land within a 3,500-foot-wide zone along the Santa Clara River south of SR-126, from near Piru east to the intersection of SR-126 and The Old Road. Although no critical habitat occurs within the VCC tract map boundary, a small area of off-site improvements, totaling 0.15 acres, occurs just south of SR-126 within critical habitat associated with the Santa Clara River. However, this area consists of disturbed land on the north side of the Valencia Travel Village, 0.1 miles from riparian habitat associated with the Santa Clara River. Elsewhere, critical habitat occurs nearly



adjacent to the VCC Project Site but is separated from the site by SR-126. Portions of critical habitat immediately adjacent to SR-126 are disturbed and developed lands and not suitable habitat for least Bell's vireo.

Since riparian bird surveys have been conducted along the Santa Clara River and Castaic Creek dating back to the 1988, the RMDP/SCP area has sustained a substantial breeding population of least Bell's vireo, particularly with a significant expansion in the 1990s. For example, the 1998 Biological Opinion (USFWS 1998) for the Natural River Management Plan (NRMP), which overlaps the eastern portion of the RMDP/SCP area east of the Castaic Creek confluence, noted that numbers of least Bell's vireos along the Santa Clara River in the NRMP area had risen steadily from 1991 (12 pairs) to 1997 (40 pairs). After the Biological Opinion was issued in 1998 through surveys in 2008, a consistently large least Bell's vireo breeding population was present in the RMDP/SCP area in the Santa Clara River extending west to the Ventura County line. Surveys first detected least Bell's vireo along Castaic Creek on the VCC Project Site in 1994, and the species was detected sporadically during surveys through 2007 (Guthrie 1994, 1996, 2003, 2006). Based on the protocol surveys from 2011 through 2024, as well as the many surveys before 2011, breeding least Bell's vireos have remained consistently common along the Santa Clara River west of I-5 in both the NRMP and RMDP/SCP areas. Along Castaic Creek between the Santa Clara River and The Old Road, the species has been detected every year of surveys since 2011 (Bloom Biological 2015; Woodstar Biological 2017, 2018, 2019c; Compliance Biology 2022a, 2024). Approximately three territories were present in 2024 (based on preliminary data through June 2024), and no more than two territories were present in any previous year. Most observations have been from the area between SR-126 and Commerce Center Drive, with several observations prior to 2008 occurring on the VCC Project Site. Since 2006, the only observations within the VCC Project Site were two observations in 2022, including a family group that was detected once on the Project Site after nesting west of Commerce Center Drive, and a lone male in late June 2024 (Compliance Biology 2022a, 2024). Habitat for least Bell's vireo, as described in the State-Certified EIR, included 63.9 acres of riparian nesting habitat and 0.3 acres of suitable foraging habitat within 100 feet of riparian habitats on the VCC Project Site. Because the tract boundary remains substantially the same as at the time of the State-Certified EIR analysis, and only low numbers of the species are detected each year, the status of least Bell's vireo has not changed on the VCC Project Site. Based on current vegetation data, the VCC Project Site now supports 79.1 acres of suitable nesting habitat (an increase of 15.2 acres) and 13.0 acres of foraging habitat within 100 feet of nesting habitat, an increase of 12.7 acres. Overall, the status of least Bell's vireo in the RMDP/SCP area relative to the VCC Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.15 Southwestern Willow Flycatcher

Southwestern willow flycatcher is federally and state listed as endangered and is an LA County sensitive species. Migrating willow flycatchers, presumably including subspecies other than the southwestern willow flycatcher that do not nest in the region, arrive in the RMDP/SCP area in May and early June, primarily occurring along the Santa Clara River and Castaic Creek. Willow flycatchers migrating through the RMDP/SCP area may use a greater variety of habitats other than riparian habitat, where breeding occurs, but non-breeding individuals vacate the area by the end of June. Breeding pairs are present on their breeding grounds until August. Any breeding pairs in the RMDP/SCP area would be the southwestern willow flycatcher subspecies. Willow flycatchers have been detected almost every year during surveys of suitable habitat in the RMDP/SCP area and NRMP area through 2008, but none stayed beyond the migratory period. In surveys conducted between 1988 and 2008 prior to the analysis for the State-Certified EIR, no observations of nesting, paired, or territorial southwestern willow flycatchers had been documented within the RMDP/SCP area, or immediately upstream in the NRMP area, which extends well east of I-5 along the Santa Clara River, San Francisquito Creek, and South Fork Santa Clara River. Along Castaic Creek within the VCC Project Area, willow flycatcher was first observed in May 1990, and one to two migrants were

observed annually from 2000 to 2005 (Guthrie 1990, 2000, 2001, 2002, 2003, 2004, 2005). Since the analysis for the State-Certified EIR, USFWS-protocol surveys have been conducted for southwestern willow flycatcher from 2011 through 2024 in the NRMP area and RMDP/SCP area by Bloom Biological (2011, 2012, 2013, 2014, 2015, 2016), Woodstar Biological (2017, 2018, 2019b, 2019c, 2021), and Compliance Biology (2022c, 2022d). Surveys were conducted along Castaic Creek within the VCC Project Site in 2015, 2017, 2018, 2019, 2022, and 2024 (Bloom Biological 2015; Woodstar Biological 2017, 2018, 2019c; Compliance Biology 2024). Riparian bird surveys were also conducted along Castaic Creek in 2022, although they did not include protocol southwestern willow flycatcher surveys (Compliance Biology 2022b). Numbers of willow flycatchers detected along the Santa Clara River and elsewhere outside the VCC Project Site varied greatly during this period, with none observed in 2011 and high numbers of migrants observed in 2012, when 15 migrants were observed, and 2018, when 14 migrants were observed (Bloom Biological 2011, 2012; Woodstar Biological 2018). In other years, numbers fluctuated between one and four willow flycatchers detected. No willow flycatchers were detected on the VCC Project Site during this period (Bloom Biological 2015; Woodstar Biological 2017, 2018; 2019c). Overall, based on the protocol surveys from 2011 through 2024, the numbers of migrating willow flycatchers in any given year have remained fairly consistent along the Santa Clara River and other surveyed areas compared to numbers during surveys from 1988 to 2008. No willow flycatchers were detected on the VCC Project Site between 2015 and 2022 (Bloom Biological 2015; Woodstar Biological 2017, 2018; 2019a; Compliance Biology 2022b). Two migrants singing in response to playback were detected on the same day in May 2024 (Compliance Biology 2024). The species likely continues to occur in small numbers, and only as a migrant, but the southwestern willow flycatcher subspecies has never been confirmed on the VCC Project Site or in the vicinity. The VCC Project Site supported 63.4 acres of southern cottonwood–willow riparian forest, considered suitable for southwestern willow flycatcher, at the time of the analysis for the State-Certified EIR. Currently, the VCC Project Site supports 74.1 acres of suitable habitat, an increase of 10.7 acres.

Prior to 2010, critical habitat for southwestern willow flycatcher had not been designated in the RMDP/SCP area. However, USFWS revised critical habitat for the southwestern willow flycatcher on January 3, 2013 (78 FR 343–534). Critical habitat in the Coastal California Recovery Unit and within the 14,525-acre Santa Clara Management Unit included 3 miles of Castaic Creek and 46.7 miles of Santa Clara River, including all of the Santa Clara River and Castaic Creek (including the reach within the VCC Project Site) within the RMDP/SCP area (78 FR 363). Although critical habitat is designated for southwestern willow flycatcher in these areas, no southwestern willow flycatchers have been confirmed to nest anywhere in this portion of the Santa Clara River, and none have been confirmed on Castaic Creek within the VCC Project Site. Overall, the status of southwestern willow flycatcher in the RMDP/SCP area relative to the VCC Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.16 Tricolored Blackbird

Tricolored blackbird is a state-listed threatened species, a federal Bird of Conservation Concern, a California Species of Special Concern, and an LA County sensitive species that is nearly endemic to California. The species was listed under CESA on April 19, 2018, so it was not listed at the time of the analysis of the State-Certified EIR. The USFWS determined that a petition to list the species federally was not warranted (84 FR 41694–41699). The tricolored blackbird usually breeds in freshwater marshes with dense growths of emergent vegetation dominated by cattails (*Typha* spp.) or bulrushes (*Schoenoplectus* spp.), but breeding colonies also occur in willows (*Salix* spp.), blackberries (*Rubus* spp.), thistles (*Cirsium* and *Centaurea* spp.), nettles (*Urtica* sp.), and triticale fields and other irrigated grain fields. It forages in open habitats such as grassland, woodland, and croplands, with most foraging within 3.1 miles of breeding colonies (County of Riverside 2008). During the breeding season, the species depends on large insect prey (e.g., grasshoppers, beetles) to feed its young. In other seasons, it relies on plant material,

primarily seeds of rice, other grains, and weeds. At the time of the State-Certified EIR analysis, tricolored blackbird breeding colonies had been observed at two locations in the vicinity of the VCC Project Site in 1994: approximately 200 breeding pairs in a small marsh area along the side of the Santa Clara River at the Castaic Junction east of the RMDP/SCP area, and a colony of about 20 breeding pairs beside Castaic Creek within the VCC Project Site, nesting in what appeared to be an old borrow pit left over from work on the flood-control dikes (Guthrie 1994). Small numbers of tricolored blackbirds appeared at the former site in 1995 and 1996 but did not nest (Guthrie 1996). Migrants were also observed on the VCC Project Site in 1999 and 2006 (Guthrie 1999, 2006). The VCC Project Site included 0.9 acres of nesting habitat (herbaceous wetlands) and 176.2 acres of foraging habitat (grasslands, disturbed land, agriculture, herbaceous wetland) for tricolored blackbird at the time of the State-Certified EIR analysis. Since 2010, no focused surveys have been conducted for tricolored blackbird due to the lack of breeding habitat, although numerous bird surveys in Castaic Creek and the Santa Clara River (where much of the mapped suitable breeding habitat occurs) and elsewhere in the RMDP/SCP area have been conducted. No nesting, foraging, or wintering tricolored blackbirds have been observed on the VCC Project Site during these surveys. Despite the extensive annual biological surveys throughout the area, the only breeding season observation in the RMDP/SCP area was of a male perched in the Santa Clara River in Ventura County in June 2018.

The most recent vegetation data show that no nesting habitat remains within the VCC Project Site. This may be the result of prolonged drought, land alterations related to development, or alteration of agricultural practices in the region since the analysis for the State-Certified EIR. Based on current vegetation data, 139.4 acres of suitable foraging habitat remain on the VCC Project Site, a decrease of 36.8 acres compared to the 2017 Approved Project data. Despite the current absence of nesting habitat for tricolored blackbird, the availability of such habitat is variable, and the species may still have a low to moderate potential to nest on site within Castaic Creek in the future, similar to its potential to nest as described in the State-Certified EIR. Although the likelihood of tricolored blackbird nesting within the VCC Project Site has been reduced somewhat, its status on site as a potential nesting and foraging species has changed relatively little, and, overall, the status of tricolored blackbird in the RMDP/SCP area relative to the VCC Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.17 Western Yellow-Billed Cuckoo

Western yellow-billed cuckoo is federally listed as threatened and state listed as endangered, is a federal Bird of Conservation Concern, and is an LA County sensitive species. It was federally listed as threatened on October 3, 2014 (79 FR 59992–60038), after the analysis for the State-Certified EIR. Critical habitat for the western yellow-billed cuckoo was proposed on August 15, 2014 (79 FR 48548–48652), but final critical habitat has not been designated. The western yellow-billed cuckoo breeds in isolated locations around California, in large blocks of riparian habitat, particularly cottonwood–willow riparian woodlands (Laymon and Halterman 1989; 66 FR 38611–38626). No focused surveys were conducted prior to the analysis for the State-Certified EIR, but annual riparian bird surveys were conducted in the Specific Plan area, encompassing all parts of the Santa Clara River within the RMDP/SCP area, from 1988 to 2008. Only single individuals, thought to be migrants, were occasionally observed along the Santa Clara River in the RMDP/SCP area and vicinity during surveys for other riparian birds; these locations were not mapped, but none occurred within Castaic Creek on the VCC Project Site. During surveys in 2011, 2012, 2014, 2015, 2016, 2017, 2019, 2021, and 2022, no western yellow-billed cuckoos were observed in the RMDP/SCP area or the NRMP area (Bloom Biological 2011, 2012, 2014, 2015, 2016; Woodstar Biological 2017, 2019a, 2019b, 2021; Compliance Biology 2022c, 2022d). One western yellow-billed cuckoo was detected incidentally during a non-protocol riparian bird survey in 2018, in the Santa Clara River east of I-5 (Woodstar Biological 2018). At the time of analysis for the State-Certified EIR, the VCC Project Site supported 63.4 acres of suitable

habitat for western yellow-billed cuckoo along Castaic Creek. Based on current vegetation mapping, 74.1 acres of suitable habitat now occurs, an increase of 10.7 acres. Because the tract boundary is similar to that analyzed in the State-Certified EIR, the amount of suitable riparian habitat is similar, and the species still has not been detected on the site, the status and likelihood of occurrence for western yellow-billed cuckoo in the RMDP/SCP area relative to the VCC Project Site has not changed significantly from the information presented in the State-Certified EIR.

### 5.3.2.18 Cougar

Cougar is currently a regulated species in California and a candidate for listing under CESA. In June 2019, the Center for Biological Diversity and the Mountain Lion Foundation submitted a petition to the California Fish and Game Commission to list cougars of the Southern California/Central Coast Evolutionarily Significant Unit (ESU) as threatened under CESA (CBD and MLF 2019). On April 21, 2020, the California Fish and Game Commission found that listing may be warranted, and cougars within the proposed ESU encompassing the VCC Project Site became a candidate species. This affords cougars the protections of a state listed species until a final determination is made. Home ranges of cougars are quite variable in relation to season, sex, and resources. The home ranges of adult male cougars often span well over 100 square miles (e.g., Loft 1996). Cougars prefer habitats that provide cover, such as thickets in brush and timber in woodland vegetation (Zeiner et al. 1990b). They also use caves and other natural cavities for cover and breeding.

Cougars and their sign were observed on several occasions during surveys of the RMDP/SCP area prior to the analysis for the State-Certified EIR. No locations were provided for some observations, but the species was observed in the High Country SMA and in Middle Canyon on the Mission Village Project Site (Impact Sciences 2005; Dudek & Associates 2006a; Huntley, pers. comm., 2008). The State-Certified EIR assumed that cougars could occur anywhere in the VCC Project vicinity where deer occur. A total of 142.9 acres of scrub, riparian, and oak woodland were considered to be suitable for cougars on the VCC Project Site. However, the entire RMDP/SCP area (about 22 square miles) was considered not large enough to support a single individual's entire home range or more than two or three cougars with overlapping home ranges at any one time. Since 2010, no focused surveys for cougar or their sign have been conducted in the RMDP/SCP area. However, in 2013–2014, Dudek conducted a wildlife camera study at key locations spread widely over the RMDP/SCP area in support of the Mission Village Project (Dudek 2016c). This study included eight locations within or immediately adjacent to the VCC Project Site. Because the camera locations were chosen to capture wildlife moving longer distances between habitat patches, the study had a high likelihood of recording any cougars using corridors within the RMDP/SCP area. During the study, cougars were recorded moving past a location in the Santa Clara River near Mayo Crossing twice in the fall 2013 and once in the summer 2014, but none were recorded on the VCC Project Site (Dudek 2016c). In addition, cougars were detected on the Entrada South Project Site, once through sign (tracks, scat) during coastal California gnatcatcher surveys in 2012 (Dudek 2012f) and once directly during California gnatcatcher surveys in 2019 (Feenstra 2019). Based on current vegetation mapping, the VCC Project Site supports 170.5 acres of suitable habitat for cougar, an increase of 27.6 acres. The VCC Project Site is unlikely to be essential to a cougar's home range based on the lack of any documentation of its occurrence and the high level of surrounding development, but it is likely used on occasion by cougars moving through the area, such as along Castaic Creek or Hasley Canyon. Therefore, overall, the status of cougar in the RMDP/SCP area relative to the VCC Project Site has not changed significantly compared to the analysis in the State-Certified EIR.

### 5.3.3 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear landscape elements that provide for species movement and dispersal between two or more habitats but do not necessarily contain sufficient habitat for all life history requirements of a species, particularly reproduction (Rosenberg et al. 1995, 1997). The main prerequisite for corridors is that they increase animal movement between habitat patches. However, in addition to larger-scale movement of individuals of more mobile species, they provide opportunities for diffusion by smaller, less mobile species. “Diffusion” is the gradual movement or expansion of populations (as opposed to individuals) across a landscape over several generations and may be applicable, for instance, to nonmigratory small mammals, reptiles, or birds reoccupying recovering burned sites.

Landscape habitat linkages (or simply “linkages”) are relatively large open space areas that contain natural habitat and provide connection between at least two larger adjacent open spaces that can provide for both diffusion and dispersal of many species. According to analysis in the State-Certified EIR, the High Country SMA and Salt Creek area within the RMDP/SCP area comprise an important part of the least cost path linkage design identified by Penrod et al. (2006) (Figure 12, South Coast Wildlands Open Space Connectivity and Linkage). These areas are not within or adjacent to the VCC Project Site. The State-Certified EIR also identified 13 potential wildlife corridors, including the Santa Clara River and 12 additional corridors that provided connections with the Santa Clara River and the High Country SMA and the Salt Creek area. These included the Castaic/Hasley Corridor, which extends north from the Santa Clara River corridor through the VCC Project Site and was identified as one of several “tributary corridors” that connect undeveloped uplands with the Santa Clara River (Figure 13, RMDP/SCP Existing Regional Wildlife Connectivity Corridors). The State-Certified EIR stated that, under then-existing conditions, the Castaic/Hasley Corridor allowed for movement of many species such as coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), and possibly cougar, and functioned as live-in habitat for many other species. The latter include smaller, in some cases less-mobile species, such as reptiles, small mammals, and birds. Birds may also use vegetated parts of these corridors to move across the landscape but may also fly over any part of the landscape during migration. Although the vicinity of Castaic Creek north of the RMDP/SCP area was becoming increasingly developed, the State-Certified EIR stated it would continue to have connectivity value between the Santa Clara River and upland habitats to the northeast, extending to Castaic Lake and the Angeles National Forest.

In 2013–2014, Dudek conducted a wildlife camera study at locations spread widely over the RMDP/SCP area in support of the Mission Village Project (Dudek 2016c). This study included eight locations within or immediately adjacent to the VCC Project Site. Each camera was in place for approximately one month in the fall 2013 and one month in the summer 2014. Of the moderate to high-mobility species expected to pass through the Castaic/Hasley Corridor according to the State-Certified EIR (coyote, mule deer, and possibly cougar), only coyote was recorded during either the fall or summer (Dudek 2016c). Coyote was both the most commonly recorded species at the eight stations and the species recorded at the most stations. While the results do not establish that no higher-mobility species, such as mule deer and cougar, travel along the Castaic/Hasley Corridor, it suggests that this may be a relatively uncommon occurrence, and that more human-tolerant species such as coyote are more likely to use the corridor. Nonetheless, the study confirmed that a variety of wildlife do use the Castaic/Hasley Corridor, as was assumed in the State-Certified EIR. Although increasing development in the vicinity may have limited the use of the corridor by less human-tolerant species, as anticipated in the State-Certified EIR, the Castaic/Hasley Corridor is still an important linkage for some species. Therefore, the value of the VCC Project Site as a wildlife corridor or habitat linkage has not changed significantly compared to the information presented in the State-Certified EIR.



INTENTIONALLY LEFT BLANK

---

## 6 Effects of the Modified Project

This chapter evaluates whether there would be any new significant environmental impacts to biological resources, or a substantial increase in the severity of previously identified significant effects, resulting from the changes incorporated in the Modified Project (summarized in Chapter 3, Description of the Modified Project), and/or from any new information or changed circumstances summarized in Chapters 4 and 5 of this Report.<sup>7</sup>

### 6.1 Impacts to Vegetation Communities, Land Covers, and General Wildlife

#### 6.1.1 Vegetation Communities and Land Covers

The State-Certified EIR analyzed the impacts of the 2017 Approved Project on vegetation communities and land covers. That analysis was a function of the vegetation community/land cover types mapped on the VCC Project Site and the development footprint of the 2017 Approved Project. The changes incorporated in the Modified Project would achieve a net reduction of 19.6 acres in the overall permanent disturbance footprint of the VCC Project, compared to the 2017 Approved Project. This net effect includes the elimination of permanent impacts within 31.3 acres that would have been impacted under the 2017 Approved Project, of which 20.5 acres will now be temporarily impacted by construction activities. The Modified Project would have new permanent impacts to 11.7 acres and temporary construction-related impacts to 15.3 acres that would not have been impacted by the 2017 Approved Project.<sup>8</sup> Specifically, the Modified Project would reduce the permanent development footprint in the vicinity of Hasley Canyon by 15.3 acres, largely by avoiding development in the drainage. This reduction largely reflects a conversion of permanent impacts to temporary impacts but also includes some areas that would not be impacted at all, including areas that would be completely avoided, or only temporarily impacted, in smaller areas between Castaic Creek and Hasley Canyon and along the edges of the VCC Project Site (Figures 3 and 4). Avoided permanent impacts compared to the 2017 Approved Project include 7.0 acres of grassland, 2.5 acres of coastal scrub, 14.1 acres of riparian scrub, and 7.7 acres of man-made land covers. Taking into account the net reduction in permanent impacts, the Modified Project, as compared to the 2017 Approved Project, would not create any new significant effects, or substantially increase the severity of previously identified significant effects, to vegetation communities or land covers.

Table 3 shows the changes in impacts to vegetation communities for the Modified Project compared to the 2017 Approved Project. The table reflects both changes in the areas impacted by the VCC Project and changes in the vegetation map based on the 2019 updated mapping. As detailed above, impacts to specific vegetation communities would decrease or increase by a few acres, but overall there would be fewer permanent impacts from the Modified Project compared to the 2017 Approved Project. The reduction of permanent impacts from the Modified Project reflects environmentally beneficial changes to the Modified Project design compared to the

---

<sup>7</sup> This Report's references to "direct impacts" include what the State-Certified EIR referred to as "indirect impacts" associated with the development facilitated by the RMDP/SCP, including the development of the VCC planning area. This Report's references to "indirect impacts" are equivalent to what were referred to as "secondary impacts" in the State-Certified EIR.

<sup>8</sup> These 11.7 acres of new permanent impacts include 4.9 acres of man-made land cover, 4.7 acres of grass and herb dominated communities, 1.6 acres of riparian, and 0.5 acres of coastal scrub. As described in the text below, the 20.5 acres of temporary impacts that were permanent impacts under the State-Certified EIR excludes 0.8 acres of temporary impacts for riparian habitat creation. The 15.3 acres of new temporary impacts excludes 4.6 acres of temporary impacts for riparian habitat creation.

State-Certified EIR. Reduced permanent impacts benefit otherwise impacted resources—for instance, reduced permanent impacts to riparian areas allow the riparian system to function in a mostly natural state with the absence of armored features within the riparian corridor. While there is an increase in temporary construction impacts from the Modified Project, 32% of these impacts are to man-made land cover types and another 20% are to naturalized vegetation communities. Table 3 also includes temporary impacts that will occur solely as a result of habitat enhancement/creation activities, such as mitigation for impacts to riparian habitat and waters under the jurisdictions of CDFW and the U.S. Army Corps of Engineers (Corps). Because these impacts are intended to meet mitigation requirements under the State-Certified EIR and do not result from VCC Project development activities, they are not included in the comparison of Modified Project and 2017 Approved Project development impacts. However, they are included separately in Table 3 and in discussions of Modified Project impacts in the following text to ensure full disclosure of VCC Project-related effects.

**Table 3. Vegetation Community Impacts - Modified Project Compared to 2017 Approved Project**

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance/ Association	2017 Approved Project Permanent Impacts (Acres)	Modified Project (Acres)		Changes in Permanent Impacts (Acres)	Modified Project Temporary Impacts from Habitat Creation/ Enhancement (Acres)
				Permanent Impacts	Temporary Construction Impacts		
Grass and Herb Dominated Communities	Non-Native Grassland	California annual grassland	64.2	37.8	5.6	-26.4	<0.05
	Mustard Stand	Short-podded mustard stand	—	4.2	1.2	+4.2	1.2
Grass and Herb Dominated Communities Subtotal			64.2	42.0	6.8	-22.2	1.2
Scrub and Chaparral	Coastal Scrub	California sagebrush scrub	31.6	28.0	2.3	-3.6	0.2
		California sagebrush – California buckwheat scrub (including disturbed forms)	6.0	11.9	0.2	+5.9	—
		Disturbed California buckwheat	—	3.9	<0.05	+3.9	—
Scrub and Chaparral Subtotal			37.6	43.7	2.5	+6.1	0.2
Broad Leafed Upland Tree Dominated	Oak Woodland and Forest	Valley oak woodland	—	1.8	—	+1.8	—
Broad Leafed Upland Tree Dominated Subtotal			—	1.8	—	+1.8	—
Riparian and Bottomland Habitat	Other Riparian/ Wetland	River wash	15.7	2.1	6.2	-13.6	<0.05
		Scale broom scrub (including disturbed forms)	—	3.1	4.8	+3.1	3.2
		Herbaceous wetlands	0.6	—	—	-0.6	—
	Low to High Elevation Riparian Scrub	Mulefat scrub (including disturbed forms)	0.5	2.3	0.7	+1.8	<0.05
		Blue elderberry stands	—	—	0.1	—	—

**Table 3. Vegetation Community Impacts - Modified Project Compared to 2017 Approved Project**

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance/ Association	2017 Approved Project Permanent Impacts (Acres)	Modified Project (Acres)		Changes in Permanent Impacts (Acres)	Modified Project Temporary Impacts from Habitat Creation/ Enhancement (Acres)
				Permanent Impacts	Temporary Construction Impacts		
		Tamarisk thickets	—	0.9	0.2	+0.9	0.1
		Disturbed rubber rabbitbrush scrub	—	0.5	0.3	+0.5	0.2
	Riparian Forest and Woodland	Southern cottonwood– willow riparian	3.9	4.3	2.6	+0.4	0.1
<i>Riparian and Bottomland Habitat Subtotal</i>			<i>20.7</i>	<i>13.2</i>	<i>14.9</i>	<i>–7.5</i>	<i>3.6</i>
<i>All Natural/Naturalized Communities Subtotal</i>			<i>122.5</i>	<i>100.8</i>	<i>24.2</i>	<i>–21.7</i>	<i>5.0</i>
Man-Made Land Cover Types		Agriculture	24.9	34.2	0.2	+9.3	—
		Developed	1.6	13.8	6.6	+12.2	—
		Disturbed land	60.3	40.5	4.6	–19.8	0.4
		Ornamental	—	0.6	0.2	+0.6	—
<i>Man-Made Land Cover Types Subtotal</i>			<i>86.9</i>	<i>89.0</i>	<i>11.6</i>	<i>+2.1</i>	<i>0.4</i>
<b>Total</b>			<b>209.4</b>	<b>189.8</b>	<b>35.9</b>	<b>–19.6</b>	<b>5.3</b>



Overall, permanent impacts to natural communities would decrease by approximately 21.7 acres under the Modified Project compared to the 2017 Approved Project. The Modified Project would permanently impact 22.2 acres less of grass- and herb-dominated communities compared to the 2017 Approved Project. The Modified Project would impact 6.1 acres more coastal scrub overall compared to the 2017 Approved Project. Permanent impacts to 1.8 acres of newly mapped oak woodland would occur under the Modified Project, compared to no impacts under the 2017 Approved Project. Permanent impacts to riparian communities would decrease by 7.5 acres overall, mostly as a result of a decrease in permanent impacts to river wash. Therefore, the only net increases to permanent impacts to natural vegetation communities at the General Physiognomic and Physical Location level would be to coastal scrub communities (6.1 acres) and oak woodlands (1.8 acres).

Overall, permanent impacts to man-made land cover types, agriculture, developed, disturbed land, and ornamental would increase by approximately 2.1 acres under the Modified Project compared to the 2017 Approved Project.

New impacts would occur to oak woodland (1.8 acres of valley oak woodland), which is sensitive per CDFW (2023b) and is protected locally. These impacts could be potentially significant absent mitigation. However, because impacts to oak woodlands are analyzed in the State-Certified EIR, mitigation is provided that would be applicable to impacts to the 1.8 acres of valley oak woodland. Specifically, to mitigate the effects of the VCC Project on oak woodlands, oak trees would be replaced in or adjacent to existing oak woodlands and savannas per the Oak Resources Management Plan (ORMP) required by RMDP/SCP Mitigation Measure BIO-22 (these RMDP/SCP mitigation measures will be referred to as “RMDP/SCP-BIO-XX” in the rest of this Report). See Appendix D, Project Mitigation Measures and Project Design Features, for complete text of mitigation measures. Maintenance of the oak woodland restoration sites is required for a period of no less than 5 years total and no less than 2 years after removal of irrigation (if any). During the maintenance period, maintenance measures will be provided to ensure that the oak trees become successfully established and are ultimately able to survive under natural conditions beyond the completion of the maintenance period. While many county and city oak tree protection ordinances focus on individual trees, the functional unit that should be considered for restoration is the oak woodland. Mitigation such as restoration and compensation should focus on oak woodlands rather than a certain number or size of individual trees (Light and Pedroni 2002). Protecting trees only over a certain size results in loss of woodlands as the younger components of the woodland are removed and structural complexity is lost. RMDP/SCP-BIO-22 does consider the community as a whole. Implementation of this mitigation measure will replace the lost habitat and provide for the long-term preservation of oak communities in the Modified Project area. The ORMP would be implemented and includes measures to create, enhance, and/or restore oak woodlands within lands owned by the Applicant. These oak woodlands will be subject to the performance criteria established in the ORMP. For example, successful completion of each woodland creation or enhancement site must be without active manipulation by irrigation, planting, or reseedling for a minimum of 3 years; oak trees must be within 5% of the plan target density of surviving, healthy oak trees; and non-native grass cover must not exceed the target woodland non-native grass cover. The plan shall be subject to the requirements of CLAOTO and will address impacts to oak resources, including oak trees of the sizes regulated under CLAOTO. Therefore, while there are new potentially significant impacts to oak woodlands from the Modified Project, the mitigation already provided by the State-Certified EIR would reduce this impact to a level that is less than significant.

Impacts to scale broom scrub and blue elderberry stands are separately identified in this Report for the first time. Modified Project development activities would have 3.1 acres of permanent impacts and 8.0 acres of temporary impacts to scale broom scrub, 3.2 acres of which are for riparian habitat creation/enhancement, and 0.1 acres of temporary impacts to blue elderberry stands. Scale broom scrub and blue elderberry stands are both considered sensitive natural communities by CDFW (2023b). While scale broom (*Lepidospartum squamatum*) and blue

elderberry (*Sambucus mexicana*) individuals were present on the VCC Project Site prior to the 2015 vegetation map update (i.e., within the river wash mapped in the 2017 Approved Project), scale broom scrub and blue elderberry stands were not included as separate mapped vegetation communities in the 2017 Approved Project. The vegetation mapping nomenclature for the current vegetation map reflects the List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database (CDFG 2010), in which this vegetation community is described. Because scale broom and blue elderberry was already known to be present on site, there is no material change in disturbance to these vegetation communities from the 2017 Approved Project to the Modified Project.

In addition, while not a new impact, permanent impacts to southern cottonwood–willow riparian forest would increase by 0.4 acres; this community corresponds to the Fremont cottonwood forest alliance, which is ranked G4S3 by CDFW (2023b) and is therefore considered a sensitive natural community.

Mitigation for direct and indirect impacts to jurisdictional resources described for the 2017 Approved Project would mitigate impacts to scale broom scrub, blue elderberry stands, and increased impacts to southern cottonwood–willow riparian forest for the Modified Project to a level that is less than significant. For indirect impacts, mitigation measures have been designed to limit the amount of particulate matter (dust) that leaves the construction area and include actions such as daily watering of disturbed areas and the use of chemical tackifiers. The Applicant will use best management practices (BMPs) to reduce the off-site transport of sediment or sediment-laden water during storm events, including per RMDP/SCP-BIO-49 (Construction stormwater measures). In order to reduce direct impacts to this vegetation community due to the removal of vegetation, the Project Applicant will implement a set of mitigation measures designed to restore the functions and services/values provided by riparian vegetation communities lost as a result of development. These impacts would be reduced through the implementation of RMDP/SCP-BIO-1 (requirements for riparian/wetland mitigation plans) and RMDP/SCP-BIO-2 through RMDP/SCP-BIO-10 (mitigation ratios for impacts to waters, Mitigation site selection, Requirements for replacement vegetation, Plant spacing for mitigation sites, Revegetation success criteria, Replanting after acts of God, Temporary irrigation for mitigation sites, Exotic plant control, and Mitigation credit for exotic plant control), RMDP/SCP-BIO-12 (mitigation monitoring reports), RMDP/SCP-BIO-13 (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance), RMDP/SCP-BIO-15 (replacement of riparian trees), and RMDP/SCP-BIO-16 (revegetation of temporary impacts). The permanent removal of existing habitats in Corps- and/or CDFW-jurisdictional areas shall be replaced by creating habitats of similar functions and values/services (see RMDP/SCP-BIO-4) on the Project Site or within lands owned by the Applicant, or as allowed under RMDP/SCP-BIO-10. The Applicant will also provide buffers around waters to minimize disturbance. A qualified biologist will monitor the construction perimeter to limit the potential for the contractor to disturb vegetation outside the proposed construction footprint. Therefore, while there are new impacts to scale broom scrub, blue elderberry stands, and southern cottonwood–willow riparian forest from the Modified Project, the mitigation already provided by the State-Certified EIR would ensure that these impacts are mitigated to a level that is less than significant.

There are some other newly identified direct impacts to certain vegetation communities and land covers resulting from the Modified Project, including short-podded mustard stand, California buckwheat scrub (disturbed), tamarisk thickets, rubber rabbitbrush scrub (disturbed), and ornamental. These vegetation communities or land covers were not specifically identified in the vegetation map for the 2017 Approved Project due to the classification system used at the time, although they were likely present within mapped vegetation communities. The most recent vegetation map updates employ an updated classification system that identifies these communities and land cover types specifically, resulting in the identification of direct impacts; but the new mapping data do not indicate a material change in disturbance to natural vegetation communities overall from the 2017 Approved Project to the Modified

Project. Direct permanent and temporary impacts to these vegetation communities would not be considered significant because they are not regulated as sensitive natural communities by CDFW (2023b). Similarly, an increase in impacts to California sagebrush scrub–California buckwheat (including disturbed forms), mulefat scrub, agriculture, and developed land, which were mapped on the site for the 2017 Approved Project, would not be considered significant because these vegetation communities and land covers are not considered sensitive (CDFW 2023b).

As described in Chapter 5, Results of Surveys, and shown in Table 2, the updated vegetation mapping of the VCC Project Site shows that vegetation communities and land cover types present on the site are consistent overall with those reported in the State-Certified EIR, and there was a net increase of 13.3 acres in natural vegetation communities overall on the VCC Project Site and off-site areas. The updated impacts include impacts to newly mapped sensitive valley oak woodland, scale broom scrub, and blue elderberry stands, and a small increase in permanent impacts to southern cottonwood–willow riparian forest (0.4 acres), as well as impacts to vegetation communities not considered sensitive, such as California buckwheat scrub and mulefat scrub. The minor changes in impacts to vegetation communities largely reflect small shifts in the types and locations of vegetation communities present within the VCC Project Site that are within the range of natural variability expected to occur over time in an undeveloped environment. The observed differences do not represent a material or substantial change in the types, quantity, and quality of biological functions and values provided by the VCC Project Site. The State-Certified EIR contemplated such change and included mitigation measures that account for this variability by requiring compensatory mitigation for impacts to sensitive vegetation communities that is proportional to actual project impacts, as described below. The mitigation measures provided by the State-Certified EIR would mitigate for newly identified impacts to oak woodlands, scale broom scrub, and blue elderberry stands, as well as increased permanent impacts to southern cottonwood–willow riparian forest.

Taking into account the Modified Project changes and the updated information regarding vegetation communities and land cover types on the VCC Project Site—as well as the reduced impacts to vegetative communities from avoiding permanent disturbance along Castaic Creek and Hasley Canyon, and the permanent conservation of jurisdictional areas within Castaic Creek and Hasley Canyon under VCC-PDF-BIO-1—the Modified Project would not result in any new significant impacts that were not evaluated in the State-Certified EIR, nor would it cause a substantial increase in the severity of any previously identified significant effects to vegetation communities.

The following mitigation measures from the Specific Plan (i.e., “SP-4.6-XX”) and the RMDP/SCP (i.e., “RMDP/SCP-BIO-XX”), all of which were adopted in the State-Certified EIR, would address direct and indirect impacts to sensitive natural communities on the VCC Project Site. In addition, several measures from the Mitigation Monitoring and Reporting Program (MMRP) for the 1990 EIR certified by the County of Los Angeles in approving the larger Valencia Commerce Center development, of which the current VCC Project is a part, also would address direct and indirect impacts to sensitive natural communities:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** through **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** through **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** through **SP-4.6-15** (revegetation plans)

- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-47a** (mitigation banking)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-58** (compliance with all required NPDES permits and water quality permits)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-25** (spineflower preserve restoration and enhancement)
- **RMDP/SCP-BIO-26** (response to wildfire/landslide damage in spineflower preserves)
- **RMDP/SCP-BIO-35** (restricted access to spineflower preserves)
- **RMDP/SCP-BIO-36** (permanent fencing along spineflower preserve boundaries)
- **RMDP/SCP-BIO-37** (signage at spineflower preserve boundaries)
- **RMDP/SCP-BIO-42** (construction avoidance of preserved oak trees)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs [covenants, conditions, and restrictions])
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)

- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)
- **RMDP/SCP-BIO-87** (quarterly monitoring and control measures for Argentine ants in perpetuity)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

## 6.1.2 General Wildlife

In evaluating impacts to general wildlife, the State-Certified EIR assumed that wildlife species with the potential to occur on the VCC Project Site, based on suitable habitat conditions and other relevant factors, would be present and would be affected by the 2017 Approved Project. The State-Certified EIR included measures to avoid, minimize, and mitigate effects to such species and reached conclusions about the significance of the 2017 Approved Project's impacts that took into account those potential effects and mitigation measures. Thus, in the absence of changes to the VCC Project that could trigger new or substantially increased effects to wildlife, or new information or changed circumstances bearing on the Modified Project's effects to wildlife and their habitat, the analysis and conclusions presented in the State-Certified EIR would continue to apply.

Specifically, the State-Certified EIR found that potential effects to non-special-status wildlife species and their habitat from implementation of the RMDP/SCP, including buildout of the VCC Project Site, would include injury or mortality to individuals from activities such as vegetation clearing and grading, permanent and temporary loss of habitat, exposure to construction-related dust and ground vibration, and water quality impacts such as sedimentation, erosion, and pollution that could affect some aquatic species. Additional, long-term, effects to wildlife from implementation of the RMDP/SCP could include habitat fragmentation; increased human activity; increased activity by pet, stray, and feral cats and dogs; risk of vehicle collisions; pesticide use; altered wildfire regimes; invasive plant species; non-native wildlife species including Argentine ants; disruption of behaviors and increased predation due to nighttime lighting; and increased noise. Given the common and widespread nature of the species and their adaptability, the State-Certified EIR found these effects would be adverse but not significant prior to mitigation, with one exception (construction-related impacts to nesting birds, discussed below). Although mitigation for these effects was not required, the State-Certified EIR found that mitigation measures already applied under that document would further reduce and offset impacts to common wildlife. With respect to habitat fragmentation, isolation, and edge effects from development facilitated by the RMDP/SCP, the State-Certified EIR found that these effects would be minimized and mitigated by conservation of large intact areas of habitat within the High Country SMA, Salt Creek area, and River Corridor SMA, which would also maintain landscape-level habitat connectivity as discussed in Section 6.3 of this Report. Other direct and indirect effects described above would be reduced by construction-related and post-construction mitigation measures that apply to the VCC Project, as listed below, including RMDP/SCP-BIO-64 (Integrated Pest Management Plan), RMDP/SCP-BIO-73 (fencing to protect open space), RMDP/SCP-BIO-87 (monitoring for Argentine ants), and RMDP/SCP-WQ-2 (Landscape and Integrated Pest Management Plan). The State-Certified EIR found that potential loss of the nests, eggs, nestlings and fledglings of various native bird species from construction activities, which would violate the Migratory Bird Treaty Act, would be significant absent mitigation. However, impacts to nesting birds would be avoided and rendered less than



significant through application of RMDP/SCP-BIO-56, which requires pre-construction surveys for nesting birds for construction activities occurring during the nesting/breeding season of native bird species potentially nesting on site, with avoidance of active nests required if found, and RMDP/SCP-BIO-52, which requires biological monitoring during vegetation clearing and grading activities.

As discussed in Section 6.1.1, Vegetation Communities and Land Covers, some relatively small shifts have occurred in the total acreages of some vegetation communities on the VCC Project Site since the analysis for the State-Certified EIR. These small shifts, which may reflect both natural vegetation changes due to succession or colonization and small changes in the VCC Project Site boundaries, include reductions in areas occupied by agriculture, grassland, and disturbed land and increases in areas occupied by coastal scrub and riparian communities, as well as the development of a small area of valley oak woodland (1.8 acres). Overall, while the area of natural/naturalized vegetation communities (i.e., excluding man-made land covers, including developed, disturbed, agriculture, and ornamental) within the tract boundary increased by only 13.3 acres, from 214.8 to 228.1 acres, the permanent impacts to natural vegetation communities providing habitat for general wildlife decreased from 122.5 acres under the 2017 Approved Project to 100.8 acres under the Modified Project. The Modified Project also includes 24.2 acres of temporary impacts to natural/naturalized vegetation communities, including 14.9 acres of riparian habitats that would be restored and that would continue to provide benefits to wildlife post-development.<sup>9</sup> Temporary impacts from habitat creation or enhancement would affect an additional 5.0 acres of natural and naturalized vegetation communities. This includes the conversion of approximately 1.6 acres of short-podded mustard stands, tamarisk thickets, and disturbed land into riparian habitats as mitigation for project impacts.

Therefore, the incremental changes associated with the Modified Project would not substantially increase the VCC Project's disturbance footprint and, in fact, would result in additional avoidance of permanent direct impacts to natural vegetation communities supporting common and special-status wildlife. The land uses associated with the VCC Project would also remain largely unchanged.

Because the overall areas of human-created land covers and natural vegetation communities on the VCC Project Site remain substantially similar to those analyzed in the State-Certified EIR (13.4 acres, or 4%, more), the Project Site continues to provide similar habitat value for common wildlife species. For example, while a 1.8-acre area of valley oak woodland has developed within the Project Site, this area is too small to substantially change wildlife habitat value on the site. Also, while the area of riparian habitat has increased overall, from 102.2 to 119.7 acres, the area of permanent impacts has decreased from 20.7 to 13.2 acres, and temporary impacts generally would be restored after VCC Project completion per the mitigation measures cited in Section 6.1.1. In addition, jurisdictional streambeds and riparian habitat within Hasley Canyon and Castaic Creek would be permanently conserved under VCC-PDF-BIO-1. As discussed in Chapter 3, there is also no other substantially new information or changed circumstances relevant to the presence of common wildlife on the VCC Project Site. Therefore, the potential for common wildlife to be present on the VCC Project Site and potentially affected by VCC Project activities under the Modified Project would remain substantially similar to that analyzed in the State-Certified EIR. Because the Modified Project would decrease permanent impacts to natural habitats for common wildlife species, it is not likely to result in any new significant direct or indirect impacts to these common species.

---

<sup>9</sup> Some of the riparian habitat would be subject to periodic flood maintenance activities, but over the long term would still provide habitat value for wildlife.

The following Specific Plan and RMDP/SCP mitigation measures applicable to the VCC Project, as well as several measures from the 1990 EIR for the Valencia Commerce Center Development, would further reduce impacts to non-special-status wildlife:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** through **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** through **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** through **SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-58** (compliance with all required NPDES permits and water quality permits)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-45** (work zone stream flow diversion and construction dewatering)

- **RMDP/SCP-BIO-48** (structures within the riverbed not to impair movement of aquatic life)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-78** (cowbird trapping)
- **RMDP/SCP-BIO-82** (condor protection measures)
- **RMDP/SCP-BIO-87** (quarterly monitoring and control measures for Argentine ants in perpetuity)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

## 6.2 Impacts to Special-Status Species

The State-Certified EIR contained an extensive analysis of impacts to special-status species resulting from the VCC Project, taking into account the documented occurrence or high potential for presence of such species on the VCC Project Site, the direct effects of the VCC Project within the development footprint of the 2017 Approved Project, and the potential indirect effects to such species from project activities. The Modified Project would not increase the permanent impact footprint of the VCC Project, and the avoidance of Castaic Creek and Hasley Canyon would reduce potential adverse effects of the Modified Project on special-status species compared to the 2017 Approved Project. The proposed construction activities and post-construction land uses would remain substantially similar to those analyzed in the State-Certified EIR. Therefore, the Modified Project would not result in new or increased impacts to special-status species absent material new information or changed circumstances regarding the presence of such species on site, their status, or their vulnerability to effects from the VCC Project. This section evaluates the potential for any such changes, based on the updated survey results and other information presented in Chapter 4, Methods and Survey Limitations.

### 6.2.1 Special-Status Plant Species

The following subsections address special-status plant species that were detected on the VCC Project Site during surveys prior to preparation of the State-Certified EIR in 2010, as well as Southern California black walnut, which was detected after preparation of the State-Certified EIR. Other special-status plant species that were analyzed in the State-Certified EIR, but that do not occur on the VCC Project Site, are not addressed here. No additional special-status plant species have been identified on the VCC Project Site since 2010, with the exception of Southern California black walnut.

### 6.2.1.1 San Fernando Valley Spineflower

As discussed in Chapter 5, the current presence and status of San Fernando Valley spineflower (“spineflower”) remains substantially similar to that analyzed in the State-Certified EIR. Focused surveys of the VCC Project Site have been conducted under the CDFW-approved SCP. Survey results are included in Dudek (2012a, 2012b, 2013, 2014a, 2015a, 2016b, 2017, 2018, 2019b, 2020, 2021, 2022, 2023a, 2024a) and the abundance and area occupied by spineflower in the years since 2007 have been within the expected range of variability for this annual species. The SCP and associated ITP authorize take of all spineflower within the VCC Project Site. Given that the status of spineflower within the VCC Project Site has not changed materially, and the Modified Project would impact the on-site spineflower population as authorized by the SCP ITP, impacts to spineflower would remain consistent with the analysis provided in the State-Certified EIR.

The Modified Project would be consistent with the SCP. It would not involve take of any spineflower not already authorized under the ITP issued for the SCP and evaluated in the State-Certified EIR. All authorized impacts of the Modified Project to spineflower would be fully mitigated through implementation of the SCP and compliance with the SCP ITP. Taking into account the absence of any material change in the current status of spineflower within the VCC Project Site or overall, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following RMDP/SCP mitigation measures, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to spineflower on the VCC Project Site:

- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-23** (adoption and implementation of SCP; protection of spineflower preserves)
- **RMDP/SCP-BIO-24** (management of spineflower preserves)
- **RMDP/SCP-BIO-25** (spineflower preserve restoration and enhancement)
- **RMDP/SCP-BIO-26** (response to wildfire/landslide damage in spineflower preserves)
- **RMDP/SCP-BIO-35** (restricted access to spineflower preserves)
- **RMDP/SCP-BIO-36** (permanent fencing along spineflower preserve boundaries)
- **RMDP/SCP-BIO-37** (signage at spineflower preserve boundaries)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

### 6.2.1.2 Slender Mariposa Lily

As discussed in Chapter 5, the current presence and status of slender mariposa lily remain substantially similar to that analyzed in the State-Certified EIR, which concluded that the species occupied 3.3 acres within the VCC Project Site. Updated surveys for slender mariposa lily in 2015, 2019, and 2022 determined that the species’ cumulative occupied footprint within the VCC Project Site is 5.0 acres, an increase of 1.7 acres. This change is within the expected range of variability for this bulbiferous species. Impacts to the cumulative occupied footprint of slender mariposa lily have increased from 2.9 acres for the 2017 Approved Project to 4.3 acres for the Modified Project, which likely reflects variable emergence from bulbs in relation to environmental factors, as discussed in

Section 5.3.1.2. While impacts to the cumulative occupied slender mariposa lily habitat have increased by 1.4 acres, this increase is not substantial given the mitigation provided. Specifically, this increased impact would be mitigated under RMDP/SCP-BIO-40, which provides for habitat replacement/enhancement at a 1:1 ratio, as well as other mitigation measures listed in this section. The increase in impacts to slender mariposa lily is within the normal range of variability anticipated by the State-Certified EIR.

The status of slender mariposa lily remains essentially the same compared to its status as analyzed in the State-Certified EIR. The slender mariposa lily is not listed under the ESA or CESA and is still a CRPR 1B.2 species. Population abundance and the distribution of documented occupied habitat has varied over the years, likely in relation to annual weather conditions (as opposed to changed vegetation communities and land covers), but its status on the VCC Project Site since 2010 is within the range recorded before 2010.

Taking into account the absence of any material change in the current status of slender mariposa lily within the VCC Project Site or overall, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to slender mariposa lily on the VCC Project Site:

- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-25** (spineflower preserve restoration and enhancement)
- **RMDP/SCP-BIO-40** (RMDP Slender Mariposa Lily Mitigation and Monitoring Plan revision and implementation)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

### 6.2.1.3 Peirson's Morning-Glory

As discussed in Chapter 5, the current presence and status of Peirson's morning-glory remains substantially similar to that analyzed in the State-Certified EIR. Based on focused surveys of the VCC Project Site conducted for the State-Certified EIR, Peirson's morning-glory was observed on the VCC Project Site from 2003 to 2006, but not mapped. Peirson's morning-glory was observed in 2019 but was not widespread on site. Given the previous and recent observations of this species on site, observations since 2010 are generally consistent with observations made in support of the State-Certified EIR. The State-Certified EIR described impacts to Peirson's morning-glory, and other species with low sensitivity that were not mapped, in terms of impacts to suitable habitat. The VCC Project Site supports approximately 106.5 acres of suitable habitat for Peirson's morning-glory, a decrease of 6.1 acres compared to that described in the State-Certified EIR. The Modified Project would result in 85.7 acres of permanent impacts and 9.3 acres of temporary construction impacts (95.1 acres total) to Peirson's morning-glory



suitable habitat, compared to 101.8 acres of permanent impacts under the 2017 Approved Project, a decrease of 6.7 acres overall and a decrease of 16.1 acres of permanent impacts. The Modified Project would also result in 1.4 acres of temporary impacts to suitable habitat for Peirson's morning-glory solely for the purpose of habitat creation or enhancement for mitigation of VCC Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. All of these areas would be restored to habitat potentially suitable for Peirson's morning-glory. Given the moderate reduction in permanent impacts to suitable habitat, including along Castaic Creek and Hasley Canyon, the changes incorporated in the Modified Project would not change the findings of the State-Certified EIR with regard to Peirson's morning-glory.

The status of Peirson's morning-glory remains essentially the same compared to its status as analyzed in the State-Certified EIR. The Peirson's morning-glory is not listed under the ESA or CESA and is still a CRPR 4.2 species.

Because the status of Peirson's morning-glory within the VCC Project Site has not materially changed, and because the species has not been observed on site in recent years, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to Peirson's morning-glory on the VCC Project Site:

- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

#### 6.2.1.4 Mainland Cherry

As discussed in Chapter 5, the current presence and status of mainland cherry remain substantially similar to that analyzed in the State-Certified EIR. Mainland cherry was noted, but not mapped, during surveys of the VCC Project Site conducted for the State-Certified EIR; a single mainland cherry has been documented since 2010 within the VCC Project Site. Mainland cherry was not mapped for the State-Certified EIR. The single mainland cherry that was identified during surveys in support of the Modified Project would be permanently impacted under the Modified Project. Given application of RMDP/SCP-BIO-88, which provides for replacement of mainland cherry trees, the difference in impacts to mainland cherry is not substantial and would not change the findings of the State-Certified EIR.

The status of mainland cherry remains the same compared to its status as analyzed in the State-Certified EIR. The mainland cherry is not listed under the ESA or CESA and is not assigned a CRPR, but it is considered sensitive by the County of Los Angeles.

Taking into account the absence of any material change in the current status of mainland cherry within the VCC Project Site or overall, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as several measures from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to mainland cherry on the VCC Project Site:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** through **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** through **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** through **SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-47a** (mitigation banking)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)

- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-88** (replacement of California black walnut and mainland cherry trees)
- **VCC-4.a-2** (retain native coastal scrub vegetation)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

#### 6.2.1.5 Southern California Black Walnut

As discussed in Chapter 5, the current presence and status of Southern California black walnut remains substantially similar to that analyzed in the State-Certified EIR. Based on focused surveys of the VCC Project Site conducted for the State-Certified EIR, Southern California black walnut was present, but given the low sensitivity status of the species, the exact locations of all individual Southern California black walnut trees were not mapped. Four individual Southern California black walnut trees have been observed during surveys since 2010. Given that this species was not mapped for the State-Certified EIR, the few observations since 2010 are generally consistent with the analysis in the State-Certified EIR. None of the four Southern California black walnuts observed during surveys in support of the Modified Project would be impacted under the Modified Project.

The status of Southern California black walnut remains the same compared to its status as analyzed in the State-Certified EIR. The Southern California black walnut is not listed under the ESA or CESA and is still a CRPR 4.2 species.

Taking into account the absence of any material change in the current status of Southern California black walnut within the Modified Project area or overall, and the lack of direct impacts to Southern California black walnut on site, the Modified Project is not expected to result in any new significant impacts, or to substantially increase any previously identified significant impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as several measures from the 1990 EIR for the Valencia Commerce Center Development, would mitigate any indirect impacts to Southern California black walnut on the VCC Project Site:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** through **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** through **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)

- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13 through SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)
- **RMDP/SCP-BIO-88** (replacement of California black walnut and mainland cherry trees)
- **VCC-4.a-2** (retain native coastal scrub vegetation)
- **VCC-4.b-2 through VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)

- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

### 6.2.1.6 White Rabbit-Tobacco (Undescribed Everlasting)

As discussed in Chapter 5, white rabbit-tobacco has been observed on the VCC Project Site since 2003. Prior to 2010, individuals on site had been identified as undescribed everlasting, which was analyzed in the State-Certified EIR. It has been described as white rabbit-tobacco since the 2017 Approved Project was analyzed. The State-Certified EIR concluded that this species occupied 0.7 acres within the VCC Project Site. Updated surveys for white rabbit-tobacco in 2019 determined that the species' occupied footprint within the VCC Project Site is 3.2 acres. This change is within the expected range of variability for this perennial species given its location in a dynamic alluvial riparian system. Impacts to the occupied footprint of white rabbit-tobacco have increased from 0.2 acres for 2017 Approved Project to 1.9 acres for the Modified Project. While impacts to the occupied white rabbit-tobacco habitat have increased by 1.7 acres (0.2 acres within the permanent impact footprint and 1.5 acres within the temporary impact footprint), these increased impacts would be mitigated under RMDP/SCP-BIO-76, which provides for replacement of this species at a 1:1 ratio under a mitigation and monitoring plan specific to this species (see Appendix D).

The status of white rabbit-tobacco is similar to its status as analyzed in the State-Certified EIR. White rabbit-tobacco is not listed under the ESA or CESA and is a CRPR 1B.2 species, whereas it was an undescribed species in the State-Certified EIR, without formal special status, but still treated as a special-status species. Population abundance and occupied habitat has varied over the years, likely in relation to annual weather conditions (because it occurs in a dynamic alluvial setting), but its status on the VCC Project Site since 2010 is within the range that may be expected based on changes in its natural setting.

Taking into account the absence of any material change in the current status of white rabbit-tobacco within the VCC Project Site or overall, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as several measures from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to white rabbit-tobacco on the VCC Project Site:

- **SP-4.6-1** (mitigation sites within River Corridor SMA)
- **SP-4.6-2** through **SP-4.6-4** (revegetation plans)
- **SP-4.6-5** (riparian restoration in River Corridor SMA)
- **SP-4.6-6** through **SP-4.6-8** (revegetation plans)
- **SP-4.6-9** (mitigation monitoring reports)
- **SP-4.6-10** (revegetation plans)
- **SP-4.6-11** (habitat enhancement)
- **SP-4.6-13** through **SP-4.6-15** (revegetation plans)
- **SP-4.6-16** (mitigation banking)
- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)



- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)
- **RMDP/SCP-BIO-75** (surveys for undescribed everlasting (a.k.a. white rabbit-tobacco))
- **RMDP/SCP-BIO-76** (White Rabbit-Tobacco Mitigation and Monitoring Plan)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

### 6.2.1.7 Oak Trees

As discussed in Chapter 5, the current presence and status of oak trees on the VCC Project Site remains substantially similar to that analyzed in the State-Certified EIR. A total of 31 oak trees were considered permanently impacted in the State-Certified EIR, none of which are heritage oaks. As shown on Figure 14, a total of 26 oak trees, none of which are heritage oaks, are considered impacted by the Modified Project (Carlberg Associates 2021). Therefore, fewer oak trees would be impacted under the Modified Project compared to the 2017 Approved Project. Impacts to oak trees will be fully mitigated. Specifically, impacts to oak trees would be mitigated per the ORMP (see RMDP/SCP-BIO-22 in Appendix D). Maintenance of the oak restoration sites is required for a period of no less than 5 years total and no less than 2 years after removal of irrigation (if any). During the maintenance period, maintenance measures would be provided to ensure that the oak trees become successfully established and are

ultimately able to survive under natural conditions beyond the completion of the maintenance period. Oak restoration would be subject to the performance criteria established in the ORMP. Successful completion of each woodland creation or enhancement site must be without active manipulation by irrigation, planting, or reseeded for a minimum of 3 years; oak trees must be within 5% of the plan target density of surviving, healthy oak trees; and non-native grass cover must not exceed the target non-native grass cover. The plan would be subject to the requirements of CLAOTO and would address impacts to oak resources, including oak trees of the sizes regulated under CLAOTO.

The status of oak trees remains substantially similar compared to its status as analyzed in the State-Certified EIR. Oak trees are protected under CLAOTO, Sections 22.56.2050–22.56.2260.

Taking into account the absence of any material change in the current status of oak trees within the VCC Project Site or overall, the Modified Project is not expected to result in any new significant direct or indirect impacts, or to substantially increase any previously identified significant direct or indirect impacts, to oak trees.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to oak trees on the VCC Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-47a** (mitigation banking)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-62** (changes to approved oak tree permit)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)

## 6.2.2 Special-Status Wildlife Species

### 6.2.2.1 Crotch's Bumble Bee

As discussed in Chapter 5, Crotch's bumble bee first became a candidate species for listing under CESA in June 2019 and was reinstated as a candidate in September 2022 after a legal challenge. Thus, it was not analyzed in the State-Certified EIR. Because it was only recently elevated to candidate status, no focused surveys for the species have been conducted on the VCC Project Site or elsewhere in the RMDP/SCP area. The CNDDB includes only historical occurrences in the immediate vicinity of the VCC Project Site, dating from 1970 and earlier, but includes more recent occurrences between 4.0 and 9.0 miles from the site (CDFW 2024). Several recent occurrences from the vicinity have been added to CNDDB since 2019. Additionally, as described in Section 5.3.2.1, Crotch's bumble bee is now considered uncommon (CDFW 2019).

Crotch's bumble bee was not recorded on the VCC Project Site prior to 2024, but the species was incidentally observed in June 2024 and was observed at two locations during a focused reconnaissance survey in July 2024. The exact extent of suitable nesting microhabitats is unknown. The VCC Project Site supports 203.3 acres of native vegetation communities and non-native grassland that could be suitable for Crotch's bumble bee, compared to 177.4 acres at the time of the analysis for the State-Certified EIR. However, both before and since the analysis for

the State-Certified EIR, the suitability of these areas would be limited, in part, by the availability of the flowering plant species the bumble bee uses for food and by the presence of suitable nesting microhabitats. Potentially suitable flowering plants include those from the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae. The VCC Project Site supports a high diversity of floral resources and all of these plant families are represented on site. The reconnaissance survey in July 2024 identified potential floral resources for this species at locations scattered over much of the site. The VCC Project Site also likely includes microhabitats suitable for nesting. While the vegetation communities have been mapped, the individual plant species and genera were not mapped before or after the analysis for the State-Certified EIR because they are all relatively common to abundant species. In addition, the presence of suitable nesting microhabitats has not been mapped. Therefore, Crotch's bumble bee is known to occur on the VCC Project Site, floral resources are sufficient to support foraging, and nesting habitat is likely present. The exact area of suitable habitat is not known.

Although not dependent on suitable floral resources like Crotch's bumble bee, several special-status vertebrate wildlife species analyzed in the State-Certified EIR occupy vegetation communities that may support Crotch's bumble bee. Blainville's horned lizard occurs in scrub (coastal scrub, chaparral) habitats and grasslands and two bird species (burrowing owl and grasshopper sparrow) occur in grasslands and areas of sparse shrub cover that support potential food plants for Crotch's bumble bee. In addition, the presence of small mammal burrows is likely important for both burrowing owl and Crotch's bumble bee. A wide variety of special-status species (such as least Bell's vireo and yellow warbler) analyzed in the State-Certified EIR may occur in the riparian scrub and woodland habitats on the VCC Project Site. Therefore, while the discussion of impacts to Crotch's bumble bee is different from the discussions for these vertebrate wildlife species, the mitigation approaches developed for these species can also provide mitigation for direct and indirect impacts to Crotch's bumble bee habitat and potentially for future indirect impacts to Crotch's bumble bee individuals on the VCC Project Site.

### Direct Impacts to Crotch's Bumble Bee Habitat

Based on the evidence cited in Section 5.3.2.1 and summarized in this section, Crotch's bumble bee is known to occur on the VCC Project Site. Therefore, the Modified Project would result in direct impacts to habitat potentially supporting suitable floral resources and nesting microhabitats for the species, where Crotch's bumble bee could occur. The Modified Project would result in permanent direct impacts to 102.8 acres and temporary direct construction impacts to 18.1 acres of vegetation communities (120.8 acres of overall direct impacts) potentially supporting Crotch's bumble bee, including impacts to each native vegetation community present on the VCC Project Site and to non-native grassland, compared to 106.8 acres of permanent impacts under the 2017 Approved Project, a decrease of 4.0 acres in permanent impacts and an increase of 14.0 acres overall. The Modified Project would also result in 1.5 acres of temporary impacts to potentially suitable Crotch's bumble bee habitat solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. However, the actual area occupied by specific floral resources with potential to support the species is likely a much lower acreage (as noted in this section, floral resources are not mapped). In addition, nesting microhabitats, such as small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, and brush piles, likely occur on site in more limited areas. Although Crotch's bumble bees are generally mobile and able to avoid construction equipment when foraging, they are vulnerable around the nest. Young hibernating females (gynes) may also be vulnerable outside the nesting season, although those originating from nests on the VCC Project Site may choose hibernation sites several miles away. Impacts to both habitat and microhabitats that could be used by Crotch's bumble bees would be potentially significant absent mitigation, because they would include permanent impacts to habitat and microhabitats for an uncommon species.

that has substantially declined throughout its range in California. Impacts to nesting Crotch's bumble bees could reduce the species' ability to persist in the VCC Project vicinity.

Potentially significant direct impacts to Crotch's bumble bee suitable habitat and microhabitats, and to Crotch's bumble bee nests, would be reduced to less than significant by the following mitigation measures contained in the State-Certified EIR, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development and a new mitigation measure (ES/VCC-MM-BIO-2) that will result in avoidance of nests of the species, if detected:

- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (preservation of 1,900 acres of coastal scrub on site and within the High Country SMA, Salt Creek area, and other open space areas within lands owned by the Applicant)
- **RMDP/SCP-BIO-22** (ORMP identifying areas suitable for oak woodland enhancement and creation)
- **RMDP/SCP-BIO-52** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **ES/VCC-MM-BIO-2** (habitat assessment and pre-construction surveys and avoidance of Crotch's bumble bee)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

Although Crotch's bumble bees are mobile when away from the nest and foraging and generally can avoid construction equipment, nests are vulnerable to potential destruction during vegetation removal, grading, and other construction activities. Any destruction of a nest would reduce the potential for the species to persist in the vicinity and would be a significant impact. Implementation of ES/VCC-MM-BIO-2 would result in surveys for Crotch's bumble bee, if ground-disturbing activities occurred during the colony active period for the species. Avoidance measures would ensure that, if any active nest were found, the nesting event would be completed undisturbed, unless CDFW authorizes the relocation or removal of the nest, so that any young females (gynes) would have the opportunity to disperse and potentially become queens and establish nests the next year. If Crotch's bumble bee is found during surveys, a Crotch's Bumble Bee Avoidance and Minimization Plan would also be prepared for CDFW review and approval, containing additional, site-specific measures to avoid take of Crotch's bumble bee during Project ground-

disturbing activities. If take of the species could not be avoided, an incidental take permit under CESA would be required, which would ensure that the impacts of the authorized taking would be minimized and fully mitigated, in accordance with CESA.

The permanent loss of suitable habitat, including microhabitats, for Crotch's bumble bee through implementation of the Modified Project would be mitigated by habitat preservation, enhancement and restoration, and management within a large open space system. This habitat would provide substantial areas that support potential floral resources and microhabitats for the species, similar to those found within the vegetation communities on the VCC Project Site that support such resources. Specifically, RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10, RMDP/SCP-BIO-12, RMDP/SCP-BIO-13, RMDP/SCP-BIO-15, RMDP/SCP-BIO-16, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22 would result in habitat mitigation in the form of a large open space system that would be established in the High Country SMA, the Salt Creek area, and the River Corridor SMA as part of RMDP/SCP implementation. This open space system includes the protection and management of approximately 1,900 acres of suitable coastal scrub habitat under RMDP/SCP-BIO-20. Restoration and management in the open space system is expected to improve the availability of habitat for Crotch's bumble bee. RMDP/SCP-BIO-52 would reduce potential inadvertent impacts to adjacent off-site habitat during construction. Under RMDP/SCP-BIO-52, all construction/contractor personnel would complete a worker environmental awareness program to ensure compliance with environmental/permit regulations and mitigation measures. Construction-limits staking and biological monitoring would prevent inadvertent impacts to suitable habitat for the species.

Based on the foregoing analysis, the Modified Project would potentially cause direct impacts to Crotch's bumble bee and to potential suitable habitat and microhabitats for Crotch's bumble bee. These impacts could be potentially significant absent mitigation, but such impacts would be reduced to less than significant with application of the mitigation measures recommended herein. The State-Certified EIR did not address impacts to Crotch's bumble bee, but this finding is consistent with the mitigation approach and significance conclusions for other invertebrate species addressed in that document.

### Indirect Impacts to Crotch's Bumble Bee

Use of herbicides and pesticides are considered to be among the primary factors in the decline of Crotch's bumble bee, resulting in a loss of habitat supporting floral resources, as well as toxins causing mortality or sublethal effects (CDFW 2019). Development of the Modified Project could result in short-term indirect impacts to off-site suitable habitat during construction and potentially long-term indirect impacts to the species from these factors. Other potential short-term and long-term indirect impacts include construction-related dust that could affect off-site habitat; increased human, pet, and feral cat and dog activity that could degrade habitat and/or disturb microhabitats; increased wildfire risk; and increased invasive species. Potential future indirect impacts include Argentine ants and a risk of vehicle collisions. Potentially significant indirect impacts would be reduced to less than significant with implementation of the following Specific Plan and RMDP/SCP mitigation measures, as well as two measures from the 1990 EIR for the Valencia Commerce Center Development:

- **RMDP/SCP-BIO-20** (preservation of 1,900 acres of coastal scrub on site and within the High Country SMA, Salt Creek area, and other open space areas within lands owned by the Applicant)
- **RMDP/SCP-BIO-22** (ORMP identifying areas suitable for oak woodland enhancement and creation)
- **RMDP/SCP-BIO-52** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)



- **RMDP/SCP-BIO-71** (dust control measures to protect vegetation communities and special-status aquatic wildlife species)
- **RMDP/SCP-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)
- **RMDP/SCP-BIO-73** (permanent fencing along trails in the River Corridor SMA)
- **RMDP/SCP-BIO-87** (quarterly monitoring and control measures for Argentine ants in perpetuity)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)
- **VCC-4.c-2** (on-site containment of any toxic substances)

RMDP/SCP-BIO-64 would be implemented to prevent loss or degradation of habitat, introduction of non-native predators, and direct poisoning. Because pesticides and herbicides are considered a main threat to Crotch's bumble bee, both to habitat and individuals, RMDP/SCP-BIO-64 is particularly pertinent. RMDP/SCP-BIO-64 requires preparation of an IPM plan that addresses the use of pesticides on site and ensures that BMPs are used to avoid and minimize adverse effects on the natural environment, including vegetation communities and special-status species and their food resources. The IPM plan includes monitoring to determine when management thresholds have been exceeded and to identify the most appropriate and efficient control method that avoids and minimizes risks to natural resources. For common area landscaping, RMDP/SCP-WQ-2 requires preparation of a Landscape and Integrated Pest Management Plan addressing application guidelines for integrated pest management.

RMDP/SCP-BIO-71 would be implemented to control for construction-related dust impacts to special-status species. Dust control shall comply with South Coast Air Quality Management District Rule 403d (SCAQMD 2005). Where determined necessary by a qualified biologist, a screening fence (i.e., a 6-foot-high chain-link fence with green fabric up to a height of 5 feet) shall be installed to protect special-status species locations.

As described above, habitat mitigation would be implemented within a large open space system that would be protected and managed to minimize impacts from increased long-term human activity, including harassment and collection. By reducing habitat fragmentation, these measures would also reduce vehicle collisions. Additional RMDP/SCP measures that would provide protection from short-term and long-term increased human activity include RMDP/SCP-BIO-64 and RMDP/SCP-WQ-2, described above, and RMDP/SCP-BIO-73.

RMDP/SCP-BIO-73 provides for fencing along trails in the River Corridor SMA. RMDP/SCP-BIO-72 and RMDP/SCP-BIO-87 would be implemented to reduce and control Argentine ants in open space areas where they could affect bumble bees.

### 6.2.2.2 Arroyo Chub

As discussed in Chapter 5, the current presence and status of arroyo chub in Castaic Creek and Hasley Canyon on the VCC Project Site and in Santa Clara River within the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. The VCC Project Site does not support permanent aquatic habitat, and the species likely is often absent due to limited aquatic habitat in many years. However, it was recorded on the VCC Project Site in 1988 and 2024, and likely occurs within Castaic Creek in times when suitable aquatic habitat is present. It has no potential to occur in Hasley Canyon.

Arroyo chub was a California Species of Special Concern and an LA County sensitive species at the time of the analysis for the State-Certified EIR. The status of the species remains unchanged. Aquatic habitat on site is variable in extent, and it is often absent. Therefore, the extent of suitable habitat for arroyo chub was not mapped prior to the analysis for the State-Certified EIR, and it has not been mapped since. However, the 2017 Approved Project would not have resulted in direct impacts to suitable aquatic habitat for arroyo chub. The limits of direct impacts from the Modified Project would be similar to those of the 2017 Approved Project. However, direct impacts of the Modified Project would include temporary impacts during construction to create a temporary stream crossing of Castaic Creek, which is dry during much of the year. The crossing would comply with project design features (PDFs) and mitigation measures included in the State-Certified EIR that would ensure that no construction activities occur within the wetted channel of Castaic Creek. These PDFs use the format “RMDP/SCP-AEA-PDF-3-XX,” and the related mitigation measures use the format “RMDP/SCP-AEA-MM 3-X.” Implementation of these measures would be determined by the time of year and conditions present at the time of construction. Therefore, temporary disturbance within Castaic Creek would not result in direct impacts to arroyo chub, and the Modified Project would not result in any direct impacts to the species or its habitat, consistent with the 2017 Approved Project.

The State-Certified EIR identified potential significant indirect impacts to arroyo chub resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP, which would be reduced to less than significant through application of mitigation measures found in the State-Certified EIR. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to arroyo chub.

The following Specific Plan mitigation measures, Final Additional Environmental Analysis PDFs (CDFW 2017), RMDP/SCP mitigation measures, State-Certified EIR mitigation measures, and several measures from the 1990 EIR for the Valencia Commerce Center Development, would address indirect impacts to arroyo chub on the VCC Project Site:

- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-AEA-PDF-3-1** (no construction in wetted channel of Santa Clara River)
- **RMDP/SCP-AEA-PDF-3-8** (temporary haul route bridge construction)
- **RMDP/SCP-AEA-PDF-3-11** (construction dewatering for bank stabilization)
- **RMDP/SCP-AEA-PDF-3-12** (maintenance activities in Santa Clara River)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)

- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)
- **RMDP/SCP-AEA-MM 3-1** (measures to avoid contact with wetted channel of Santa Clara River)
- **RMDP/SCP-AEA-MM 3-1a** (bridge and bank stabilization design)
- **RMDP/SCP-AEA-MM 3-1b** (Worker Environmental Awareness Program to address access to Santa Clara River channel)
- **RMDP/SCP-AEA-MM 3-1c** (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- **RMDP/SCP-AEA-MM 3-1e** (clear weather window required for bridge or bank stabilization concrete pours)
- **RMDP/SCP-AEA-MM 3-1f** (inspections during rain events)
- **RMDP/SCP-AEA-MM 3-1k** (water quality monitoring for work in Santa Clara River)
- **RMDP/SCP-AEA-MM 3-2** (avoidance of unarmored threespine stickleback)
- **RMDP/SCP-AEA-MM 3-2a** (implement MM 3-1a, 3-1b, 3-1f)
- **RMDP/SCP-AEA-MM 3-2b** (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- **RMDP/SCP-AEA-MM 3-2c** (vibratory piles for temporary haul route bridges)
- **RMDP/SCP-AEA-MM 3-2d** (construction setback from Santa Clara River banks)
- **RMDP/SCP-AEA-MM 3-2e** (construction monitoring during temporary haul route bridge construction and demobilization)
- **RMDP/SCP-AEA-MM 3-2f** (clear weather required for temporary haul route installation and removal in Castaic Creek)
- **RMDP/SCP-AEA-MM 3-3** (avoidance measures for bank stabilization in Santa Clara River)
- **RMDP/SCP-AEA-MM 3-3a** (implement MM 3-1a, 3-1b, 3-1e, 3-1f, 3-1k)
- **RMDP/SCP-AEA-MM 3-3b** (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- **RMDP/SCP-AEA-MM 3-3d** (seasonal restrictions for bank stabilization construction)
- **RMDP/SCP-AEA-MM 3-3e** (BMPs for bank stabilization work zones)
- **RMDP/SCP-AEA-MM 3-3f** (Construction Groundwater Dewatering Plan)
- **VCC-PDF-BIO-2** (temporary at-grade crossings of Castaic Creek)
- **VCC-4.b-2 through VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

### 6.2.2.3 Santa Ana Sucker

As discussed in Chapter 5, the current presence and status of Santa Ana sucker in Castaic Creek on the VCC Project Site and in Santa Clara River within the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. The VCC Project Site does not support permanent aquatic habitat and the species was not recorded prior to the analysis for the State-Certified EIR, and has been recorded only once since, in a year when flows in Castaic Creek continued unusually late in the year.

The Santa Ana sucker was a California Species of Special Concern throughout its range in California and was an LA County sensitive species at the time of the analysis for the State-Certified EIR. Non-introduced populations were also federally listed as threatened, but this status did not apply to the introduced population in the Santa Clara River. The federal, state, and local status of the Santa Ana sucker has not changed since the analysis for the State-Certified EIR. Aquatic habitat on the VCC Project Site is variable in extent, and it is often absent. As a result, the State-Certified EIR considered Castaic Creek and other Santa Clara River tributaries to be unsuitable for Santa Ana sucker. Although conditions within Castaic Creek overall are unchanged, based on the 2019 aquatic habitat assessment, the species was recorded in 2024, in a year of more persistent flows (Compliance Biology 2019, 2024). However, consistent with the 2017 Approved Project, the Modified Project would not result in direct impacts to any aquatic habitat in Castaic Creek. Although direct impacts of the Modified Project would include temporary impacts during construction to create a stream crossing of Castaic Creek, which is dry during much of the year, the crossing would comply with PDFs and mitigation measures included in the State-Certified EIR that would ensure that no construction activities occur within the wetted channel of Castaic Creek. Implementation of these measures would be determined by the time of year and conditions present at the time of construction. Therefore, the Modified Project would not result in direct impacts to Santa Ana sucker habitat or individuals.

The State-Certified EIR identified potential significant indirect impacts to Santa Ana sucker resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP, which would be reduced to less than significant through application of mitigation measures found in the State-Certified EIR. The Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to Santa Ana sucker.

The following Specific Plan mitigation measures, Final Additional Environmental Analysis PDFs, RMDP/SCP mitigation measures, State-Certified EIR mitigation measures, and several measures from the 1990 EIR for the Valencia Commerce Center Development would address indirect impacts to Santa Ana sucker on the VCC Project Site:

- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-AEA-PDF-3-1** (no construction in wetted channel of Santa Clara River)
- **RMDP/SCP-AEA-PDF-3-8** (temporary haul route bridge construction)
- **RMDP/SCP-AEA-PDF-3-11** (construction dewatering for bank stabilization)
- **RMDP/SCP-AEA-PDF-3-12** (maintenance activities in Santa Clara River)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)

- RMDP/SCP-BIO-5 (plant spacing for mitigation sites)
- RMDP/SCP-BIO-6 (revegetation success criteria)
- RMDP/SCP-BIO-7 (replanting after acts of God)
- RMDP/SCP-BIO-8 (temporary irrigation for mitigation sites)
- RMDP/SCP-BIO-9 (exotic plant control)
- RMDP/SCP-BIO-10 (mitigation credit for exotic plant control)
- RMDP/SCP-BIO-12 (mitigation monitoring reports)
- RMDP/SCP-BIO-13 (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- RMDP/SCP-BIO-15 (replacement of riparian trees)
- RMDP/SCP-BIO-16 (revegetation of temporary impacts)
- RMDP/SCP-BIO-49 (construction stormwater measures)
- RMDP/SCP-BIO-52 (Worker Environmental Awareness Training for construction personnel)
- RMDP/SCP-BIO-70 (construction BMPs for protection of water quality, plant/wildlife species)
- RMDP/SCP-BIO-71 (construction dust control)
- RMDP/SCP-BIO-80 (Exotic Wildlife Species Control Plan)
- RMDP/SCP-AEA-MM 3-1 (measures to avoid contact with wetted channel of Santa Clara River)
- RMDP/SCP-AEA-MM 3-1a (bridge and bank stabilization design)
- RMDP/SCP-AEA-MM 3-1b (Worker Environmental Awareness Program to address access to Santa Clara River channel)
- RMDP/SCP-AEA-MM 3-1c (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- RMDP/SCP-AEA-MM 3-1e (clear weather window required for bridge or bank stabilization concrete pours)
- RMDP/SCP-AEA-MM 3-1f (inspections during rain events)
- RMDP/SCP-AEA-MM 3-1k (water quality monitoring for work in Santa Clara River)
- RMDP/SCP-AEA-MM 3-2 (avoidance of unarmored threespine stickleback)
- RMDP/SCP-AEA-MM 3-2a (implement MM 3-1a, 3-1b, 3-1f)
- RMDP/SCP-AEA-MM 3-2b (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- RMDP/SCP-AEA-MM 3-2c (vibratory piles for temporary haul route bridges)
- RMDP/SCP-AEA-MM 3-2d (construction setback from Santa Clara River banks)
- RMDP/SCP-AEA-MM 3-2e (construction monitoring during temporary haul route bridge construction and demobilization)
- RMDP/SCP-AEA-MM 3-2f (clear weather required for temporary haul route installation and removal in Castaic Creek)
- RMDP/SCP-AEA-MM 3-3 (avoidance measures for bank stabilization in Santa Clara River)
- RMDP/SCP-AEA-MM 3-3a (implement MM 3-1a, 3-1b, 3-1e, 3-1f, 3-1k)
- RMDP/SCP-AEA-MM 3-3b (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- RMDP/SCP-AEA-MM 3-3d (seasonal restrictions for bank stabilization construction)
- RMDP/SCP-AEA-MM 3-3e (BMPs for bank stabilization work zones)



- **RMDP/SCP-AEA-MM 3-3f** (Construction Groundwater Dewatering Plan)
- **VCC-PDF-BIO-2** (temporary at-grade crossings of Castaic Creek)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

#### 6.2.2.4 Southern Steelhead

As discussed in Chapter 5, the current presence and status of southern steelhead in Castaic Creek or Hasley Canyon on the VCC Project Site and in Santa Clara River within the RMDP/SCP area remains the same as that analyzed in the State-Certified EIR: this species is not expected to occur in the RMDP/SCP area or anywhere in the Santa Clara River and its tributaries upstream of the confluence with Piru Creek. Therefore, no habitat for this species occurs on the VCC Project Site, and the Modified Project would result in no direct impacts to southern steelhead.

Southern steelhead was a federally listed endangered species, a California Species of Special Concern, and an LA County sensitive species at the time of the analysis for the State-Certified EIR. The species is now a candidate for listing under CESA, but its regulatory status otherwise remains unchanged.

The State-Certified EIR analyzed the potential for indirect impacts to southern steelhead resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP and concluded that no indirect impacts would occur. The development facilitated by the Modified Project would be substantially similar to that analyzed in the State-Certified EIR for the 2017 Approved Project and thus would not result in any new indirect impacts to southern steelhead.

Because the State-Certified EIR identified no significant direct or indirect impacts to steelhead, no mitigation is required.

#### 6.2.2.5 Unarmored Threespine Stickleback

As discussed in Chapter 5, the current presence and status of unarmored threespine stickleback in Castaic Creek on the VCC Project Site and in the Santa Clara River within the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. The VCC Project Site does not support permanent aquatic habitat, and the species was not recorded during the aquatic habitat assessment in 2019 or fish surveys in 2024 (Compliance Biology 2019, 2024). However, the species had been recorded in Castaic Creek prior to analysis for the State-Certified EIR and was recorded just below Castaic Dam about 3.5 miles north of the VCC Project Site in 1975. It still has the potential to occur in Castaic Creek within the VCC Project Site in times when suitable aquatic habitat is present. Persistent aquatic habitat does not occur in Hasley Canyon, which has no potential to support this species. Unarmored threespine stickleback was a federally listed endangered, state listed endangered, state fully protected, and LA County sensitive species at the time of the analysis for the State-Certified EIR. The regulatory status of the species remains the same.

Aquatic habitat on site is variable in extent, and it is often absent. Therefore, the extent of suitable habitat for unarmored threespine stickleback was not mapped prior to the analysis for the State-Certified EIR, and it has not been mapped since. However, the 2017 Approved Project would not have resulted in direct impacts to suitable

habitat for unarmored threespine stickleback. The State-Certified EIR (Final Additional Environmental Analysis; CDFW 2017) addressed impacts to unarmored threespine stickleback from construction of permanent bridges over the Santa Clara River (at Commerce Center Drive and at Long Canyon), temporary haul route bridges, and bank stabilization. Both a temporary crossing of Castaic Creek, by a temporary haul route bridge and/or at-grade crossings, and bank stabilization are proposed as part of the Modified Project. For the Santa Clara River, the Revised Additional Analysis addressed potential direct impacts including accidental construction occurring directly within the wetted channel and debris falling into the river from the decks of temporary haul route bridges. To address impacts to unarmored threespine stickleback, the Revised Additional Analysis included PDFs to prohibit work in the wetted channel (RMDP/SCP-AEA-PDF-3-1), specifying timing of installation and demobilization of temporary haul route bridges that would result in avoidance of the wetted channel (RMDP/SCP-AEA-PDF-3-8), and dewatering for bank stabilization activities, when required, that would avoid stranding of unarmored threespine stickleback (RMDP/SCP-AEA-PDF-3-11). New VCC-PDF-BIO-2 addresses temporary at-grade crossings of Castaic Creek. These PDFs would result in avoidance of direct impacts to unarmored threespine stickleback from work directly in the wetted channel. Construction of the temporary haul route bridges and bank stabilization activities would occur only during the non-storm-flow season (April 1 to November 30; RMDP/SCP-AEA-PDF-3-8). Temporary haul route bridges would remain in use only during this season, and they would be removed in winter, thus avoiding the potential for debris falling into the river. The State-Certified EIR also included mitigation measures (RMDP/SCP-AEA-MM 3-1 to RMDP/SCP-AEA-MM 3-3) providing further details on avoidance of the wetted channel (Worker Environmental Awareness Program addressing access to the Santa Clara River Channel, survey of work areas by the project biologist to confirm they are outside the wetted channel, a required clear weather window, and inspections during rain events), avoiding impacts to unarmored threespine stickleback (pre-construction surveys, construction setback from the top of bank, construction monitoring, and a clear weather window for temporary haul route bridge installation and demobilization), and avoidance measures for bank stabilization (pre-construction surveys, seasonal work restrictions, BMPs, and a Construction Groundwater Dewatering Plan). The above measures applicable to the Santa Clara River will be implemented for the Modified Project in relation to any temporary haul route bridge over Castaic Creek and bank stabilization along Castaic Creek, to ensure no direct impacts occur to unarmored threespine stickleback. In addition, the Modified Project includes VCC-PDF-BIO-2, which provides that any temporary at-grade crossing of Castaic Creek would be installed and removed when the crossing location is outside any wetted channel of Castaic Creek and there is a clear weather forecast. Therefore, although the Modified Project would include a temporary stream crossing of Castaic Creek and bank stabilization, the Modified Project also would not result in direct impacts to suitable aquatic habitat for the species, because the crossing and bank stabilization would involve only temporary disturbance of Castaic Creek and would comply with applicable PDFs and mitigation measures included in the State-Certified EIR that would ensure that no construction activities occur in the wetted channel of Castaic Creek. Therefore, temporary disturbance within Castaic Creek would not result in direct impacts to unarmored threespine stickleback, and the Modified Project would not result in any direct impacts to the species or its habitat, consistent with the 2017 Approved Project.

The State-Certified EIR also identified potential significant indirect impacts to unarmored threespine stickleback resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP along the Santa Clara River, including impacts from construction, operation, and demobilization of temporary haul route bridges and from bank stabilization construction. Specifically, the Final Additional Environmental Analysis (CDFW 2017) identified potential impacts from vibrating pile driving for the temporary haul route bridges, while indirect impacts from bank stabilization construction could include inundation of construction areas during the winter months and stranding of unarmored threespine stickleback. In addition, dewatering for bank stabilization construction could result in impacts to the Santa Clara River flow regime that could also result in strandings. However, with mitigation, impacts were determined to be less than significant. Specifically, the 2017 Approved

Project included a comprehensive suite of PDFs and mitigation measures (described above), which were reviewed and approved by CDFW and included in the 2017 Final Additional Environmental Analysis for the RMDP/SCP (CDFW 2017), to ensure that construction activities would not result in significant impacts to unarmored threespine stickleback. Impacts from pile installation and removal would be avoided because no pile driving would occur within 10 feet of the wetted channel (RMDP/SCP-AEA-MM 3-2-c). Piles would be installed and removed using a vibratory hammer, a less invasive method than impact hammers (NMFS 2011). Also, installation and removal would occur very quickly (several hours) in a sandy substrate, where the vibration has a limited expression beyond the immediate area of the pile, with minimal ground impacts extending only 1 to 3 feet out (Moffat & Nichol 2016). These requirements would also apply to the VCC Project temporary haul route within Castaic Creek, if the haul route requires pile supports. Also, these at-grade haul route crossings would not have indirect impacts to unarmored threespine stickleback, because they would not occur within or adjacent to the wetted channel, as required under VCC-PDF-BIO-2. Requirements in the Final Additional Environmental Analysis (CDFW 2017) for a Construction Groundwater Dewatering Plan (RMDP/SCP-AEA-MM 3-3f) would ensure that dewatering would not create a temporary wetted channel suitable for unarmored threespine stickleback, diminish existing flows, or introduce pollutants into the channel. Requirements of RMDP/SCP-AEA-MM 3-3f include discharging groundwater into a suitable upland location, monitoring of local stream and groundwater conditions, daily monitoring of upstream and downstream surface water conditions, stop work authority for the designated monitor, and monitoring of upland discharge locations. The Modified Project would incorporate all of the above measures for the temporary crossing of Castaic Creek and for Castaic Creek bank stabilization. Therefore, the Modified Project would not result in any new significant indirect impacts, or substantially increase any previously identified significant indirect impacts, to unarmored threespine stickleback.

The following Specific Plan mitigation measures, Final Additional Environmental Analysis PDFs, RMDP/SCP mitigation measures, State-Certified EIR mitigation measures, and several measures from the 1990 EIR for the Valencia Commerce Center Development would address direct and indirect impacts to unarmored threespine stickleback on the VCC Project Site:

- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-AEA-PDF-3-1** (no construction in wetted channel of Santa Clara River)
- **RMDP/SCP-AEA-PDF-3-8** (temporary haul route bridge construction)
- **RMDP/SCP-AEA-PDF-3-11** (construction dewatering for bank stabilization)
- **RMDP/SCP-AEA-PDF-3-12** (maintenance activities in Santa Clara River)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)

- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)
- **RMDP/SCP-AEA-MM 3-1** (measures to avoid contact with wetted channel of Santa Clara River)
- **RMDP/SCP-AEA-MM 3-1a** (bridge and bank stabilization design)
- **RMDP/SCP-AEA-MM 3-1b** (Worker Environmental Awareness Program to address access to Santa Clara River channel)
- **RMDP/SCP-AEA-MM 3-1c** (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- **RMDP/SCP-AEA-MM 3-1e** (clear weather window required for bridge or bank stabilization concrete pours)
- **RMDP/SCP-AEA-MM 3-1f** (inspections during rain events)
- **RMDP/SCP-AEA-MM 3-1k** (water quality monitoring for work in Santa Clara River)
- **RMDP/SCP-AEA-MM 3-2** (avoidance of unarmored threespine stickleback)
- **RMDP/SCP-AEA-MM 3-2a** (implement MM 3-1a, 3-1b, 3-1f)
- **RMDP/SCP-AEA-MM 3-2b** (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- **RMDP/SCP-AEA-MM 3-2c** (vibratory piles for temporary haul route bridges)
- **RMDP/SCP-AEA-MM 3-2d** (construction setback from Santa Clara River banks)
- **RMDP/SCP-AEA-MM 3-2e** (construction monitoring during temporary haul route bridge construction and demobilization)
- **RMDP/SCP-AEA-MM 3-2f** (clear weather required for temporary haul route installation and removal in Castaic Creek)
- **RMDP/SCP-AEA-MM 3-3** (avoidance measures for bank stabilization in Santa Clara River)
- **RMDP/SCP-AEA-MM 3-3a** (implement MM 3-1a, 3-1b, 3-1e, 3-1f, 3-1k)
- **RMDP/SCP-AEA-MM 3-3b** (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- **RMDP/SCP-AEA-MM 3-3d** (seasonal restrictions for bank stabilization construction)
- **RMDP/SCP-AEA-MM 3-3e** (BMPs for bank stabilization work zones)
- **RMDP/SCP-AEA-MM 3-3f** (Construction Groundwater Dewatering Plan)
- **VCC-PDF-BIO-2** (temporary at-grade crossings of Castaic Creek)
- **VCC-4.b-2 through VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

### 6.2.2.6 Arroyo Toad

As discussed in Chapter 5, the current presence and status of arroyo toad along Castaic Creek on the VCC Project Site and in the Santa Clara River within the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. Arroyo toad has never been recorded in the reach of Castaic Creek within the VCC Project Site. Hasley Canyon supports some riparian vegetation but does not support persistent aquatic habitat capable of supporting breeding by arroyo toads. The analysis for the State-Certified EIR identified habitat for arroyo toad with the Santa Clara River in the RMDP/SCP area, but not within Castaic Creek or elsewhere on the VCC Project Site.

Arroyo toad was a federally listed endangered species, California Species of Special Concern, and LA County sensitive species at the time of the analysis for the State-Certified EIR. The regulatory status of the species remains the same. However, while the occurrence of arroyo toad, the regulatory status of arroyo toad, the tract boundary, and impacts from the VCC Project all remain the same or very similar, the regulatory status of the VCC Project Site has changed because USFWS designated critical habitat for the arroyo toad within the VCC Project Site in Castaic Creek and in Hasley Canyon in 2011 (76 FR 7246–7467).

To analyze impacts on designated critical habitat for arroyo toad, this Report follows the method used by USFWS in the Biological Opinion for the RMDP (USFWS 2011). The impact analysis in the Biological Opinion distinguished between designated critical habitat supporting Primary Constituent Elements (PCEs) and critical habitat lacking PCEs and based the jeopardy analysis on impacts to PCEs.<sup>10</sup> PCEs identified in the critical habitat designation (USFWS 2011) are as follows:

1. Rivers or streams with hydrologic regimes that supply water to provide space, food, and cover needed to sustain eggs, tadpoles, metamorphosing juveniles, and adult breeding toads. Breeding pools must persist a minimum of 2 months for the completion of larval development. However, due to the dynamic nature of southern California riparian systems and flood regimes, the location of suitable breeding pools may vary from year to year. Specifically, the conditions necessary to allow for successful reproduction of arroyo toads are:
  - Breeding pools that are less than 6 in. (15 cm) deep
  - Areas of flowing water with current velocities less than 1.3 ft per second (40 cm per second)
  - Surface water that lasts for a minimum of 2 months during the breeding season (a sufficient wet period in the spring months to allow arroyo toad larvae to hatch, mature, and metamorphose).
2. Riparian and adjacent upland habitats, particularly low-gradient (typically less than 6 percent) stream segments and alluvial streamside terraces with sandy or fine gravel substrates that support the formation of shallow pools and sparsely vegetated sand and gravel bars for breeding and rearing of tadpoles and juveniles; and adjacent valley bottomlands, that include areas of loose soil where toads can burrow underground, to provide foraging and living areas for juvenile and adult arroyo toads.

<sup>10</sup> Many critical habitat designations prior to February 2016 relied on the concept of PCEs to describe critical habitat. However, in 2016, USFWS removed the term “Primary Constituent Elements” from the Code of Federal Regulations (50 CFR 424.12) and included the concept under the term “physical and biological features.” As the change in regulations applied only to future designations of critical habitat, the discussion here relies on the term “Primary Constituent Elements,” which are defined in the arroyo toad critical habitat designation and employed in the Biological Opinion (USFWS 2011).



3. A natural flooding regime, or one sufficiently corresponding to natural, that: A) is characterized by intermittent or near-perennial flow that contributes to the persistence of shallow pools into at least mid-summer; B), maintains areas of open, sparsely vegetated, sandy stream channels and terraces by periodically scouring riparian vegetation; and C) also modifies stream channels and terraces and redistributes sand and sediment, such that breeding pools and terrace habitats with scattered vegetation are maintained.
4. Stream channels and adjacent upland habitats that allow for movement to breeding pools, foraging areas, overwintering sites, upstream and downstream dispersal, and connectivity to areas that contain suitable habitat.

Based on these PCEs, USFWS excluded several types of areas from the effects analysis for arroyo toad critical habitat: areas of intensive agriculture, oil production, and permanent disturbance. As noted in Section 5.3.2, Special-Status Wildlife Species, Hasley Canyon, which is included within designated critical habitat, does not support suitable aquatic habitat for breeding arroyo toads. Although suitable upland habitat may occur within and adjacent to Hasley Canyon, only on-site habitat within 500 meters (1,640 feet) of Castaic Creek may support PCEs. The Modified Project would result in direct impacts to designated critical habitat containing PCEs, including permanent direct impacts to 31.7 acres (21% of critical habitat on site with PCEs) and temporary direct construction impacts to 26.7 acres (18%) on site. These impacts represent 0.2% permanent impacts and 0.2% temporary impacts to the total 16,066 acres of critical habitat within the Northern Recovery Unit for the arroyo toad.

Most of these impacts would occur to upland habitats that are not considered high suitability habitat. The State-Certified EIR analysis of habitat loss from the Approved Project relied on methods of habitat assessment for the RMDP from Impact Sciences (2002), which assigned habitat suitability categories to areas within 500 meters (1,640 feet) of areas potentially supporting aquatic habitat. Category 1 (high suitability) habitats are those capable of supporting all life phases of the arroyo toad and generally are those occurring within the 100-year floodplain. Category 2 (moderate suitability) habitats generally do not support the hydrology required for aquatic breeding habitat but are capable of supporting other phases of the arroyo toad's life history, such as aestivation. Category 3 (low suitability) habitats are those that are marginally suitable for aestivation, dispersal, and foraging. These occur primarily in upland areas, such as agricultural land. Applying this method of analysis to the Modified Project, the VCC Project Site supports 92.3 acres of Category 1 habitats, 117.3 acres of Category 2 habitats, and 104.7 acres of Category 3 habitats. The Modified Project would result in permanent impacts to only 4.1 acres (4%) and temporary impacts to 3.6 acres (4%) of Category 1 habitats on the VCC Project Site.

Because the occurrence status of arroyo toad on the VCC Project Site has not changed, and no arroyo toads have been observed, potential direct impacts to arroyo toad individuals have not changed. The State-Certified EIR did not identify impacts to arroyo toad habitat within the VCC Project Site and impacts from the Modified Project are only minimally different from those of the 2017 Approved Project. The Modified Project would include temporary impacts to create a stream crossing of Castaic Creek during construction. However, the crossing would comply with PDFs and mitigation measures included in the State-Certified EIR that would ensure that no construction activities occur within the wetted channel of Castaic Creek. Therefore, the Modified Project would not result in direct impacts to any potential aquatic breeding habitat for arroyo toad, should this species occur in Castaic Creek in the future.

In addition, in its biological opinion for the RMDP (which does not apply to the Modified Project), issued subsequent to the finalization of critical habitat including areas within Castaic Creek and Hasley Canyon, USFWS (2011) concluded the following:

The critical habitat unit of which the [RMDP] action area is a part will continue to serve its conservation functions as a connection between the known populations of arroyo toad in tributaries to the Santa Clara River, and to accommodate natural population expansion and fluctuation. The minor effects of the proposed action should not diminish the ability of the entire critical habitat designation to protect and support the management of breeding and non-breeding habitat on a watershed basis for the conservation of the species.

Although the RMDP biological opinion does not cover the VCC Project Site, the same reasoning would apply to the effects of the Modified Project on arroyo toad critical habitat: since the Modified Project would not impact any potential aquatic breeding habitat for arroyo toad, and its effects on high suitability habitat would be minimal in the context of the overall Northern Recovery Unit designation, it should not adversely affect designated critical habitat for the species. The State-Certified EIR also noted that implementation of the RMDP/SCP would result in large areas (92%) of highly suitable habitat (aquatic habitats and surrounding riparian communities and land covers) for this species being protected in the River Corridor SMA. Likewise, the Modified Project would avoid impacts to 94% of such habitat on the VCC Project Site. The State-Certified EIR also identified potential significant indirect impacts to arroyo toad resulting from implementation of the RMDP/SCP and the development facilitated by the RMDP/SCP, which were reduced to less than significant with application of mitigation measures, and because of the unchanged occurrence status of the species, these impacts would remain unchanged as well. Therefore, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to arroyo toad or to designated critical habitat for the species.

The following Specific Plan mitigation measures, Final Additional Environmental Analysis PDFs, RMDP/SCP mitigation measures, State-Certified EIR mitigation measures, and several measures from the 1990 EIR for the Valencia Commerce Center Development would address direct and indirect impacts to arroyo toad and/or its critical habitat resulting from development of the VCC Project Site:

- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-AEA-PDF-3-1** (no construction in wetted channel of Santa Clara River)
- **RMDP/SCP-AEA-PDF-3-8** (temporary haul route bridge construction)
- **RMDP/SCP-AEA-PDF-3-11** (construction dewatering for bank stabilization)
- **RMDP/SCP-AEA-PDF-3-12** (maintenance activities in Santa Clara River)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)

- RMDP/SCP-BIO-8 (temporary irrigation for mitigation sites)
- RMDP/SCP-BIO-9 (exotic plant control)
- RMDP/SCP-BIO-10 (mitigation credit for exotic plant control)
- RMDP/SCP-BIO-12 (mitigation monitoring reports)
- RMDP/SCP-BIO-13 (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- RMDP/SCP-BIO-15 (replacement of riparian trees)
- RMDP/SCP-BIO-16 (revegetation of temporary impacts)
- RMDP/SCP-BIO-17 (arroyo toad surveys in river bed)
- RMDP/SCP-BIO-20 (coastal scrub preservation in RMDP areas)
- RMDP/SCP-BIO-21 (supplemental restoration of coastal scrub)
- RMDP/SCP-BIO-49 (construction stormwater measures)
- RMDP/SCP-BIO-52 (Worker Environmental Awareness Training for construction personnel)
- RMDP/SCP-BIO-64 (Integrated Pest Management Plan; CC&Rs)
- RMDP/SCP-BIO-70 (construction BMPs for protection of water quality, plant/wildlife species)
- RMDP/SCP-BIO-71 (construction dust control)
- RMDP/SCP-BIO-72 (planting restrictions within 200 feet of native vegetation)
- RMDP/SCP-BIO-80 (Exotic Wildlife Species Control Plan)
- RMDP/SCP-BIO-87 (quarterly monitoring and control measures for Argentine ants in perpetuity)
- RMDP/SCP-WQ-2 (Landscape and Integrated Pest Management Plan)
- RMDP/SCP-AEA-MM 3-1 (measures to avoid contact with wetted channel of Santa Clara River)
- RMDP/SCP-AEA-MM 3-1a (bridge and bank stabilization design)
- RMDP/SCP-AEA-MM 3-1b (Worker Environmental Awareness Program to address access to Santa Clara River channel)
- RMDP/SCP-AEA-MM 3-1c (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- RMDP/SCP-AEA-MM 3-1e (clear weather window required for bridge or bank stabilization concrete pours)
- RMDP/SCP-AEA-MM 3-1f (inspections during rain events)
- RMDP/SCP-AEA-MM 3-1k (water quality monitoring for work in Santa Clara River)
- RMDP/SCP-AEA-MM 3-2 (avoidance of unarmored threespine stickleback)
- RMDP/SCP-AEA-MM 3-2a (implement MM 3-1a, 3-1b, 3-1f)
- RMDP/SCP-AEA-MM 3-2b (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- RMDP/SCP-AEA-MM 3-2c (vibratory piles for temporary haul route bridges)
- RMDP/SCP-AEA-MM 3-2d (construction setback from Santa Clara River banks)
- RMDP/SCP-AEA-MM 3-2e (construction monitoring during temporary haul route bridge construction and demobilization)
- RMDP/SCP-AEA-MM 3-2f (clear weather required for temporary haul route installation and removal in Castaic Creek)
- RMDP/SCP-AEA-MM 3-3 (avoidance measures for bank stabilization in Santa Clara River)

- **RMDP/SCP-AEA-MM 3-3a** (implement MM 3-1a, 3-1b, 3-1e, 3-1f, 3-1k)
- **RMDP/SCP-AEA-MM 3-3b** (pre-construction surveys to ensure avoidance of Santa Clara River wetted channel)
- **RMDP/SCP-AEA-MM 3-3d** (seasonal restrictions for bank stabilization construction)
- **RMDP/SCP-AEA-MM 3-3e** (BMPs for bank stabilization work zones)
- **RMDP/SCP-AEA-MM 3-3f** (Construction Groundwater Dewatering Plan)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-PDF-BIO-2** (temporary at-grade crossings of Castaic Creek)
- **VCC-4.a-2** (retain native coastal scrub vegetation)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

### 6.2.2.7 Western Spadefoot

As discussed in Chapter 5, the overall status of western spadefoot on the VCC Project Site and elsewhere in the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. The species was not observed prior to 2010, and focused surveys in 2024 did not identify western spadefoot or suitable ponding for western spadefoot. However, the species was assumed to be present, despite the absence of observations prior to 2010, and it is still assumed to be present today. In addition, focused surveys elsewhere in the RMDP/SCP area have confirmed that western spadefoot still occurs in suitable pools in the area. Because western spadefoot is associated with specific microhabitats, however, its total suitable habitat on site was not quantified.

Western spadefoot was a California Species of Special Concern and an LA County sensitive species at the time of the analysis for the State-Certified EIR, and its state and local status remain the same. In 2015, USFWS issued a finding on a petition to federally list western spadefoot, determining that the petition presented substantial scientific or commercial information indicating that the petitioned actions may be warranted (80 FR 37568-37579). In December 2023, USFWS published a proposed rule to list both the northern distinct population segment (DPS) and the southern DPS of the western spadefoot as threatened (88 FR 84252-84278). No final rulemaking had been published as of August 2024.

If the western spadefoot were to be federally listed, it would increase its sensitivity rangewide; however, because both direct and indirect impacts were determined to be significant in the State-Certified EIR absent mitigation, avoidance, minimization, and mitigation measures have already been adopted for the species on the VCC Project Site and in the larger RMDP/SCP area. The State-Certified EIR would result in an open space system providing for preservation of suitable upland habitat for western spadefoot in the High Country SMA, Salt Creek area, and River Corridor SMA. Under SP-4.6-26a, SP-4.6-27, and RMDP/SCP-BIO-20 the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable habitat to support western spadefoot. In addition, streambeds and riparian habitat within Hasley Canyon and Castaic Creek within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1. These areas would preserve additional potential habitat for western spadefoot beyond the conservation implemented under the RMDP.

Mitigation measures imposed under the State-Certified EIR also require pre-construction surveys for breeding western spadefoot and replacement of occupied aquatic breeding habitat at a 2:1 ratio, if breeding pools are found. In addition, the State-Certified EIR requires project design and minimization measures that would reduce direct and indirect impacts to western spadefoot, including long-term impacts, as identified below. The Modified Project would be consistent with the 2017 Approved Project. Taking into account the absence of any material change in the current status of western spadefoot on the VCC Project Site and overall, the Modified Project would not result in new significant direct or indirect impacts to western spadefoot, or substantially increase the severity of any previously identified significant direct or indirect impacts to the species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as two measures from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to western spadefoot on the VCC Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-53** (pre-construction surveys for western spadefoot)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)



- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)
- **VCC-4.c-3** (diversion of non-storm flows)

### 6.2.2.8 California Glossy Snake

As discussed in Chapter 5, the California glossy snake, which was designated as a California Species of Special Concern in 2016, was not a special-status species at the time of analysis for the State-Certified EIR. Therefore, no focused surveys were conducted for the species and the State-Certified EIR did not analyze impacts to California glossy snake. The lack of known occurrences at the time is not an indication that the species was absent. In fact, the status was likely the same prior to the analysis for the State-Certified EIR as it is now. Currently, California glossy snake is known to occur in the VCC Project Site vicinity elsewhere in the RMDP/SCP area. It has the potential to occur in 106.5 acres of grassland and coastal scrub habitats on the VCC Project Site, compared to 112.6 acres of these habitats that occurred at the time of the analysis for the State-Certified EIR. The same habitats are potentially occupied by other special-status terrestrial reptiles, including San Bernardino ringneck snake, which is a CDFW Special Animal, and three species that, like California glossy snake, are California Species of Special Concern: San Diegan tiger whiptail, coast patch-nosed snake, and Blainville's horned lizard. The analysis of impacts to California glossy snake should be most similar to the analysis for Blainville's horned lizard ("coast horned lizard" in the State-Certified EIR), which also occurs in grassland, disturbed, coastal scrub, and chaparral habitats as well as the drier riparian and other riparian/wetland communities occurring on the VCC Project Site.

#### Direct Impacts to California Glossy Snake

Project construction would result in direct impacts to suitable habitat for California glossy snake and could directly affect individuals. The Modified Project would result in permanent direct impacts to 85.7 acres and temporary direct construction impacts to 9.3 acres of suitable on-site habitat for California glossy snake, compared to 101.8 acres of permanent impacts under the 2017 Approved Project, a decrease of 16.1 acres in permanent impacts and 6.8 acres overall. Individuals are typically belowground during the daytime and are relatively slow moving when aboveground. Therefore, they are highly vulnerable to injury and mortality during construction. These impacts would be potentially significant because they would permanently impact 80% and temporarily impact 9% of the suitable habitat on site for an uncommonly occurring California Species of Special Concern that has experienced substantial habitat loss and fragmentation from urban and agricultural development throughout its range, and individuals could be injured and killed during construction. The Modified Project would also result in 1.4 acres of temporary impacts to suitable California glossy snake habitat solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. These impacts would occur mostly to short-podded mustard stands (1.2 of 1.4 acres), which likely currently provide only marginally suitable habitat for the species.

Potentially significant direct impacts to California glossy snake would be reduced to less than significant by the following RMDP/SCP mitigation measures contained in the State-Certified EIR and one measure from the 1990 EIR for the Valencia Commerce Center Development, as well as a new mitigation measure (ES/VCC-MM-BIO-1) requiring pre-construction surveys for the species:<sup>11</sup>

- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-54** (relocation plan for certain reptile species)
- **ES/VCC-MM-BIO-1** (relocation plan for California glossy snake)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

California glossy snakes are not very mobile, and usually only move short distances at a time, as well as typically remaining underground during the day, when construction activities are likely to occur. Large-scale construction and/or grading activities causing permanent and temporary impacts likely would result in entombment or direct contact with grading equipment, either during the spring and summer, when this species is more active, or in winter, when they may remain inactive and belowground throughout the day. Those individuals aboveground during construction would be subject to injury or mortality as a result of direct contact with or crushing by construction equipment used for vegetation clearing and grading.

ES/VCC-MM-BIO-1 ensures the capture and relocation of California glossy snake in conjunction with these requirements for other special-status reptiles addressed under RMDP/SCP-BIO-54. RMDP/SCP-BIO-52 provides for

<sup>11</sup> The State-Certified EIR already includes RMDP/SCP-BIO-54, which provides for pre-construction surveys and a relocation plan for named special-status reptiles other than California glossy snake. Rather than revising RMDP/SCP-BIO-54 (which has been adopted in CEQA approvals for other applicant projects) to include glossy snake, ES/VCC-MM-BIO-1 simply applies the text of RMDP/SCP-BIO-54 to California glossy snake to avoid potential confusion. RMDP/SCP-BIO-54 continues to apply to the VCC Modified Project to mitigate for direct impacts to other special-status terrestrial reptiles, as required by the State-Certified EIR.

pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities. Under RMDP/SCP-BIO-52, all construction/contractor personnel would complete a worker environmental awareness program to ensure compliance with environmental/permit regulations and mitigation measures. Construction-limits staking and biological monitoring would prevent inadvertent impacts on California glossy snake and its habitat.

The permanent loss of suitable habitat for California glossy snake through implementation of the Modified Project would be mitigated by preservation, enhancement, and restoration, and management of suitable habitat within a large open space system that will be conserved under the RMDP within the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22 the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable habitat to support California glossy snake in the vicinity of the VCC Project Site and offset impacts of the VCC Project. In addition, streambeds and riparian habitat within Hasley Canyon within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1. This area, which is dominated by river wash and scale broom, versions of streambed and riparian habitat that are more suitable for this species, would preserve additional suitable habitat for California glossy snake beyond the conservation implemented under the RMDP. RMDP/SCP-BIO-1 also requires that riparian habitats impacted be replaced and restored under guidelines described in RMDP/SCP-BIO-2 through RMDP/SCP-BIO-10, RMDP/SCP-BIO-12, RMDP/SCP-BIO-13, RMDP/SCP-BIO-15, and RMDP/SCP-BIO-16 (wetlands mitigation plan and riparian restoration activities). Implementation of these measures would permit California glossy snake to persist in the RMDP/SCP vicinity.

Based on the foregoing analysis, the Modified Project may cause potentially significant direct impacts to California glossy snake, but such impacts can be reduced to less than significant with application of the mitigation measures recommended herein. This finding is consistent with the significance determination and mitigation findings of the State-Certified EIR for impacts to other special-status terrestrial reptile species with similar life histories.

### Indirect Impacts to California Glossy Snake

The Modified Project could result in short-term and long-term indirect impacts to California glossy snake such as construction-related dust; human-caused habitat degradation; harassment and collection; predation by pet, stray, and feral cats and dogs; invasive species; use of pesticides; and increased roadkill. Short-term and long-term indirect impacts to California glossy snake would be potentially significant, absent mitigation. Potentially significant indirect impacts to California glossy snake would be reduced to less than significant with implementation of the following Specific Plan and RMDP/SCP mitigation measures, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)

- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

RMDP/SCP-BIO-71 would be implemented to control for construction-related dust impacts to special-status species. Dust control shall comply with South Coast Air Quality Management District Rule 403d (SCAQMD 2005). Where determined necessary by a qualified biologist, a screening fence (i.e., a 6-foot-high chain-link fence with green fabric up to a height of 5 feet) shall be installed to protect special-status species locations.

SP-4.6-63, RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10, RMDP/SCP-BIO-12, RMDP/SCP-BIO-13, RMDP/SCP-BIO-15, RMDP/SCP-BIO-16, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-21 would be implemented to mitigate impacts from increased long-term human activity, including harassment and collection and habitat fragmentation, through protection, restoration and enhancement, and management of habitat. By reducing habitat fragmentation, these measures would also reduce vehicle collisions and roadkill. RMDP/SCP measures that would provide protection from short-term and long-term increased in human activity include RMDP/SCP-BIO-64, RMDP/SCP-BIO-73, and RMDP/SCP-WQ-2.

RMDP/SCP-BIO-72 and RMDP/SCP-BIO-87 would be implemented to reduce and control Argentine ants in open space areas. RMDP/SCP-BIO-72 specifies that container plants for use within 200 feet of the open space areas be inspected for pests, including Argentine ants. Plant palettes also would include non-invasive species that do not require high irrigation rates, which would help keep moisture levels low at the urban–open space interface. Except as required for fuel modification, perimeter landscaping irrigation would be temporary. RMDP/SCP-BIO-87 requires quarterly monitoring for Argentine ants along the urban–open space interface where invasions could occur upon initiating landscaping within a development area. If Argentine ants are detected, direct control measures would be implemented immediately to help prevent the invasion from worsening. Monitoring and control of Argentine ants would occur in perpetuity. RMDP/SCP-BIO-64 would be implemented to prevent loss of prey and secondary poisoning and requires preparation of an Integrated Pest Management plan controlling the use of pesticides on site prior to the issuance of building permits. RMDP/SCP-WQ-2 requires preparation of a

Landscape and Integrated Pest Management Plan, which addresses application guidelines for integrated pest management for common area landscaping.

Based on the foregoing analysis, the Modified Project may cause potentially significant indirect impacts to California glossy snake, but such impacts can be reduced to less than significant with application of the mitigation measures recommended herein. This finding is consistent with the significance determination and mitigation findings in the State-Certified EIR for impacts to other special-status terrestrial reptile species with similar life histories.

#### 6.2.2.9 California Legless Lizard

As discussed in Chapter 5, the overall status of California legless lizard on the VCC Project Site and elsewhere in the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. Surveys since 2010 confirmed the presence of California legless lizard within additional areas of the Mission Village Project Site and the Entrada South Project Site in the RMDP/SCP area. No focused surveys were conducted on the VCC Project Site, and the species was not detected during other surveys. However, it was assumed to be present during the analysis for the State-Certified EIR based on the presence of suitable habitat, and it is still assumed to be present, based on vegetation mapping updated in 2019. The VCC Project Site supports approximately 170.5 acres of suitable habitat, an increase of 27.6 acres compared to that described in the State-Certified EIR for the Approved Project. The Modified Project would result in 58.8 acres of permanent impacts and 21.2 acres of temporary construction impacts (80.0 acres total) to California legless lizard habitat, compared to 57.7 acres of permanent impacts under the 2017 Approved Project, an increase of 22.3 acres overall; however, permanent impacts would increase by only 1.1 acres. The Modified Project would also result in 3.8 acres of temporary impacts to California legless lizard habitat solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. All of these areas would be restored to habitat potentially suitable for California legless lizard.

California legless lizard (i.e., silvery legless lizard) was a California Species of Special Concern and an LA County sensitive species at the time of the analysis for the State-Certified EIR. All legless lizard species currently are California Species of Special Concern, and legless lizards remain LA County sensitive species.

The Modified Project would result in an increase in impacts over the 2017 Approved Project, but only a 1.1-acre increase in permanent impacts. Impacts to more than 50% of on-site suitable habitat for the species, including almost all of Castaic Creek, would be completely avoided. In addition, portions of the 18.5 acres subject to temporary construction impacts would be available to legless lizards after construction. The permanent loss of suitable habitat for California legless lizard through implementation of the Modified Project would be mitigated by preservation, enhancement and restoration, and management of suitable habitat within a large open space system that will be conserved under the RMDP within the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22 the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable upland habitat to support California legless lizard in the vicinity of the VCC Project Site and offset impacts of the VCC Project. In addition, streambeds and riparian habitat within Hasley Canyon and Castaic Creek within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1. These areas would preserve additional suitable habitat for California legless lizard beyond the conservation implemented under the RMDP. The State-Certified EIR also requires development of a relocation plan, pre-construction surveys, and relocation for California legless lizards and other special-status terrestrial reptiles. Taking into account the absence of any material change in the current status of California legless lizard on the VCC



Project Site and overall, or any material change to impacts to the species or its habitat under the Modified Project compared to the 2017 Approved Project, the Modified Project would not result in new direct or indirect impacts, or substantially increase any previously identified direct or indirect impacts, to California legless lizard.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to California legless lizard on the VCC Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-54** (relocation plan for certain reptile species)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

### 6.2.2.10 Southwestern Pond Turtle

As discussed in Chapter 5, the current presence and status of southwestern pond turtle on the VCC Project Site and elsewhere in the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR, which assumed that no impacts would occur to southwestern pond turtle on the VCC Project Site. Aquatic habitat (i.e., ponded water) likely is present only sporadically within Castaic Creek on the VCC Project Site, and southwestern pond turtle has not been observed on site to date.

Southwestern pond turtle was a California Species of Special Concern and an LA County sensitive species at the time of the analysis for the State-Certified EIR. In 2015, USFWS issued a finding on a petition to federally list southwestern pond turtle, determining that the petition presented substantial scientific or commercial information indicating that the petitioned actions may be warranted (80 FR 19259–19263). In October 2023, USFWS found that the listing of both the southwestern pond turtle and the northwestern pond turtle as threatened under ESA was warranted and solicited comments on the proposed listing of the two species as threatened (88 FR 68370–68399). If the southwestern pond turtle were to be federally listed, it would increase its sensitivity rangewide; however, because both direct and indirect impacts were determined to be significant in the State-Certified EIR, avoidance, minimization, and mitigation measures have already been adopted for the species in the larger RMDP/SCP area. In the unlikely event that southwestern pond turtle were to occur on the VCC Project Site in the future, these measures would mitigate any potentially significant direct impacts to a level less than significant.

The State-Certified EIR identified potential significant indirect impacts to southwestern pond turtle resulting from implementation of the RMDP. Under the Modified Project, these indirect impacts could still occur, but the Modified Project is not expected to result in any new significant indirect impacts, or to substantially increase any previously identified significant indirect impacts, to southwestern pond turtle.

Although no direct impacts are expected to southwestern pond turtle on the VCC Project Site, the following Specific Plan and RMDP/SCP mitigation measures, as well as several measures from the 1990 EIR for the Valencia Commerce Center Development, would address both direct and indirect impacts to southwestern pond turtle, should the species occur on the VCC Project Site:

- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)

- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-50** (pre-construction surveys for southwestern pond turtle)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)
- **RMDP/SCP-BIO-80** (Exotic Wildlife Species Control Plan)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

#### 6.2.2.11 Burrowing Owl

As discussed in Chapter 5, the current presence and status of burrowing owl on the VCC Project Site and elsewhere in the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. No additional burrowing owls have been detected anywhere within the RMDP/SCP area, including on the VCC Project Site, since the analysis for the State-Certified EIR. Focused surveys for burrowing owl in 2015 were negative (Dudek 2015b). A previously unknown winter season CNDDDB occurrence from Hasley Canyon on the VCC Project Site, recorded prior to the analysis for the State-Certified EIR, confirmed the occurrence of burrowing owl on site outside the nesting season. However, because the State-Certified EIR assumed that burrowing owl could occasionally occur in the RMDP/SCP area, including the VCC Project Site, for wintering and migration, the assumptions underlying the State-Certified EIR impact analysis have not changed. Also, because the site is within the species' breeding range, the analysis assumed that burrowing owl could nest on the site. Approximately 132.7 acres of suitable habitat occurs on the Project Site, a decrease of 42.7 acres compared to that described in the State-Certified EIR, primarily as a result of conversion of some California annual grassland and disturbed land covers to coastal scrub and riparian scrub communities. The Modified Project would result in 122.9 acres of construction-related impacts to suitable habitat for burrowing owl, including 112.5 acres of permanent impacts and 10.4 acres of temporary construction impacts, compared to 149.5 acres of permanent impacts in the analysis for the State-Certified EIR. The Modified Project would also result in 0.4 acres of temporary impacts to burrowing owl habitat from habitat

creation and enhancement for the purpose of mitigating impacts to riparian habitat and waters under the jurisdiction of CDFW and the Corps. Although these additional 0.4 acres of temporary impacts would be restored as riparian habitat not suitable for burrowing owl, the Modified Project would still result in 26.2 fewer acres of overall impacts to burrowing owl habitat compared to the 2017 Approved Project.

Burrowing owl was a federal Bird of Conservation Concern, a California Species of Special Concern, and an LA County sensitive species at the time of the State-Certified EIR analysis, and its federal, state, and local status remain the same. The Modified Project would be consistent with the 2017 Approved Project and would result in a reduction of impacts to burrowing owl. The State-Certified EIR would result in an open space system that would result in preservation of suitable habitat for burrowing owl through preservation of grasslands and other suitable communities in the High Country SMA and the Salt Creek area. Under SP-4.6-26a, the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable habitat to support burrowing owl in the vicinity of the VCC Project Site and offset impacts of the VCC Project. In addition, mitigation measures imposed under the State-Certified EIR would require avoidance and minimization measures that would substantially reduce direct and indirect impacts to burrowing owl individuals during construction, as well as long-term indirect impacts to burrowing owls.

Taking into account the absence of any material change in the current status of burrowing owl on the VCC Project Site overall, and a net reduction of impacts from the Modified Project compared with the 2017 Approved Project (taking into account the reduced suitable habitat available due to habitat conversion), the Modified Project would not result in new significant direct or indirect impacts to burrowing owl, or substantially increase the severity of any previously identified significant direct or indirect impacts to the species.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to burrowing owl on the VCC Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-56** (downcast lighting near natural areas)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-57** (pre-construction surveys for burrowing owl)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

#### 6.2.2.12 California Condor

As discussed in Chapter 5, the current presence and status of California condor on the VCC Project Site and elsewhere in the RMDP/SCP area remain substantially similar to that analyzed in the State-Certified EIR. No focused surveys for California condor—which is expected to occur only rarely on site, if at all—were conducted on the VCC Project Site. In support of this assumption, USGS data for California condors fitted with GPS transmitters had shown that no condors being tracked had ever landed on the VCC Project Site or its immediate vicinity, although condors had landed in other parts of the RMDP area on several occasions. Only one condor overflight point had been recorded for the VCC Project Site, although condors had been recorded occasionally flying over the vicinity at high altitudes. No overflight points have been recorded since 2014, and no condors have been recorded landing on the VCC Project Site (USGS 2024). Several condors landed in the RMDP area on several occasions well southwest of

the VCC Project Site in 2017 and once in 2018, reconfirming their opportunistic use of the area. The State-Certified EIR also acknowledged, based on 2009 flight data, that flights over the RMDP/SCP area were increasing. The State-Certified EIR did not estimate the area of suitable habitat for this species and concluded that the species likely occurs only very irregularly to forage opportunistically for large mammal carcasses. This conclusion remains valid based on the most recent data.

California condor is listed as endangered under both the ESA and CESA, is state fully protected, and is an LA County sensitive species. Its regulatory status remains the same as at the time of the State-Certified EIR analysis. The Modified Project would be consistent with the 2017 Approved Project. Taking into account the absence of any material change in the current status of California condor within the VCC Project Site or overall, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to this species.

The following RMDP/SCP mitigation measures, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to California condor on the VCC Project Site:

- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-82** (condor protection measures)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

### 6.2.2.13 Coastal California Gnatcatcher

As discussed in Chapter 5, the current presence and status of coastal California gnatcatcher on the VCC Project Site and elsewhere in the RMDP/SCP area remain substantially similar to that analyzed in the State-Certified EIR. Focused surveys were conducted on the VCC Project Site in 2013–2014, 2019, 2022, and 2024, and no coastal California gnatcatchers were detected. Elsewhere in the RMDP/SCP area, approximately 2 miles south of the VCC Project Site, single dispersing juveniles were detected at the Entrada South Project Site and the Legacy Village Project Site in 2015, and a pair was present during the nesting season at the Mission Village Project Site in 2012, although no evidence of nesting was detected. No evidence of a resident population of coastal California gnatcatchers has been found, despite numerous focused surveys within the RMDP/SCP area. Approximately 49.1 acres of suitable habitat remains on the VCC Project Site, and the availability of suitable habitat under the Modified Project remains substantially similar (an increase of 7.6 acres) to that described in the State-Certified EIR. The Modified Project would result in 43.8 acres of permanent impacts and 2.5 acres of temporary impacts to suitable habitat for the species (46.2 acres of impacts overall). By comparison, the 2017 Approved Project would have resulted in 37.6 acres of permanent impacts, meaning that impacts under the Modified Project represent a net increase of 8.6 acres (a 6.2-acre increase in permanent impacts), which mostly reflects the overall broader distribution and increased acreage of suitable habitat on the VCC Project Site under current conditions, compared to the conditions evaluated in the State-Certified EIR. The Modified Project would also result in 0.2 acres of temporary impacts to coastal California gnatcatcher habitat from habitat creation and enhancement for the purpose of mitigating impacts to riparian habitat and waters under the jurisdiction of CDFW and the Corps. Although these additional 0.2 acres of temporary impacts would be restored as riparian habitat not suitable for coastal California gnatcatcher, impacts from the Modified Project would be similar to those of the Approved Project overall. Coastal California gnatcatcher was listed as threatened under the ESA, was a California Species of Special Concern, and was an LA County sensitive species at the time of the analysis for the State-Certified EIR. Its regulatory status



remains the same. The State-Certified EIR would result in an open space system providing for preservation of suitable coastal scrub habitat for coastal California gnatcatcher in the High Country SMA and the Salt Creek area. Under SP-4.6-26a, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-55 the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable upland habitat to support coastal California gnatcatcher in the vicinity of the VCC Project Site and offset impacts of the VCC Project. In addition, mitigation measures imposed under the State-Certified EIR would require avoidance and minimization measures that would substantially reduce direct and indirect impacts to coastal California gnatcatcher individuals during construction, as well as long-term indirect impacts to coastal California gnatcatcher. Although impacts to suitable coastal California gnatcatcher habitat increased from 37.6 acres of permanent impacts to 43.8 acres of permanent impacts and 2.5 acres of temporary impacts under the Modified Project, as well as 0.2 acres of impacts from habitat creation, and despite numerous biological surveys of upland habitats, the species has not been observed on site since a one-time observation of a single individual outside the breeding season in October 2007. No resident population of coastal California gnatcatcher is known to exist on the VCC Project Site or anywhere else in the RMDP/SCP area despite numerous focused surveys since 2010. Taking into account the absence of any material change in the current status of coastal California gnatcatcher within the VCC Project Site or overall, the lack of any new observations of the species, and impacts to suitable habitat that are substantially similar to those of the 2017 Approved Project, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to coastal California gnatcatcher on the VCC Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-56** (downcast lighting near natural areas)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-55** (mitigation for least Bell's vireo and California gnatcatcher habitat)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

#### 6.2.2.14 Least Bell's Vireo

As discussed in Chapter 5, the current presence and status of least Bell's vireo on the VCC Project Site and elsewhere in the Santa Clara River and Castaic Creek in the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. Least Bell's vireos have gone undetected on the VCC Project Site most years

during nearly annual riparian bird surveys along Castaic Creek, and the species' occurrence was sporadic through 2007, prior to the analysis for the State-Certified EIR. Based on vegetation mapping updated in 2019, the VCC Project Site supports approximately 79.1 acres of suitable riparian nesting habitat, an increase of 15.2 acres compared to that described in the State-Certified EIR, and approximately 13.1 acres of adjacent upland foraging habitat, an increase of 12.8 acres. These increases reflect normal riparian vegetation succession, such as revegetation of river wash over time between large storm flow reset events. The Modified Project would result in 6.6 acres of permanent impacts and 3.4 acres of temporary impacts from construction (10.0 acres of impacts in total) to least Bell's vireo nesting habitat, compared to 4.3 acres of permanent impacts under the 2017 Approved Project, an increase of 5.7 acres overall and 2.3 acres in permanent impacts. The Modified Project would also result in temporary impacts to 0.1 acres of least Bell's vireo habitat solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. All of these areas would be restored to habitat potentially suitable for least Bell's vireo. The Modified Project would result in 5.5 acres of permanent impacts and 2.1 acres of temporary construction impacts to upland foraging habitat within 100 feet of nesting habitat, compared to 0.3 acres of permanent impacts from the 2017 Approved Project. It would also result in 2.7 acres of temporary impacts to upland foraging habitat solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. All of these areas would be restored to habitat potentially suitable for foraging and nesting for least Bell's vireo. The increase in impacts to upland foraging habitat reflects vegetation succession of grassland and disturbed land covers to shrubbier upland habitats adjacent to riparian habitats.

Least Bell's vireo was listed as endangered under the ESA and CESA at the time of the State-Certified EIR analysis, as well as being an LA County sensitive species. The status of the species remains unchanged. Federally designated critical habitat for the species does not occur within the VCC tract map boundary. The VCC Project would result in temporary impacts to a small area of off-site improvements, totaling 0.15 acres, just south of SR-126 and within critical habitat associated with the Santa Clara River. However, this area consists of disturbed land not suitable for least Bell's vireo.

The State-Certified EIR would result in an open space system providing for preservation of suitable habitat for least Bell's vireo in the River Corridor SMA through preservation of riparian nesting habitat and adjacent suitable upland foraging habitats. Under RMDP/SCP-BIO-1 and RMDP/SCP-BIO-2, the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable habitat to support least Bell's vireo in the vicinity of the VCC Project Site and offset impacts of the VCC Project. This would reduce habitat losses on the VCC Project Site to less than significant. In addition, riparian habitat within Hasley Canyon and Castaic Creek within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1. These areas would preserve additional suitable habitat for least Bell's vireo beyond the conservation implemented under the RMDP. Mitigation measures imposed under the State-Certified EIR also would require avoidance and minimization measures that would substantially reduce potential direct and indirect impacts to least Bell's vireo individuals during construction, as well as potential long-term indirect impacts to least Bell's vireos. Although impacts to suitable least Bell's vireo habitat increased from 4.3 acres of permanent impacts to 6.6 acres of permanent and 3.4 acres of temporary construction impacts to riparian nesting habitats, and from 0.3 acres of permanent impacts to 5.5 acres of permanent impacts and 2.1 acres of temporary impacts to upland foraging habitats, the species remains uncommon and sporadic in occurrence on the VCC Project Site, and overall impacts to suitable habitat from the Modified Project would remain low. The Modified Project would avoid direct construction impacts to 69.0 acres of nesting habitat, which is 87% of the nesting habitat currently available and 5.1 acres more habitat than was considered to occur on the VCC Project

Site according to the analysis for the State-Certified EIR. Habitat restoration for permanent and temporary impacts to riparian communities would also provide nesting habitat for the species. In addition, the VCC Project would continue to support 2.7 acres of suitable upland foraging habitat after implementation of the Modified Project, compared with no such habitat after implementation of the 2017 Approved Project. Taking into account the absence of any material change in the current status of least Bell's vireo within the VCC Project Site or overall, and the large amount of suitable habitat that would remain, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as several measures from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to least Bell's vireo on the VCC Project Site:

- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-55** (mitigation for least Bell's vireo and California gnatcatcher habitat)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)

- **RMDP/SCP-BIO-78** (cowbird trapping)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

### 6.2.2.15 Southwestern Willow Flycatcher

As discussed in Chapter 5, the current presence and status of southwestern willow flycatcher on the VCC Project Site and elsewhere in the Santa Clara River and Castaic Creek in the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. The willow flycatcher remains an expected migrant in the VCC Project vicinity, but southwestern willow flycatcher has not nested in the RMDP/SCP area and has not been confirmed to occur during surveys. According to current vegetation mapping, the VCC Project Site supports 74.1 acres of suitable habitat for southwestern willow flycatcher, compared to 63.4 acres at the time of the analysis for the State-Certified EIR, an increase of 10.7 acres. The Modified Project would result in 4.3 acres of permanent and 2.6 acres of temporary construction impacts to suitable habitat, compared to 3.9 acres of permanent impacts from the 2017 Approved Project. The Modified Project would also result in 0.1 acres of temporary impacts to southwestern willow flycatcher habitat solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. All of these areas would be restored to habitat potentially suitable for southwestern willow flycatcher.

In addition, as noted in Section 5.3.2, USFWS designated critical habitat for southwestern willow flycatcher within Castaic Creek on the VCC Project Site in 2013, subsequent to the analysis for the State-Certified EIR. The VCC Project Site supports 112.8 acres of critical habitat for southwestern willow flycatcher. The Modified Project would result in 15.9 acres (14%) in permanent impacts and 11.4 acres (10%) in temporary construction impacts to these areas. This represents permanent impacts to 0.001% and temporary impacts to 0.001% of critical habitat within the total 14,525 acres of critical habitat within the Santa Clara Management Unit for southwestern willow flycatcher. However, southwestern willow flycatcher critical habitat is mapped somewhat generally, and large amounts of land covers not suitable for southwestern willow flycatcher, such as California annual grassland and disturbed land, are included in the designated critical habitat. Of the 112.8 acres of total critical habitat on the VCC Project Site, 66.1 acres contain PCEs. The Modified Project would result in 2.3 acres (3%) of permanent and 2.3 acres (3%) of temporary impacts to the southwestern willow flycatcher critical habitat with PCEs on the VCC Project Site.

Southwestern willow flycatcher was listed as endangered under the ESA and CESA at the time of the State-Certified EIR analysis, as well as being an LA County sensitive species. The status of the species remains unchanged.

The State-Certified EIR would result in an open space system providing for preservation of suitable habitat for southwestern willow flycatcher in the River Corridor SMA. Under RMDP/SCP-BIO-1 and RMDP/SCP-BIO-2, the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable habitat to support southwestern willow flycatcher in the vicinity of the VCC Project Site and would reduce habitat losses on the VCC Project Site to less than significant. In addition, streambeds and riparian habitat within Hasley Canyon and Castaic Creek within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1. These areas would

preserve additional suitable habitat for southwestern willow flycatcher beyond the conservation implemented under the RMDP. In addition, avoidance and minimization measures required under the State-Certified EIR would substantially reduce potential direct and indirect impacts to southwestern willow flycatcher individuals during construction, as well as potential long-term indirect impacts to southwestern willow flycatchers. Although impacts to suitable southwestern willow flycatcher habitat increased from 3.9 acres of permanent impacts to 4.3 acres of permanent and 2.6 acres of temporary construction impacts, the species' status remains unchanged, and it has not been confirmed on the VCC Project Site or in the overall area. Also, although impacts to critical habitat were not analyzed in the State-Certified EIR, USFWS reinitiated consultation on the RMDP for southwestern willow flycatcher after the designation of critical habitat in the RMDP/SCP area in 2013 and issued its conclusion in relation to RMDP effects on southwestern willow flycatcher critical habitat in 2015 (USFWS 2015). According to USFWS, the RMDP "was not likely to destroy or adversely modify the designated critical habitat of the southwestern willow flycatcher" because of the small area (11.8 acres overall, compared to the 208,973 acres of critical habitat rangewide) that would be lost to development, because the lost habitat would not be in a location where it would fragment the critical habitat unit or eliminate an important element of the function of the critical habitat, and because the majority of the critical habitat would continue to support PCEs. The same conclusion would apply to impacts of the Modified Project on designated critical habitat for southwestern willow flycatcher.

Overall impacts to suitable habitat remain low, with avoidance of direct impacts to 67.0 acres, which is 90% of the suitable habitat currently available and 3.6 acres more habitat than was considered to occur on the Project Site according to the analysis for the State-Certified EIR. Taking into account the absence of any material change in the current status of southwestern willow flycatcher within the VCC Project Site or overall, and the large amount of suitable habitat that would remain, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to this species.

The Project would also avoid 67.0 acres of southwestern willow flycatcher habitat supporting PCEs, and 61.3 acres of critical habitat supporting PCEs would remain on the VCC Project Site. Because 93% (61.3 acres) of critical habitat supporting PCEs would remain after development of the Modified Project, and because the State-Certified EIR would result in an open space system providing for preservation of suitable habitat for southwestern willow flycatcher in the River Corridor SMA, impacts to southwestern willow flycatcher critical habitat would be less than significant.

The following Specific Plan and RMDP/SCP mitigation measures, as well as several measures from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to southwestern willow flycatcher on the VCC Project Site:

- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)



- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-55** (mitigation for least Bell's vireo and California gnatcatcher habitat)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)
- **RMDP/SCP-BIO-78** (cowbird trapping)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

### 6.2.2.16 Tricolored Blackbird

As discussed in Chapter 5, the current presence and status of tricolored blackbird on the VCC Project Site and elsewhere in the RMDP/SCP area remains essentially the same as that analyzed in the State-Certified EIR. Although the species was recorded nesting once previously on the Project Site in 1994 in an old borrow pit along the edge of Castaic Creek, and migrants were subsequently observed on several occasions, no tricolored blackbirds have been observed during surveys since the analysis for the State-Certified EIR, including nearly annual riparian bird surveys of Castaic Creek. Individuals of the species have been observed elsewhere in the RMDP/SCP area in that time, but no new nesting colonies have been recorded since 1994. The State-Certified EIR assumed that tricolored blackbirds could occur in the RMDP/SCP area, including the VCC Project Site, while foraging. The State-Certified EIR also assumed that tricolored blackbirds could nest in wetland and marsh habitat in the RMDP/SCP area. Approximately 139.4 acres of suitable foraging habitat remains on the Project Site, a 36.8-acre decrease compared to that described in the State-Certified EIR. Although the species nested on the VCC Project Site in 1994, based on current vegetation data, no nesting habitat currently occurs. However, given that breeding habitat occurred in the past, such habitat could develop quickly if ponding occurs within Castaic Creek. The Modified Project would result in 116.7 acres of permanent and 11.7 acres of temporary impacts to suitable foraging habitat (128.4 overall),

compared to 150.1 acres of permanent impacts from the 2017 Approved Project. The Modified Project would also result in temporary impacts to 1.5 acres of tricolored blackbird foraging habitat solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. As this will result in conversion to habitats not considered suitable for tricolored blackbird foraging, this would also be considered a loss of habitat, so that the Modified Project would result in 129.9 acres of impacts overall, a reduction of 20.2 acres compared to impacts under the Approved Project. This decrease in impacts is primarily due to reduction of suitable habitat as a result of conversion of some California annual grassland and disturbed land covers to coastal scrub and riparian scrub communities.

Tricolored blackbird was a federal Bird of Conservation Concern, a California Species of Special Concern, and an LA County sensitive species at the time of the State-Certified EIR analysis. Tricolored blackbird was listed as threatened under CESA in April 2018. Although USFWS reviewed a petition to federally list the tricolored blackbird following the analysis for the State-Certified EIR, USFWS ultimately determined that the listing was not warranted (84 FR 41694–41699). The state listing of tricolored blackbird increased the sensitivity of the species rangewide, but because both direct and indirect impacts were determined to be significant absent mitigation in the State-Certified EIR, avoidance, minimization, and mitigation measures have already been adopted for the species on the VCC Project Site and in the larger RMDP/SCP area. In addition, while impacts would occur to suitable foraging habitat, none would occur to occupied or suitable nesting habitat.

The State-Certified EIR would result in an open space system providing for preservation of grasslands and other suitable communities for tricolored blackbird in the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, RMDP/SCP-BIO-1, and RMDP/SCP-BIO-2, the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable habitat to support tricolored blackbird in the vicinity of the VCC Project Site and reduce impacts to habitat on the VCC Project Site to less than significant. In addition, streambeds and riparian habitat within Hasley Canyon and Castaic Creek within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1. These areas would preserve additional suitable habitat for tricolored blackbird beyond the conservation implemented under the RMDP. In addition, avoidance and minimization measures required under the State-Certified EIR would substantially reduce potential direct and indirect impacts to tricolored blackbird individuals during construction, as well as long-term potential indirect impacts to tricolored blackbirds. The Modified Project would result in a decrease in impacts to suitable foraging habitat compared to the 2017 Approved Project. Taking into account the absence of any material change in the current status of tricolored blackbird on the VCC Project Site overall, the absence of any new observations of the species on the VCC Project Site, and the similarity in impacts on potential tricolored blackbird habitat compared to the 2017 Approved Project, the Modified Project would not result in new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to tricolored blackbird.

The following Specific Plan and RMDP/SCP mitigation measures would address direct and indirect impacts to tricolored blackbird on the VCC Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)

- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)

#### 6.2.2.17 Western Yellow-Billed Cuckoo

As discussed in Chapter 5, the current presence and status of western yellow-billed cuckoo on the VCC Project Site and elsewhere in the Santa Clara River and Castaic Creek in the RMDP/SCP area remains substantially similar to that analyzed in the State-Certified EIR. No western yellow-billed cuckoos have been detected on the VCC Project Site. One incidental observation of the species along the Santa Clara River in 2018 added to the pattern established at the time of the analysis for the State-Certified EIR that only occasional migrants pass through the area. However, the State-Certified EIR analyzed impacts to western yellow-billed cuckoo because the species could occupy and potentially nest in the RMDP/SCP area if it became more abundant rangewide. According to current vegetation mapping, the VCC Project Site supports 74.1 acres of suitable riparian habitat for western yellow-billed cuckoo, compared to 63.4 acres at the time of the analysis for the State-Certified EIR, an increase of 10.7 acres. The Modified Project would result in 4.3 acres of permanent impacts and 2.6 acres of temporary construction impacts to suitable riparian habitat, compared to 3.9 acres of permanent impacts from the 2017 Approved Project. The Modified Project would also result in 0.1 acres of temporary impacts to western yellow-billed cuckoo habitat solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps. All of these areas would be restored to habitat potentially suitable for western yellow-billed cuckoo.

Western yellow-billed cuckoo was a candidate for listing under the ESA, was listed as endangered under CESA, was a federal Bird of Conservation Concern, and was an LA County sensitive species at the time of the State-Certified EIR analysis. The state and local status of the species remain unchanged, but the species was federally listed as endangered in 2014.

The State-Certified EIR would result in an open space system providing for preservation of suitable habitat for western yellow-billed cuckoo in the River Corridor SMA. Under RMDP/SCP-BIO-1 and RMDP/SCP-BIO-2, the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system, and potentially within conserved portions of the VCC Project Site, that would provide suitable habitat to support western yellow-billed cuckoo in the vicinity of the VCC Project Site and reduce habitat losses on the VCC Project Site to less than significant. In addition, riparian habitat within Hasley Canyon and Castaic Creek within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1. These areas would preserve additional suitable habitat for western yellow-billed cuckoo beyond the conservation implemented under the RMDP. In addition, avoidance and minimization measures required under the State-Certified EIR would substantially reduce potential direct and indirect impacts to western yellow-billed cuckoo individuals during construction, as well as potential long-term indirect impacts to western yellow-billed cuckoos. Although impacts to suitable western yellow-billed cuckoo habitat increased from 3.9 acres of permanent impacts to 4.3 acres of permanent and 2.6 acres of temporary construction impacts, the species' status remains unchanged and it has not been confirmed on the VCC Project Site or in the overall area. Overall impacts to suitable habitat remain low, with avoidance of impacts to 67.0 acres, which is 90% of the nesting habitat currently available and 3.6 acres more habitat than was considered to occur on the VCC Project Site according to the analysis for the State-Certified EIR. Taking into account the absence of any material change in the current status of western yellow-billed cuckoo on the VCC Project Site or overall, the similar impacts to suitable habitat for western yellow-billed cuckoo, and the large amount of suitable habitat that would remain, the Modified Project would not result in any new significant direct or indirect impacts, or substantially increase any previously identified significant direct or indirect impacts, to this species.

The following Specific Plan and RMDP/SCP mitigation measures, as well as several measures from the 1990 EIR for the Valencia Commerce Center Development, would address direct and indirect impacts to western yellow-billed cuckoo on the VCC Project Site:

- **SP-4.6-55** (permits required before wetland/habitat disturbance)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)

- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-49** (construction stormwater measures)
- **RMDP/SCP-BIO-52** (Worker Environmental Awareness Training for construction personnel)
- **RMDP/SCP-BIO-55** (mitigation for least Bell's vireo and California gnatcatcher habitat)
- **RMDP/SCP-BIO-56** (pre-construction surveys for nesting birds)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-BIO-70** (construction BMPs for protection of water quality, plant/wildlife species)
- **RMDP/SCP-BIO-71** (construction dust control)
- **RMDP/SCP-BIO-72** (planting restrictions within 200 feet of native vegetation)
- **RMDP/SCP-BIO-73** (fencing along River Corridor SMA trails)
- **RMDP/SCP-BIO-78** (cowbird trapping)
- **RMDP/SCP-BIO-87** (Argentine ant monitoring)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.b-2** through **VCC-4.b-4** (creek and bank contours)
- **VCC-4.c-1** (biological monitoring of creek channelization)
- **VCC-4.c-2** (on-site containment of any toxic substances)
- **VCC-4.c-3** (diversion of non-storm flows)

#### 6.2.2.18 Cougar

As discussed in Chapter 5, the current presence and status of cougar on the VCC Project Site and elsewhere in the RMDP/SCP area remain essentially the same as analyzed in the State-Certified EIR. No focused surveys for cougar were conducted on the Project Site, but camera studies of wildlife movement in the RMDP/SCP area in 2013–2014 included eight camera stations on the VCC Project Site. No cougars were detected on the VCC Project Site during the study, and the species and its sign have not been detected before or since the analysis for the State-Certified EIR. Observations of sign and detections by camera elsewhere in the RMDP/SCP area since 2010 have reconfirmed the overall status of the species, which was assumed to be present throughout the area in the analysis for the State-Certified EIR. Approximately 170.5 acres of suitable habitat remain on the VCC Project Site, a 27.6-acre increase compared to that described in the State-Certified EIR (142.9 acres). The Modified Project would result in permanent impacts to 58.8 acres and temporary construction impacts to 21.2 acres (80.0 acres overall), compared to 58.3 acres of permanent impacts from the 2017 Approved Project. Therefore, the Modified Project would result in an increase of 0.5 acres in permanent impacts, and an overall increase of 21.7 acres, compared to the 2017 Approved Project. The Modified Project would also result in 3.8 acres of temporary impacts solely for the purpose of habitat creation or enhancement for mitigation of Modified Project impacts to vegetation and to aquatic resources under the jurisdiction of CDFW and the Corps.

The cougar was designated in California as a Specially Protected Mammal at the time of the analysis for the State-Certified EIR and was considered a special-status species for purposes of that document. As discussed in Chapter 5,



in April 2021 the California Fish and Game Commission, following a review of a petition filed by the Center for Biological Diversity and the Mountain Lion Foundation (CBD and MLF 2019), found that listing of the cougar in the proposed Southern California/Central Coast ESU may be warranted, making cougars in the VCC Project Site region a candidate species under CESA. Candidate status provides the cougar with the same protections as endangered species under CESA, as long as the species remains a candidate. Therefore, the legal status of cougar has changed since the analysis for the State-Certified EIR, although the cougar remains a special-status species.

### **Direct Impacts to Cougar and Cougar Habitat**

As described in Section 5.3.2.17, the cougar has not been recorded on the VCC Project Site, despite wildlife camera surveys covering the site in 2013–2014. However, the analysis for the State-Certified EIR assumed that cougar was present in the area, and the status of the species has not changed since that analysis. Impacts to suitable cougar habitat have increased from 58.3 acres to 58.8 acres of permanent impacts, which is a negligible change, and 21.7 acres of temporary construction impacts. Moreover, the proposed changes under the Modified Project include a reduction of permanent impacts to riparian communities and jurisdictional stream habitat, which should improve cover for any cougars that might use the site for movement along Hasley Canyon. Under VCC-PDF-BIO-1, the jurisdictional streambeds and riparian habitat in Hasley Canyon and Castaic Creek that are not subject to permanent impacts will be permanently conserved.

The impacts associated with the VCC Project represent less than 4% of impacts to cougar habitat analyzed in the State-Certified EIR, which found that implementation and buildout within the RMDP/SCP area as a whole would result in permanent loss of a total of 2,223 acres of suitable habitat for the species. Although the State-Certified EIR considered the entire RMDP/SCP area (about 22 square miles) as not large enough to support a single individual's entire home range or more than two or three cougars with overlapping home ranges at any one time, the State-Certified EIR found that the RMDP/SCP as a whole would result in substantial permanent loss of habitat for cougar that would reduce the distribution and range of the cougar population in the RMDP/SCP area, which would be a significant impact absent mitigation.

Habitat loss can also result in fragmentation of remaining habitats. However, the VCC Project Site itself is relatively isolated under existing conditions. Development to the east, north, and west constrains movement onto or away from the VCC Project Site, other than along Hasley Canyon and Castaic Creek. These corridors would largely be preserved, and cougars would still be able to move through these areas because impacts would be almost entirely limited to upland habitats. Therefore, the loss of upland habitats outside these corridors would not result in further fragmentation of habitat for cougars.

It is unlikely that construction activities would result in direct injury or mortality of individual adult cougars. The risk of collision with fast-moving construction equipment and vehicles is very low because cougars are expected to avoid construction activities and because the species is highly mobile. The potential for disturbance of denning cougars is very low because the species is expected to use the VCC Project Site mostly for movement and possibly for occasional foraging. Although the species has been known to den in dense vegetation, cougars typically den in rockier areas with caves or cavities suitable for dens, which are absent from the VCC Project Site and more likely to be found in the upland habitats of the High Country SMA. The likelihood of denning on the site is also lower than elsewhere in the RMDP/SCP area because of its relatively small size and proximity to surrounding development. But, while it is highly unlikely the Modified Project would result in impacts to very young cougars confined to natal dens, this possibility cannot be entirely discounted, and any impact to individuals of a species that is considered a candidate under CESA could be considered significant.

These potentially significant direct impacts to cougar suitable habitat and cougar individuals would be reduced to less than significant by the following Specific Plan and RMDP/SCP mitigation measures, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development, which are applicable to the VCC Project (see Appendix D):

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-60** (pre-construction surveys for mountain lion [cougar] natal dens)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

The permanent loss of suitable habitat for the cougar through implementation of the Modified Project would be mitigated by preservation, enhancement, and restoration, and management of suitable habitat within a large open space system that will be conserved under the RMDP within the High Country SMA, the Salt Creek area, and the River Corridor SMA. Under SP-4.6-26a, RMDP/SCP-BIO-1, RMDP/SCP-BIO-2, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22, the VCC Project would preserve, enhance, and restore vegetation communities within this large managed open space system to offset impacts of the Modified Project. Restoration and management in the open space system is expected to improve the availability of habitat for the cougar. In addition, streambeds and riparian habitat within Hasley Canyon and Castaic Creek within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1, which would preserve habitat that could provide cover for any cougar that might use the site for movement along the Castaic/Hasley Corridor.

RMDP/SCP-BIO-60 requires a pre-construction survey for cougar natal dens and the prohibition of construction activities within 2,000 feet of any natal den located during the survey until a qualified biologist in consultation with CDFW determines a suitable no-construction buffer. The protection of cougar natal dens with young will result in avoidance of any direct impacts to individual cougars.

Based on the foregoing analysis, the Modified Project may cause potentially significant direct impacts to potential suitable habitat for cougar, but such impacts will be reduced to less than significant with application of the mitigation measures recommended herein. This finding is consistent with the significance determination and mitigation findings in the State-Certified EIR. In addition, the measures described herein are sufficient to address the elevated status of this species since the analysis for the State-Certified EIR.

### Indirect Impacts to Cougars

The Modified Project could result in short-term and long-term indirect impacts to cougars. Potential short-term impacts include collision with vehicles due to increased traffic and disturbance from noise and increased human presence during construction, especially if construction occurs near a natal den. Because cougars are highly mobile, they would be expected to leave and/or avoid construction zones. Short-term noise and human presence associated with construction and/or grading activities may alter the foraging behavior and movement patterns of cougars in the immediate vicinity of these activities. However, because this species typically forages and moves at night (although some activity may occur at dusk and dawn), the effects of these short-term construction-related activities on cougars are expected to be minimal, although cougars may avoid lighted construction areas.

The potential for disturbance of denning cougars is very low, as discussed under direct impacts, because the species is expected to use the VCC Project Site mostly for movement and possibly for occasional foraging. Although the species may sometimes den in dense vegetation, cougars typically den in rockier areas with caves or cavities suitable for dens, which are more likely to be found in the upland habitats of the High Country SMA. Such habitats are absent on the VCC Project Site. The developed nature of the area surrounding the VCC Project Site also reduces the likelihood of denning. However, the possibility of denning, and therefore of impacts to very young cougars in their dens, cannot be entirely discounted. Any impact to individuals of a species that is considered a candidate under CESA could be considered significant.

As described in the State-Certified EIR, several additional long-term indirect impacts could occur to individual cougars, including nighttime illumination of areas adjacent to open space that could disrupt foraging and movement behavior; increased incidence of vehicle collisions at new and expanded roadways; increased encounters with humans and pet, stray, and feral dogs, which could lead to predation and disease; the use of rodenticides to control small mammals that are prey for cougars (e.g., ground squirrels and rabbits), which may reduce the prey populations and possibly cause secondary poisoning; and introduction of and invasion by non-native plant species in natural areas. These short-term and long-term indirect impacts could permanently restrict the range of the cougar and reduce its population on site. Indirect impacts could be significant, absent mitigation.

The following Specific Plan and RMDP/SCP mitigation measures, as well as one measure from the 1990 EIR for the Valencia Commerce Center Development, would address indirect impacts to individual cougars on the VCC Project Site:

- **SP-4.6-26a** (habitat restoration in High Country SMA)
- **SP-4.6-27** (riparian enhancement in High Country SMA)
- **SP-4.6-28** (mitigation banking)

- **SP-4.6-43** (mitigation within Open Area)
- **SP-4.6-48** (oak mitigation)
- **SP-4.6-56** (downcast lighting near natural areas)
- **SP-4.6-63** (riparian resource mitigation ratio)
- **RMDP/SCP-BIO-1** (requirements for riparian/wetland mitigation plans)
- **RMDP/SCP-BIO-2** (mitigation ratios for impacts to waters)
- **RMDP/SCP-BIO-3** (mitigation site selection)
- **RMDP/SCP-BIO-4** (requirements for replacement vegetation)
- **RMDP/SCP-BIO-5** (plant spacing for mitigation sites)
- **RMDP/SCP-BIO-6** (revegetation success criteria)
- **RMDP/SCP-BIO-7** (replanting after acts of God)
- **RMDP/SCP-BIO-8** (temporary irrigation for mitigation sites)
- **RMDP/SCP-BIO-9** (exotic plant control)
- **RMDP/SCP-BIO-10** (mitigation credit for exotic plant control)
- **RMDP/SCP-BIO-12** (mitigation monitoring reports)
- **RMDP/SCP-BIO-13** (sale of mitigation credits not prohibited; incorporation of applicable mitigation banking guidance)
- **RMDP/SCP-BIO-15** (replacement of riparian trees)
- **RMDP/SCP-BIO-16** (revegetation of temporary impacts)
- **RMDP/SCP-BIO-20** (coastal scrub preservation in RMDP areas)
- **RMDP/SCP-BIO-21** (supplemental restoration of coastal scrub)
- **RMDP/SCP-BIO-22** (Oak Resource Management Plan)
- **RMDP/SCP-BIO-60** (pre-construction surveys for cougar natal dens)
- **RMDP/SCP-BIO-63** (homeowner educational information)
- **RMDP/SCP-BIO-64** (Integrated Pest Management Plan; CC&Rs)
- **RMDP/SCP-WQ-2** (Landscape and Integrated Pest Management Plan)
- **VCC-4.a-2** (retain native coastal scrub vegetation)

RMDP/SCP-BIO-60 requires a pre-construction survey for cougar natal dens and the prohibition of construction activities within 2,000 feet of any natal den located during the survey until a qualified biologist in consultation with CDFW determines a suitable no-construction buffer. The protection of cougar natal dens with young will help avoid and reduce construction-related indirect impacts.

Preservation, enhancement, and management of vegetation communities to offset Modified Project impacts within the large open space system composed of the River Corridor SMA, the High Country SMA, and the Salt Creek area will contribute to protected open space that will in part offset indirect impacts. The open space system connects the Santa Susana Mountains in the south to the Los Padres National Forest north of the Santa Clara River via the High Country SMA, Salt Creek area, and River Corridor SMA. This regional habitat connection will allow cougars to use and move through the RMDP/SCP area without coming into contact with residential, commercial, and industrial areas, thus reducing indirect effects such as noise and nighttime lighting and contact with humans and domestic and stray or feral animals. In addition, streambeds and riparian habitat within Hasley Canyon and Castaic Creek

within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1. Preservation of the Castaic/Hasley Corridor will ensure that this wildlife corridor connecting the Santa Clara River with uplands to the north remains available for potential use by cougar and will provide additional benefits to cougar movement beyond the conservation implemented through the RMDP.

SP-4.6-56 requires downcast lighting along the perimeter of natural areas, so that light is directed away from these areas and cougar movement and foraging would not be disrupted there, further reducing impacts from perimeter lighting.

RMDP/SCP-BIO-63 will be implemented to control for pet, stray, and feral animals. This measure requires each homeowners' association to supply educational information to future residents regarding pets, wildlife, and open space areas, specifying that pets must remain leashed while on designated trail systems and/or in any areas within or adjacent to open space. This measure also requires as-needed control of stray and feral dogs in open space areas.

RMDP/SCP-BIO-64 requires implementation of an Integrated Pest Management plan, which will ensure the implementation of BMPs to avoid and minimize adverse effects on the natural environment, including from rodenticides. RMDP/SCP-WQ-2 requires preparation of a Landscape and Integrated Pest Management Plan, which addresses application guidelines for integrated pest management for common area landscaping.

RMDP/SCP-BIO-9 and RMDP/SCP-BIO-10 will ensure control of exotic and invasive plants in areas where habitat is created to mitigate for impacts to aquatic resources under Corps or CDFW jurisdiction, as required under RMDP/SCP-BIO-2. Measures included in RMDP/SCP-BIO-20 for coastal scrub mitigation and RMDP/SCP-BIO-22 for managing oak resources also include provisions that would result in control of invasive species in those areas.

Based on the foregoing analysis, the Modified Project may cause potentially significant indirect impacts to cougars, but such impacts can be reduced to less than significant with application of the mitigation measures recommended herein. This finding is consistent with the significance determination and mitigation findings in the State-Certified EIR. In addition, the measures described herein are sufficient to address the elevated status of this species since the analysis for the State-Certified EIR.

## 6.3 Impacts to Wildlife Corridors and Habitat Linkages

As discussed in Chapter 5, the value of the VCC Project Site for wildlife movement was described in the State-Certified EIR. The current wildlife movement value of the VCC Project Site is consistent with the State-Certified EIR: no identified habitat linkages and one wildlife corridor exists within the Project Site. Although the vicinity of Castaic Creek north of the VCC Project Site is becoming increasingly developed, it continues to have connectivity value between the Santa Clara River and upland habitats to the northeast of the VCC Project area extending to Castaic Lake and the Angeles National Forest. Wildlife movement studies conducted in the RMDP/SCP area, including eight camera stations on the VCC Project Site, in 2013–2014, confirm the Castaic/Hasley Corridor is still used by a variety of species, although larger, higher-mobility species such as cougar and mule deer were not detected. Overall, the value of the Castaic/Hasley Corridor as a wildlife corridor or habitat linkage remains the same as at the time of the State-Certified EIR.

The Modified Project would be consistent with the 2017 Approved Project, but with reduced permanent impacts to the Castaic/Hasley Corridor (Figure 4). As described in the State-Certified EIR, the Castaic/Hasley Corridor would be narrowed by development of the VCC Project but would continue to have connectivity value between the Santa Clara



River and upland habitats to the northeast of the VCC Project area extending to Castaic Lake and the Angeles National Forest, allowing for movement of many high-mobility mammal species such as coyote, mule deer, and possibly mountain lion and bobcat (*Lynx rufus*), and would continue to function as potential live-in habitat and movement habitat for other species. In addition, streambeds and riparian habitat within Hasley Canyon and Castaic Creek within the VCC Project Site will be permanently conserved under VCC-PDF-BIO-1, which will ensure that the Castaic/Hasley Corridor remains available for wildlife movement. As under current conditions, aquatic habitat for fish would remain limited to periods when Castaic Creek is flowing; therefore, the VCC Project would not result in long-term or short-term impacts to fish movement. Bird movements would remain relatively unaffected. Most bird species are highly mobile and would be able to follow remaining habitats or fly over new development to disperse or migrate through the area. Although birds are known to collide with buildings in some cases, causing bird injury or mortality, most bird deaths from building collisions occur close to the ground and are related to the presence of habitat (especially that including trees) near glass that reflects such habitat (Borden et al. 2010; Kahle et al. 2016; Gelb and Delacretaz 2006, 2009). Where development will occur near roads and other existing development, building glass would result in little risk of bird collisions. The principal areas where development will occur near remaining natural habitats or restored habitats are along Hasley Canyon and Castaic Creek. Temporary impact areas in Hasley Canyon will be restored with vegetation similar to that removed. Vegetation communities and land covers in these areas currently consist mostly of river wash, coastal scrub communities, scale broom scrub, California annual grassland, and disturbed land, instead of the forested habitats more likely to be reflected in building glass in nearby developed areas. Along both Hasley Canyon and Castaic Creek, because preserved or restored vegetation will generally be at a lower elevation than surrounding structures and glass, the potential for glass to reflect trees and shrubs would be relatively low, which would reduce the potential for birds to fly into glass that is incorporated into buildings outside the Santa Clara River Significant Ecological Area (SEA). The generally lower-profile vegetation expected to be restored within Hasley Canyon would further reduce this potential. Therefore, the presence of buildings will not serve as a barrier that will make birds unable to reach other or nearby habitats; cause migrants or other birds moving locally to collide with buildings; or sever any connection between populations.

Taking into account the absence of any material change in the suitability of the VCC Project Site for wildlife movement, the incremental reduction in impacts to the Castaic/Hasley Corridor, and the permanent conservation of that corridor under VCC-PDF-BIO-1, impacts of the Modified Project on wildlife movement would be consistent overall with those described in the State-Certified EIR: the Modified Project would not affect wildlife movement within any identified habitat linkage, including the High Country SMA, Salt Creek, and River Corridor SMA areas identified in the State-Certified EIR as part of important regional habitat linkages. As described in the State-Certified EIR, those regional habitat linkages would remain intact and fully functional and would support landscape-scale connectivity. The Castaic/Hasley Corridor also would remain functional, and permanent impacts would be reduced in comparison with the 2017 Approved Project. Therefore, the Modified Project would not result in any new significant direct or indirect impacts and would not substantially increase any previously identified significant direct or indirect impacts to wildlife corridors or habitat linkages. In fact, as noted above for cougar, the proposed changes under the Modified Project include a reduction of permanent impacts to riparian communities and jurisdictional stream habitat, which should improve cover for moderate- and high-mobility species that use the VCC Project Site for movement.

INTENTIONALLY LEFT BLANK

---

# 7 Cumulative Impacts

## 7.1 Methods of Analysis

To analyze the cumulative impacts of implementation of the RMDP/SCP, including the 2017 Approved Project, the State-Certified EIR relied on data for cumulative impacts within the Santa Clara River watershed as a whole from past, present, and reasonably foreseeable future projects in this area. Vegetation data from the analysis was from the California Gap Analysis Program (GAP) database (UCSB 1999), which was the only database available that covered the entire watershed. The analysis in this section similarly relies on more recent GAP data (USGS 2012) that was available for the Upper Santa Clara River Watershed (USCRW), similar to use of updated vegetation data for the project-level analysis. Also similar to the vegetation data used in the project-level analysis, the two databases rely on similar classification schemes, with communities that may be grouped under general categories including chaparrals, scrubs, riparian, wetland and aquatic, woodland, coniferous forest, grasslands, other natural land covers, and developed land covers.

Direct comparison of the newer data set to the analysis in the State-Certified EIR may be misleading, because the 1999 data set used in the State-Certified EIR did not map vegetation communities to the same level of detail as the 2012 GAP data set. In the 1999 data set, the entire VCC Project Site was mapped as Venturan coastal scrub, while current mapping reflects the occurrence of the large areas of riparian communities along Castaic Creek, the significant area of agriculture lands on the VCC Project Site, and grasslands and disturbed land.

The information presented in this Report also differs from the analysis in the State-Certified EIR in the extent of the study area. This analysis relies on the Final Upper Santa Clara River Watershed Study (“USCRW study”; Dudek 2015g), which described the impacts of existing and potential future projects within the USGS hydrologic unit code (HUC)<sup>12</sup> 10, watersheds Numbers 2 through 5 (hereafter referred to as “watersheds” or “study area”). Each of the four HUC 10 watersheds in the study area is well defined and supports a variety of plants, animals, and natural communities and other non-natural land covers (e.g., agriculture, development). However, they do drain to a common point, the Santa Clara River. These four watersheds were selected because, when compared to the downstream watersheds, they are more likely to be developed and sustain effects from the Newhall projects. The USCRW study area is also consistent with the conservation area delineated in the Santa Clara River Upper Watershed Conservation Plan produced by The Nature Conservancy, except that the 2015 USCRW study excludes HUC 10 Watershed 19 (Lower Piru Creek), which was included in the Nature Conservancy study (TNC 2006). The HUC 10 Watershed 19 is excluded from the USCRW study because it is downstream of Newhall property.

The State-Certified EIR analyzed cumulative impacts over the entire Santa Clara Sub-Basin (including the current study area and an additional five watersheds). However, because of different regulatory environments in Los Angeles and Ventura counties, the current analysis excludes all but a fraction of the Ventura County portion of the Santa Clara Sub-Basin. Development in rural and agricultural areas of Ventura County is essentially under a moratorium as a result of several “Save Open Space and Agricultural Resources” (SOAR) ordinances and initiatives. The Ventura County SOAR ordinance requires County-wide voter approval of any change to the County General Plan involving the Agricultural, Open Space, or Rural land use map designations, or any change to a General Plan goal

---

<sup>12</sup> HUCs are a way to classify divisions of watersheds—the largest and most inclusive category, HUC 2, covers large areas of the United States, like the Great Basin or the Pacific Northwest. The most exclusive HUC classification is HUC 12, the subwatershed. The HUCs investigated in this study are all HUC 10 watersheds.

or policy related to those land use designations. The City of Ventura has two measures: (1) its original SOAR measure, which requires voter approval of any change to the General Plan involving the Agriculture designation and has been extended through 2030, and (2) the Hillside Voter Participation Act, which requires voter approval of any urban development within the Hillside Voter Participation Act line.

Table 4 shows the acreage of each vegetation community that would be affected by (1) development projects proposed by the Applicant, (2) other development projects, or (3) a combination of both.<sup>13</sup> Note that, within the same 425,507-acre area, the State-Certified EIR identified 37,890 acres of impacts (209.4 from the 2017 Approved Project) from all planned and approved projects in the USCRW, compared to only 27,007 acres identified in Table 4. Although the acreage of impacts from approved and reasonably foreseeable projects has decreased since the previous analysis, the numbers are similar, supporting the validity of using the USCRW study and more recent GAP data for cumulative impacts of the Modified Project.

**Table 4. Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in Study Area**

Land Cover Type	Total Study Area (Acres)	Development Impacts (Acres)			
		Modified Project	Newhall Projects	All Other Planned and Approved Projects	Total Planned and Approved Development in Study Area
Chaparrals					
Southern California dry-mesic chaparral	139,772	0.6	683	3,571	4,254
California mesic chaparral	1,748	—	8	13	22
Sonora-Mojave semi-desert chaparral	765	—	—	14	14
Mediterranean California mesic serpentine woodland and chaparral	290	—	24	2	26
California montane woodland and chaparral	78	—	—	—	—
Subtotal <sup>a</sup>	142,653	0.6	715	3,600	4,316
Scrubs					
Southern California coastal scrub	69,404	9.2	1,399	5,665	7,064
Sonora-Mojave creosote bush-white bursage desert scrub	4,801	—	7	570	578

<sup>13</sup> The California GAP data were compiled using satellite imagery forming a 30-meter resolution map for the entire United States based on NatureServe's Ecological Systems Classification. Thus, the California GAP vegetation database was mapped at a broader scale and necessarily lower precision than the project-level vegetation community and land cover mapping. Therefore, acreages for similar communities, and for impacts to vegetation communities and habitat, will be different from those cited in the more detailed project analysis. Nonetheless, the GAP data provide reasonable estimates of regionwide vegetation community conditions (i.e., acreage).

**Table 4. Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in Study Area**

Land Cover Type	Total Study Area (Acres)	Development Impacts (Acres)			
		Modified Project	Newhall Projects	All Other Planned and Approved Projects	Total Planned and Approved Development in Study Area
Mojave mid-elevation mixed desert scrub	2,515	—	—	90	90
Sonora–Mojave mixed salt desert scrub	442	—	—	6	6
Mediterranean California southern coastal dune	85	—	—	<1	<1
Inter-mountain basins big sagebrush shrubland	39	—	<1	2	2
Inter-mountain basins mixed salt desert scrub	30	—	—	—	—
North American warm desert active and stabilized dune	2	—	—	—	—
<i>Subtotal<sup>a</sup></i>	<i>77,318</i>	<i>9.2</i>	<i>1,406</i>	<i>6,333</i>	<i>7,739</i>
<b>Riparian</b>					
Mediterranean California foothill and lower montane riparian woodland	2,018	4.1	34	12	47
North American warm desert riparian woodland and shrubland	141	—	—	16	16
California Central Valley riparian woodland and shrubland	7	—	—	1	1
<i>Subtotal<sup>a</sup></i>	<i>2,166</i>	<i>4.1</i>	<i>34</i>	<i>30</i>	<i>64</i>
<b>Wetland and Aquatic</b>					
Open water (fresh)	3,296	—	—	—	—
Temperate Pacific freshwater mudflat	1,315	2.0	19	15	35
Temperate Pacific freshwater emergent marsh	512	9.3	21	34	55
<i>Subtotal<sup>a</sup></i>	<i>5,123</i>	<i>11.3</i>	<i>41</i>	<i>49</i>	<i>90</i>



**Table 4. Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in Study Area**

Land Cover Type	Total Study Area (Acres)	Development Impacts (Acres)			
		Modified Project	Newhall Projects	All Other Planned and Approved Projects	Total Planned and Approved Development in Study Area
Woodland					
Great Basin pinyon–juniper woodland	44,092	—	3	2,021	2,024
California Coastal live oak woodland and savannah	18,952	—	440	503	943
California Central Valley mixed oak savannah	4,100	2.1	62	385	446
Central and Southern California mixed evergreen woodland	1,469	—	—	—	—
California lower montane blue oak–foothill pine woodland and savanna	1,395	—	49	194	243
Southern California oak woodland and savannah	489	—	22	64	86
Mediterranean California mixed evergreen forest	78	—	—	—	—
Subtotal <sup>a</sup>	70,576	2.1	575	3,166	3,742
Coniferous Forest					
Mediterranean California dry-mesic mixed conifer forest and woodland	17,594	—	—	3	3
California montane Jeffrey pine–(Ponderosa pine) woodland	1,265	—	—	—	—
California coastal redwood forest	84	—	<1	1	1
Subtotal <sup>a</sup>	18,942	—	<1	3	3
Grasslands					
California Central Valley and southern coastal grassland	50,167	92.6	2,178	4,317	6,495

**Table 4. Planned and Approved Development on Newhall Property in Relation to GAP Vegetation and Land Cover Types in Study Area**

Land Cover Type	Total Study Area (Acres)	Development Impacts (Acres)			
		Modified Project	Newhall Projects	All Other Planned and Approved Projects	Total Planned and Approved Development in Study Area
California mesic serpentine grassland	24	—	—	5	5
<i>Subtotal<sup>a</sup></i>	<i>50,192</i>	<i>92.6</i>	<i>2,178</i>	<i>4,321</i>	<i>6,499</i>
<b>Other Natural Land Covers</b>					
Southern California Coast Ranges cliff and canyon	407	—	—	12	12
North American warm desert bedrock cliff and outcrop	369	—	—	97	97
North American warm desert pavement	28	<1	<1	3	3
<i>Subtotal<sup>a</sup></i>	<i>803</i>	<i>&lt;1</i>	<i>&lt;1</i>	<i>112</i>	<i>112</i>
<b>Agricultural Lands</b>					
Pasture/hay	2,676	2.8	598	165	764
Cultivated cropland	2,114	3.2	209	29	238
Recently burned shrubland	815	—	2	3	5
<i>Subtotal<sup>a</sup></i>	<i>5,605</i>	<i>6.0</i>	<i>809</i>	<i>197</i>	<i>1,006</i>
<b>Developed Lands</b>					
Developed, open space	30,871	79.3	711	2,155	2,866
Developed, low intensity	12,996	20.8	100	341	441
Developed, medium intensity	8,056	4.2	24	102	126
Developed, high intensity	206	0.8	—	2	2
<i>Subtotal<sup>a</sup></i>	<i>52,128</i>	<i>105.1</i>	<i>835</i>	<i>2,600</i>	<i>3,435</i>
<b>Total<sup>a</sup></b>	<b>425,507</b>	<b>231.0</b>	<b>6,594</b>	<b>20,412</b>	<b>27,007</b>

**Notes:** GAP = Gap Analysis Program.

<sup>a</sup> Subtotals and totals may not sum precisely due to rounding.

As described in Section 3.1, Disturbance Footprint, the Modified Project would reduce the permanent development footprint under the 2017 Approved Project, and otherwise includes refinements to the VCC Project that reflect a more detailed development plan to implement the conceptual land use plan analyzed in the State-Certified EIR. Because of these minor changes the Modified Project represents relative to the 2017 Approved Project, the Modified Project would not result in a substantial increase in the VCC Project's contribution to cumulative impacts, compared to the 2017 Approved Project, for any resource or species analyzed in the State-Certified EIR. Therefore,

the Modified Project would not result in new significant cumulative impacts or substantially increase the severity of any significant cumulative impact identified in the State-Certified EIR. This conclusion applies to all rare plants analyzed in this Report: San Fernando Valley spineflower, slender mariposa lily, Peirson's morning-glory, mainland cherry, Southern California black walnut, white rabbit-tobacco, and oak trees. The same conclusion applies to the following wildlife species: arroyo chub, Santa Ana sucker, southern steelhead, unarmored threespine stickleback, arroyo toad, western spadefoot, California legless lizard, southwestern pond turtle, burrowing owl, California condor, coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, tricolored blackbird, western yellow-billed cuckoo, and cougar. Therefore, this Report does not further analyze cumulative impacts to these species. However, neither Crotch's bumble bee nor California glossy snake was considered a special-status species at the time of the cumulative analysis for the State-Certified EIR, and potential cumulative impacts to these species have not previously been specifically analyzed. Cumulative impacts for both species are discussed in this chapter, based on the data presented in Table 4.

## 7.2 Crotch's Bumble Bee

The Modified Project, when combined with planned and approved projects, could reduce available habitat suitable for Crotch's bumble bee. Based on the likely presence of floral resources and nesting microhabitats for the species, described above, there are approximately 366,651 acres of suitable Crotch's bumble bee habitat in the study area, including all native vegetation communities and non-native grassland (and excluding developed, cropland, bare, and open water land covers). Planned and approved projects in the study area would affect 22,423 acres (6%), 4,933 acres (1%) of which would be affected by Newhall Land projects. The Modified Project's contribution to this cumulative impact would be 117.7 acres (0.03%). Although the historical range of Crotch's bumble bee is widespread in California, its population has substantially declined and the species has apparently disappeared from parts of its former range, mostly in the Central Valley (CDFW 2019). However, recent observations have confirmed that Crotch's bumble bee occurs on the VCC Project Site. The Modified Project's contribution to the cumulative loss of habitat for this species, when combined with planned and approved projects in the study area, could be a significant cumulative impact unless mitigated.

In addition, the Modified Project, when combined with planned and approved projects, could result in potential long-term indirect effects. These include impacts from pesticides and herbicides and habitat fragmentation, making the species more vulnerable to extirpation from smaller habitat patches or precluding successful colonization. In addition, the close proximity of urban development to suitable habitat for this species could result in disruption of essential behavioral activities (e.g., foraging, reproduction) and greater vulnerability to several potential indirect impacts, including human-caused habitat degradation (e.g., from trampling of vegetation or off-road vehicles); disturbances by pet, stray, and feral cats and dogs; wildfires; invasive species such as Argentine ants; and increased collisions with vehicles. Unless mitigated, these indirect effects could contribute to a potential significant cumulative impact.

The Modified Project's contribution to potential significant direct and indirect cumulative impacts on Crotch's bumble bee would be less than significant with mitigation.

Permanent loss of suitable habitat for Crotch's bumble bee would be mitigated by measures requiring habitat preservation, enhancement and restoration, and management within a large, permanent open space system that would include suitable habitat to support the species. These mitigation measures include RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10, RMDP/SCP-BIO-12, RMDP/SCP-BIO-13, RMDP/SCP-BIO-15, RMDP/SCP-BIO-16, RMDP/SCP-BIO-20, and RMDP/SCP-BIO-22. Implementation of these mitigation measures would contribute to the protection

and management of suitable habitat expected to support floral resources and nesting and hibernation microhabitats (small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, rock walls, and brush piles) for Crotch's bumble bee in the River Corridor SMA and within the High Country SMA and the Salt Creek area. This would contribute to Crotch's bumble bee's ability to persist in the study area.

Mitigation measures would also be implemented to reduce long-term indirect impacts to Crotch's bumble bee. Pesticides would be controlled through an IPM plan (RMDP/SCP-BIO-64) and, for common area landscaping, a Landscape and Integrated Pest Management Plan (RMDP/SCP-WQ-2). Measures addressing long-term indirect impacts from Argentine ants include quarterly monitoring for Argentine ants along the urban–open space interface and control measures for Argentine ants in perpetuity (RMDP/SCP-BIO-87). Implementation of these measures would allow Crotch's bumble bee to persist in habitat mitigation areas within the large amount of permanent open space that would be protected and managed in the VCC Project Site vicinity, as noted above.

For the reasons set forth in this section, the Modified Project would not result in (1) a cumulatively considerable contribution to a potential significant cumulative impact on individual Crotch's bumble bees, (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat for this species, or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to indirect impacts.

## 7.3 California Glossy Snake

The Modified Project, when combined with planned and approved projects, could reduce available habitat suitable for California glossy snake. There are approximately 178,517 acres of suitable California glossy snake habitat in the study area, including chaparral, scrub, and grassland. Planned and approved projects in the study area would affect approximately 20,742 acres (12%), of which 5,764 acres (3%) would be affected by Newhall projects. The Modified Project's contribution to this impact would be 104.5 acres (0.1%).

California glossy snake is highly localized in distribution and apparently declining in much of its range, so it is vulnerable to habitat fragmentation from development. The Modified Project's contribution to the cumulative loss of habitat for this species, when combined with planned and approved projects in the study area, unless mitigated, could be a potentially significant cumulative impact.

In addition, the Modified Project, when combined with planned and approved projects, could result in potential long-term indirect effects. These include habitat fragmentation and isolation of some local populations, making the species more vulnerable to extirpation from smaller habitat patches. In addition, the close proximity of urban development to suitable habitat for this species could result in disruption of essential behavioral activities (e.g., foraging, reproduction) and greater vulnerability to several potential indirect impacts, including human-caused habitat degradation (e.g., trampling of vegetation; introduction of invasive species, such as Argentine ants; damage from off-road vehicle use); harassment and collection; predation by pet, stray, and feral cats and dogs; increased roadkill; and use of pesticides, which may reduce California glossy snake prey or cause secondary poisoning. Unless mitigated, these indirect effects could be a potentially significant cumulative impact.

The Modified Project's contribution to potentially significant direct and indirect cumulative impacts on the California glossy snake would be less than significant with mitigation.

Permanent loss of suitable habitat for California glossy snake would be mitigated by measures requiring habitat preservation, enhancement and restoration, and management within a large, permanent open space system that would include suitable habitat to support this species. These mitigation measures include RMDP/SCP measures RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10, RMDP/SCP-BIO-12, RMDP/SCP-BIO-13, RMDP/SCP-BIO-15, RMDP/SCP-BIO-16, and RMDP/SCP-BIO-20 through RMDP/SCP-BIO-22. Implementation of these mitigation measures would contribute to the protection and management of suitable habitat for the California glossy snake in the River Corridor SMA, the High Country SMA, and the Salt Creek area, and potentially within the VCC Project Site. In addition, preservation of Hasley Canyon under VCC-PDF-BIO-1, which is dominated by river wash and scale broom, versions of streambed and riparian habitat that are more suitable for this species, would preserve additional suitable habitat for California glossy snake beyond the conservation implemented under the RMDP. This would allow California glossy snake to persist in the study area.

Pesticides would be controlled through an Integrated Pest Management plan (RMDP/SCP-) and, for common area landscaping, through a Landscape and Integrated Pest Management Plan (RMDP/SCP-WQ-2). Argentine ant invasions of upland habitats would be monitored and controlled to the extent feasible (RMDP/SCP-BIO-87). Implementation of these measures would allow this species to persist on site in the large amount of permanent open space that would be protected and managed.

For the reasons set forth in this section, the Modified Project would not result in (1) a cumulatively considerable contribution to a potentially significant cumulative impact on individuals of this species, (2) a cumulatively considerable contribution to a potentially significant cumulative impact due to loss of suitable habitat for this species, or (3) a cumulatively considerable contribution to a potentially significant cumulative impact due to indirect impacts.



---

## 8 Thresholds of Significance

The State-Certified EIR evaluated the significance of the 2017 Approved Project's effects to biological resources using the applicable significance criteria set forth in the CEQA Guidelines, with minor modifications. This Report uses the equivalent significance thresholds adopted by the County of Los Angeles and based on those provided in the current CEQA Guidelines, as set forth below, which do not differ materially from those used in the State-Certified EIR. This chapter evaluates whether the Modified Project would have any *new* significant effect not considered in the State-Certified EIR or would substantially increase the severity of any significant effect identified in the State-Certified EIR as a result of changes to the VCC Project, new information, or changed circumstances evaluated in this Report.

The findings in the State-Certified EIR took into account mitigation measures and PDFs imposed on the 2017 Approved Project, which remain applicable to the Modified Project and are listed in Appendix D to this Report.

- 1. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?**

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on special-status species and their habitat, taking into account the PDFs, avoidance measures, and mitigation measures applicable to the VCC Project. Impacts of the Modified Project remain consistent with those of the 2017 Approved Project overall, although the Modified Project includes environmentally beneficial changes by reducing permanent impacts to vegetation communities overall and to the Hasley Canyon drainage in particular, and it would result in permanent conservation of jurisdictional streambeds and riparian habitat within Hasley Canyon and Castaic Creek under VCC-PDF-BIO-1. With two exceptions, these impacts would be reduced to less than significant with the application of the existing RMDP/SCP mitigation measures recommended herein. Based on the information evaluated in this Report, including the changes incorporated in the Modified Project and any relevant new information or changed circumstances regarding special-status species and their habitat within the Project Site, the Modified Project would result in the following effects to two special-status species not specifically evaluated in the State-Certified EIR: potential significant direct and indirect impacts on habitat for, and individuals of, Crotch's bumble bee and California glossy snake. One new mitigation measure is proposed to address potential direct impacts to Crotch's bumble bee: ES/VCC-MM-BIO-2. ES/VCC-MM-BIO-2 would require a habitat assessment and pre-construction surveys for Crotch's bumble bee and, if the species is found, avoidance of any nests found and preparation of a Crotch's Bumble Avoidance and Minimization Plan with additional, site-specific measures to avoid take of the species. These measures would result in avoidance of impacts to individuals, consistent with requirements that apply to other special-status species. Habitat mitigation measures for communities potentially occupied by Crotch's bumble bee would also reduce impacts from loss of habitat, similar to mitigation for impacts to other special-status wildlife species potentially occurring on the VCC Project Site. Implementation of ES/VCC-MM-BIO-2 and existing Specific Plan and RMDP/SCP mitigation measures would reduce potential impacts to Crotch's bumble bee to less than significant. New mitigation measure ES/VCC-MM-BIO-1 is proposed to address potential direct impacts to California glossy snake. ES/VCC-MM-BIO-1 would require development of a relocation plan, pre-construction surveys, and relocation of any California glossy snakes captured during surveys, or otherwise detected on site during construction activities. These are the same requirements that apply to other

special-status terrestrial reptiles addressed under RMDP/SCP measure RMDP/SCP-BIO-54 and, in conjunction with the existing Specific Plan and RMDP/SCP mitigation measures recommended herein, would reduce potential impacts to California glossy snake to less than significant. These findings are consistent with the significance determination and mitigation findings in the State-Certified EIR for impacts to other special-status wildlife species with similar life histories.

Taking into account the mitigation measures already applicable to the Modified Project and implementation of new mitigation measures ES/VCC-MM-BIO-1 and ES/VCC-MM-BIO-2 (see Appendix D to this Report), the Modified Project would not have a substantial adverse effect, either directly or via habitat modifications, on any special-status species, as defined, that was not evaluated in the State-Certified EIR. There would be minor increases in direct impacts to San Fernando Valley spineflower, slender mariposa lily, and white rabbit-tobacco, but these increases would not substantially increase the severity of previously identified adverse effects to these species. There would also be minor increases in direct permanent impacts to suitable habitat for the following special-status species: California legless lizard, coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and cougar, but these increases would not substantially increase the severity of previously identified adverse effects to these species. Moreover, impacts to special-status species would be reduced through the avoidance of permanent impacts along Hasley Canyon and permanent conservation within Hasley Canyon and Castaic Creek under VCC-PDF-BIO-1. Additional information regarding impacts to special-status species is included in Section 6.2, Impacts to Special-Status Species.

**2. Would the project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?**

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on riparian habitat or other special-status natural community, taking into account the PDFs, avoidance measures, and mitigation measures imposed on the VCC Project. The Modified Project would permanently impact less riparian habitat than analyzed in the State-Certified EIR and would permanently conserve riparian habitat in Hasley Canyon and Castaic Creek under VCC-PDF-BIO-1. Although the Modified Project includes environmentally beneficial changes by reducing permanent impacts to vegetation communities, the Modified Project would have the following effects to special-status vegetation communities not evaluated in the State-Certified EIR: 1.8 acres of permanent impacts to valley oak woodland, 3.1 acres of permanent impacts and 8.0 acres of temporary impacts to scale broom scrub, and 0.1 acres of temporary impacts to blue elderberry stands. In addition, permanent impacts to southern cottonwood–willow riparian forest increased slightly (by 0.4 acres). However, such impacts would be reduced to less than significant levels with application of the mitigation measures recommended herein for oak woodlands and for jurisdictional resources. Therefore, taking into account the mitigation measures already applicable to the Modified Project (as provided in Appendix D to this Report), the Modified Project would not have a substantial adverse effect, either directly or via habitat modifications, on any riparian habitat or special-status vegetation, as defined, that was not evaluated in the State-Certified EIR. Additional information regarding impacts to riparian habitat or other special-status natural communities is included in Section 6.1.1, Vegetation Communities and Land Covers.

3. **Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on wildlife movement, taking into account the PDFs, avoidance measures, and mitigation measures imposed on the VCC Project. Based on the information evaluated in this Report, including the changes incorporated in the Modified Project, the Modified Project would not have any additional effects to wildlife movement that were not evaluated in the State-Certified EIR, and in fact, would result in more cover habitat along movement corridors under the Modified Project compared to the 2017 Approved Project. In addition, the permanent conservation of jurisdictional streambeds and riparian habitat under VCC-PDF-BIO-1 would ensure that the Castaic/Hasley Corridor would remain available for wildlife movement. Therefore, taking into account the mitigation measures already applicable to the Modified Project (as provided in Appendix D to this Report), the Modified Project would not have any substantial adverse effect on wildlife movement that was not evaluated in the State-Certified EIR. Additional information regarding impacts to wildlife movement is included in Section 6.3, Impacts to Wildlife Corridors and Habitat Linkages.

4. **Would the project convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inches in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, Southern California black walnut, etc.)?**

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on oak woodlands, oaks, or Southern California black walnut, taking into account the PDFs, avoidance measures, and mitigation measures imposed on the VCC Project. Although the Modified Project overall includes environmentally beneficial changes by reducing permanent impacts to vegetation communities, the Modified Project would impact an additional 1.8 acres of valley oak woodland that were not evaluated in the State-Certified EIR. There would be fewer impacts to individual oak trees under the Modified Project compared to the 2017 Approved Project. The State-Certified EIR provides mitigation for impacts to oak woodlands and individual oaks that would adequately address current impacts to oak resources. Mitigation provided is in accordance with CLAOTO. Four Southern California black walnuts have been observed on site during surveys conducted since 2010, but none of these would be impacted by implementation of the VCC Project. Therefore, taking into account the mitigation measures already applicable to the Modified Project (as provided in Appendix D to this Report), the Modified Project would not have any substantial adverse effect on oaks or Southern California black walnut that was not evaluated in the State-Certified EIR. Additional information regarding impacts to oak woodlands is included in Section 6.1.1; additional information regarding impacts to individual oaks is included in Section 6.2.1.7, Oak Trees, and information regarding impacts to Southern California black walnut is included in Section 6.2.1.5, Southern California Black Walnut.

5. **Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (LA County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (LA County Code, Title 22, Ch. 22.174, Part 16), the Significant Ecological Areas (SEAs) (LA County Code, Title 22, Ch. 102), Specific Plans (LA County Code, Title 22, Ch. 22.46), Community Standards Districts (LA County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (LA County General Plan, Figure 9.3)?**

Neither the 2017 Approved Project nor the Modified Project would affect any Wildflower Reserve Areas. The VCC Project would have some impacts within the Santa Clara River SEA, but it is exempt from the SEA

Program. Nevertheless, the Modified Project, as discussed in Significant Ecological Area Program Consistency Analysis for the Valencia Commerce Center Project (Appendix E), would have relatively limited impacts within the SEA. These impacts, and the VCC Project in general, would substantiate six required findings for projects applying for an SEA Conditional Use Permit (Los Angeles County Code of Ordinances, Section 22.102.080) and would ensure that the biodiversity and future resiliency of the SEA would be maintained; therefore, the VCC Project would be consistent with the SEA Program.

The State-Certified EIR determined that the 2017 Approved Project would not have a substantial adverse effect on oaks, taking into account the PDFs, avoidance measures, and mitigation measures imposed on the VCC Project. Although the Modified Project overall includes environmentally beneficial changes by reducing permanent impacts to vegetation communities, the Modified Project would impact 1.8 acres of valley oak woodland not evaluated in the State-Certified EIR. However, mitigation provided under the State-Certified EIR would mitigate for these increased impacts. In addition, five fewer oak trees would be impacted under the Modified Project compared to the State-Certified EIR. Primarily, the impacts to oak trees would be mitigated per the ORMP in compliance with CLAOTO (see RMDP/SCP-BIO-22 and SP-4.6-62 in Appendix D). Maintenance of the oak restoration sites is required for a period of no less than 5 years total and no less than 2 years after removal of irrigation (if any). During the maintenance period, maintenance measures would be provided to ensure that the oak trees become successfully established and are ultimately able to survive under natural conditions beyond the completion of the maintenance period. Oak restoration would be subject to the performance criteria established in the ORMP. Successful completion of each woodland creation or enhancement site must be without active manipulation by irrigation, planting, or reseeded for a minimum of 3 years; oak trees must be within 5% of the plan target density of surviving, healthy oak trees; and non-native grass cover must not exceed the target non-native grass cover. The plan shall be subject to the requirements of CLAOTO and would address impacts to oak resources, including oak trees of the sizes regulated under CLAOTO. Therefore, taking into account the mitigation measures already applicable to the Modified Project (as presented in Appendix D to this Report), the Modified Project would not have any substantial adverse effect on oaks that was not evaluated in the State-Certified EIR. Additional information regarding impacts to oak woodlands is included in Section 6.1.1; additional information regarding impacts to individual oaks is included in Section 6.2.1.7.

**6. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional or local habitat conservation plan?**

The VCC Project Site is not within any adopted habitat conservation plan, natural community conservation plan, or other approved state, regional or local habitat conservation plan, with the exception of the approved SCP, which was evaluated within and adopted in conjunction with the State-Certified EIR. The VCC Project would be fully consistent with the SCP, which authorizes take of spineflower associated with the VCC Project. Additional information regarding implementation of the SCP is included in Section 6.2.11.

Therefore, taking into account the mitigation measures already applicable to the Modified Project (as presented in Appendix D to this Report), the Modified Project would not conflict with the provisions of any adopted habitat conservation plan, natural community conservation plan, or other approved state, regional, or local habitat conservation plan.

---

## 9 Acknowledgments

David Compton and Kathleen Dayton prepared this Report, with review by Philip Behrends. Kirsten Zecher provided graphics and GIS mapping analyses. Laurel Porter and Hannah Wertheimer provided editorial review.



INTENTIONALLY LEFT BLANK

---

## 10 Documents Cited

- 50 CFR Part 17. Endangered and Threatened Wildlife. Section 17.11, List of Endangered and Threatened Wildlife.
- 50 CFR Part 424, Listing Endangered and Threatened Species and Designating Critical Habitat, Section 424.12, Criteria for Designating Critical Habitat.
- 59 FR 4845–4867. Final rule: “Designation of Critical Habitat for the Least Bell’s Vireo.” February 2, 1994.
- 66 FR 38611–38626. Notice of 12-month petition finding: “12-Month Finding for a Petition to List the Yellow-Billed Cuckoo (*Coccyzus americanus*) in the Western Continental United States.” July 25, 2001.
- 70 FR 19562–19633. Final rule: “Final Designation of Critical Habitat for the Arroyo Toad (*Bufo californicus*).” April 13, 2005.
- 70 FR 52488–52627. Final rule: “Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California.” September 2, 2005.
- 76 FR 7246–7467. Final rule: “Revised Critical Habitat for the Arroyo Toad.” February 9, 2011.
- 78 FR 343–534. Final rule: “Designation of Critical Habitat for Southwestern Willow Flycatcher.” January 3, 2013.
- 79 FR 48548–48652. Proposed rule: “Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-Billed Cuckoo.” August 15, 2014.
- 79 FR 59992–60038. Final rule: “Determination of Threatened Status for the Western Distinct Population Segment of the Yellow-Billed Cuckoo (*Coccyzus americanus*).” October 3, 2014.
- 80 FR 19259–19263. “90-Day Findings on 10 Petitions.” April 10, 2015.
- 80 FR 37568–37579. “90-Day Findings on 31 Petitions.” July 1, 2015.
- 84 FR 41694–41699. “12-Month Findings on Petitions to List Eight Species as Endangered or Threatened Species.” August 15, 2019.
- 88 FR 68370–68399. Proposed rule: “Threatened Species Status with Section 4(d) Rule for the Northwestern Pond Turtle and the Southwestern Pond Turtle.” October 3, 2023.
- 88 FR 84252–84278. Proposed rule: “Threatened Status with Section 4(d) Rule for the Northern and Southern Distinct Population Segments of the Western Spadefoot.” December 5, 2023.
- Allan E. Seward (Allen E. Seward Engineering Geology Inc.). 2002. “Geological Evaluation: San Fernando Valley Spineflower Occurrences.” Letter report prepared for Gatzke, Dillon and Balance LLP, October 1, 2002.
- Allan E. Seward. 2004. “Surface and Subsurface Geologic Evaluation: San Fernando Valley Spineflower Occurrences.” Letter report prepared for the Applicant Company, August 2004.

- Aquatic Consulting Services (Aquatic Consulting Services Inc.). 2002a. *Aquatic Surveys along the Santa Clara River; Part II: Commerce Center Bridge Project Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. June 2002.
- Aquatic Consulting Services. 2002b. *Aquatic Surveys along the Santa Clara River; Part III: West of Commerce Center Bridge to the Ventura County Line, California*. Revised. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. June 18, 2002.
- Aquatic Consulting Services. 2002c. *Aquatic Surveys along the Santa Clara River; Part IV: Ventura County Line to Las Brisas Bridge, Ventura County, California*. Revised. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. June 25, 2002.
- Aquatic Consulting Services. 2002d. *Aquatic Surveys along the Santa Clara River; Part I: Castaic Junction Project Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. April 2002.
- Bloom, P.H. 2007. *Report on Arroyo Toad Surveys on Landmark Village, Newhall Land and Farming Company Property, Los Angeles County, California*. Prepared for U.S. Fish and Wildlife Service. Santa Ana, California: P.H. Bloom (Bloom Biological). November 2007.
- Bloom Biological (Bloom Biological Inc.). 2011. *2011 NRMP Bird Survey Report*. Prepared for The Newhall Land and Farming Company. August 2011.
- Bloom Biological. 2012. *Results of Special-Status Riparian Bird Surveys Conducted on Newhall Land and Planning Areas in Spring and Summer 2012*. Prepared for The Newhall Land and Farming Company. August 2012.
- Bloom Biological. 2013. *2013 Natural River Management Plan Riparian Bird Surveys – Suitable Habitat for Least Bell's Vireo and Willow flycatcher*. Prepared for The Newhall Land and Farming Company. August 2013.
- Bloom Biological. 2014. *Santa Clara River Riparian Bird Surveys: 2014 Final Report*. Prepared for The Newhall Land and Farming Company. August 2014.
- Bloom Biological. 2015. *Santa Clara River Riparian Bird Surveys: 2015 Final Report*. Prepared for The Newhall Land and Farming Company. August 2015.
- Bloom Biological. 2016. *Santa Clara River Riparian Bird Surveys: 2016 Final Report*. Prepared for The Newhall Land and Farming Company. September 2016.
- Bontrager, D.R. 1991. *Habitat Requirements, Home Range, and Breeding Biology of the California Gnatcatcher (Poliophtila californica) in South Orange County, California*. Prepared for Santa Margarita Co., Rancho Santa Margarita, California. April 1991.
- Borden, W.C., O.M. Lockhart, A.W. Jones, and M.S. Lyons. 2010. "Seasonal, Taxonomic, and Local Habitat Components of Bird-window Collisions on an Urban University Campus in Cleveland, OH." *Ohio Journal of Science* 110(3): 44–52.
- Boyd, S. 1999. "Vascular Flora of the Liebre Mountains, Western Transverse Ranges, California." *Aliso* 18(2): 93–129.

- California Trout. 2021. "Notice of Petition: Southern California Steelhead (*Oncorhynchus mykiss*).” Letter from C. Knight (California Trout, Executive Director) to the California Fish and Game Commission. June 7, 2021.
- Cardno. 2015a. *Technical Memorandum: Newhall Ranch Aquatic Species Survey in the Santa Clara River, Los Angeles County, California, 2014*. November 2015 update.
- Cardno. 2015b. *Southern Western Pond Turtle Nesting Study Report*. The Newhall Land and Farming Company. November 18, 2015.
- Carlberg Associates. 2019. *Oak Tree Report, Valencia Commerce Center, VTPM 18108, Valencia, California*. Prepared for FivePoint Holdings LLC. Santa Monica and Sierra Madre, California: Carlberg Associates. December 18, 2019.
- Carlberg Associates. 2021. *Oak Tree Report, Valencia Commerce Center, VTPM 18108, Unincorporated Los Angeles County*. Prepared for FivePoint Holdings LLC. Santa Monica and Sierra Madre, California: Carlberg Associates. November 1, 2021.
- Carpenter, M. 2009. "RE: Potrero Canyon Pond Turtle Record." Email from M. Carpenter (Newhall) to P. Behrends (Dudek). January 21, 2009.
- CBD and MLF (Center for Biological Diversity and Mountain Lion Foundation). 2019. *Before the California Fish and Game Commission, a Petition to List the Southern California/Central Coast Significant Evolutionary Unit (ESU) of Mountain Lions as Threatened under the California Endangered Species Act (CESA)*. June 25, 2019.
- CBOC (California Burrowing Owl Consortium). 1993. *Burrowing Survey Protocol and Mitigation Guidelines*. April 1993.
- CDFG (California Department of Fish and Game). 2003. *The Vegetation Classification and Mapping Program List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database*. Wildlife and Habitat Data Analysis Branch. September 2003.
- CDFG. 2007. *Vegetation Classification and Mapping Program List of California Vegetation Alliances*. October 22, 2007.
- CDFG. 2010. *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database*.
- CDFW (California Department of Fish and Wildlife). 2017. *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan: Final Additional Environmental Analysis*. SCH No. 2000011025. June 12, 2017.
- CDFW. 2019. *Report to the Fish and Game Commission. Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered under the California Endangered Species Act*. State of California, the Natural Resources Agency, Department of Fish and Wildlife. April 4, 2019.

- CDFW. 2021. Pacific Rock Quarry Expansion Project, Draft Environmental Impact Report, SCH #2017081052, Ventura County. Letter from Erinn Wilson-Olgin, CDFW, to Justin Bertoline, Ventura County, Planning Division. January 22, 2021.
- CDFW. 2023a. California Natural Community List. June 1, 2023. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>.
- CDFW. 2023b. *Survey Considerations for the California Endangered Species Act (CESA) Candidate Bumble Bee Species*. June 6. <https://www.wildlife.ca.gov/Data/CNDDB>.
- CDFW. 2024. *RareFind*. California Natural Diversity Database. Accessed July 2023. <https://www.wildlife.ca.gov/Data/CNDDB>.
- CNPS (California Native Plant Society). 2024. Rare Plant Inventory. Online ed. Version 9.5. Sacramento: CNPS, Rare Plant Program. Accessed August 2024. <http://www.rareplants.cnps.org/>.
- Compliance Biology. 2004a. “Results of Focused Western Spadefoot Toad Surveys on the River Village Project Site and Associated Borrow Sites.” Letter report from D. Crawford (Compliance Biology) to Newhall Ranch Company. Camarillo, California: Compliance Biology. November 3, 2004.
- Compliance Biology. 2004b. *Results of Butterfly Surveys on the Newhall Ranch Project Site, Los Angeles County, California*. Camarillo, California: Compliance Biology. September 16, 2004.
- Compliance Biology. 2004c. *Results of Butterfly Surveys on Newhall Land, Stevenson Ranch Phase V Site, Los Angeles County, California*. Camarillo, California: Compliance Biology. September 16, 2004.
- Compliance Biology. 2004d. *Results of Butterfly Surveys on Magic Mountain Entertainment Site, Los Angeles County, California*. Camarillo, California: Compliance Biology. August 4, 2004.
- Compliance Biology. 2005. Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area, Los Angeles County, California. Prepared for Newhall Land and Farming. Camarillo, California: Compliance Biology, July 31, 2005.
- Compliance Biology. 2008. *Results of Focused California Gnatcatcher Surveys on the Valencia Commerce Center SCP Site; Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Compliance Biology. August 28, 2008.
- Compliance Biology. 2014. *Results of Focused Surveys for Arroyo Toad and Special-Status Herpetofauna, Mission Village Project, Newhall Ranch*. August 2014.
- Compliance Biology. 2017. *Summary of 2017 Pre-Construction Surveys for the MV1 Project Area*. Memorandum to S. Rojas (Newhall) from D. Crawford (Compliance Biology). October 3, 2017.
- Compliance Biology. 2019a. “Results of 2019 Aquatic Habitat Assessment for Special-Status Species—Valencia Commerce Center, Castaic Creek (PM 18108).” Letter report to S. Rojas (Newhall). August 12, 2019.
- Compliance Biology. 2019b. *Summary of California Gnatcatcher (Poliophtila californica) Surveys, Valencia Commerce Center, Los Angeles, Spring 2019*. Prepared for The Newhall Land and Farming Company.



- Compliance Biology. 2022a. *Summary of Riparian Bird Surveys. Castaic Creek: Santa Clara River Confluence to I-5. Santa Clarita. Los Angeles County. Spring 2022.* Prepared for The Newhall Land and Farming Company.
- Compliance Biology. 2022b. *Summary of California Gnatcatcher (Poliophtila californica) Surveys, Valencia Commerce Center, Los Angeles, Spring 2022.* Prepared for The Newhall Land and Farming Company.
- Compliance Biology. 2022c. *Summary of Riparian Bird Surveys. Santa Clara River: Resource Management and Development Plan (RMDP) Area. Santa Clarita. Los Angeles County. Spring 2022.* Prepared for The Newhall Land and Farming Company.
- Compliance Biology. 2022d. *Summary of Riparian Bird Surveys. Santa Clara River: Natural Rivers Management Plan (NRMP) Reach. Santa Clarita. Los Angeles County.* Prepared for The Newhall Land and Farming Company.
- Compliance Biology. 2024. "Summary of Special-Status Biological Resource Surveys in Portions of Valencia Commerce Center Project Area." Letter from D. Crawford (Compliance Biology) to D. Compton (Dudek). July 1, 2024.
- Corps and CDFG (U.S. Army Corps of Engineers and California Department of Fish and Game). 2010. *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan Joint Environmental Impact Statement and Environmental Impact Report.* Final. SCH No. 2000011025. Los Angeles: Corps and CDFG. June 2010.
- Coulombe, H.N. 1971. "Behavior and Population Ecology of the Burrowing Owl, *Speotyto cunicularia*, in the Imperial Valley of California." *Condor* 73:162–176.
- County of Riverside. 2008. "BIRDS." Volume 2 – The MSHCP Reference Document. *Western Riverside County Multiple Species Habitat Conservation Plan.* County of Riverside Transportation and Land Management Agency (TLMA). Accessed July 2019. <https://rctlma.org/Portals/0/mshcp/volume2/index.html>.
- Dudek & Associates. 2004. *2004 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2004.
- Dudek & Associates. 2006a. *Biological Resources Technical Report, Valencia Commerce Center, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek & Associates. 2006b. *2006 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek & Associates. December 2007.
- Dudek & Associates. 2006c. *Biological Resources Technical Report for the Newhall Ranch High Country Special Management Area and the Salt Creek Area.* Prepared for The Newhall Land and Farming Company.
- Dudek. 2007. *2007 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California.* Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2007.

- Dudek. 2012a. *2011 Sensitive Plant Survey Results for Valencia Commerce Center, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. January 2012.
- Dudek. 2012b. *2012 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. August 2012.
- Dudek. 2012c. *Focused American Badger and Burrowing Owl and General Wildlife Survey Report for the Mission Village Site, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Santa Barbara, California: Dudek. August 2012.
- Dudek. 2012d. "Report for Focused Arroyo Toad Surveys for the Mission Village Project, Newhall Ranch, Los Angeles County, California." Letter report to S. Rojas (Newhall). August 10, 2012.
- Dudek. 2012e. "Focused California Gnatcatcher Survey, Mission Village Project, Los Angeles, California." Letter to U.S. Fish and Wildlife Service. August 20, 2012.
- Dudek. 2012f. "Focused California Gnatcatcher Survey, Entrada North and South Projects, Los Angeles County, California." Letter to the U.S. Fish and Wildlife Service. July 24, 2012.
- Dudek. 2013. *2013 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Dudek. June 2013.
- Dudek. 2014a. *2014 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California. July 2014.
- Dudek. 2014b. *Focused California Gnatcatcher Survey, Valencia Commerce Center, Los Angeles County, California*. Prepared for U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office. April 7, 2014.
- Dudek. 2014c. *Grasshopper Sparrow Surveys, Valencia Commerce Center Project, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company, Valencia, California. August 5, 2014.
- Dudek. 2014d. *Pre-Construction Wildlife Surveys and Species Relocation for the Mayo Crossing and Potrero Canyon Advance Mitigation Sites, Los Angeles County, California*. August 2014.
- Dudek. 2014e. *Wildlife Survey Report for the MV1 Project Site, 2013–2014, Los Angeles County, California*. November 2014.
- Dudek. 2015a. *2015 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek.
- Dudek. 2015b. *Wildlife Survey Report for the Valencia Commerce Center Project Site, 2015, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek.
- Dudek. 2015c. *Wildlife Survey for the Potrero Village Project, 2015, Los Angeles County, California*. December 2015.

- Dudek. 2015d. *Wildlife Survey for the Homestead South Project Site, Los Angeles County, California*. December 2015.
- Dudek. 2015e. *Focused California Gnatcatcher Survey, Legacy Village Project Site, Los Angeles County, California*. Prepared for U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office. August 10, 2015.
- Dudek. 2015f. *Focused California Gnatcatcher Survey, Entrada South Project Site, Los Angeles County, California*. Prepared for U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office. August 10, 2015.
- Dudek. 2015g. *Final Upper Santa Clara River Watershed Study*. June 2015.
- Dudek. 2016a. *2015 Sensitive Plant Survey Results for the Valencia Commerce Center Project Site, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California.
- Dudek. 2016b. *2016 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area*. Prepared for The Newhall Land and Farming Company. July 2016.
- Dudek. 2016c. *2013/2014 Wildlife Corridor Surveys for the Mission Village Project Site, Los Angeles County, California*. Letter to S. Rojas (Newhall). January 26, 2016.
- Dudek. 2017. *2017 Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. July 2017.
- Dudek. 2018. *2018 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2018.
- Dudek. 2019a. *2019 Botanical Survey Results for the Valencia Commerce Center Project Site, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. In Prep.
- Dudek. 2019b. *2019 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2019.
- Dudek. 2020. *2020 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2020.
- Dudek. 2021. *2021 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2021.
- Dudek. 2022. *2022 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. June 2022.
- Dudek. 2023a. *2023 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. September 2023.

- Dudek. 2023b. *2022 Focused Survey Results for Slender Mariposa Lily on the Valencia Commerce Center Project Site – Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. March 2023.
- Dudek. 2023c. Memorandum. Significant Ecological Area (SEA) Program Consistency Analysis for the Valencia Commerce Center (VCC) Project. October 5, 2023.
- Dudek. 2024a. *2024 Monitoring Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area Outside of Actively Managed Preserves, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. August 2024.
- Dudek. 2024b. *2024 Crotch's Bumble Bee Reconnaissance Survey Report for the Valencia Commerce Center Project*. Letter report from K. Dayton (Dudek) to S. Rojas (FivePoint). August 14, 2024.
- Dudek. 2024c. *Focused California Gnatcatcher Survey Results for the Valencia Commerce Center Project, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. August 2024.
- Ecological Sciences (Ecological Sciences Inc.). 2001. "Permit Submittal Requirement, TE-808242, Arroyo Toad Surveys, Los Angeles County, California." Letter report from S.D. Cameron (Ecological Sciences) to R. Farris (U.S. Fish and Wildlife Service). August 2, 2001.
- Ecological Sciences. 2003. "Results of Focused Arroyo Toad Surveys, Soledad Site, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (Newhall Ranch Company). Oxnard, California: Ecological Sciences. August 23, 2003.
- Ecological Sciences. 2004. "Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (Newhall Ranch Company). Santa Paula, California: Ecological Sciences. August 11, 2004.
- Ecological Sciences. 2005. "Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences) to M. Subbotin (Newhall Ranch Company). Santa Paula, California: Ecological Sciences. August 17, 2005.
- ENTRIX (ENTRIX Inc.). 2009. *Focused Special-Status Fish Species Habitat Assessment—Santa Clara River and Tributary Drainages, Newhall Ranch, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Ventura, California: ENTRIX.
- Feenstra, J. 2019. "The Lion." Email from J. Feenstra (Woodstar Biological LLC) to S. Rojas (Newhall).
- Finkelstein, M., Z. Kuspa, N.F. Snyder, and N.J. Schmitt. 2020. "California Condor – *Gymnogyps californianus*." Version 1.0. *Birds of the World*, edited by P. G. Rodewald. Ithaca, New York: Cornell Lab of Ornithology. <https://doi.org/10.2173/bow.calcon.01>.
- Gelb, Y., and N. Delacretaz. 2006. "Avian Window Strike Mortality at an Urban Office Building." *Northeastern Naturalist* 16(3): 455–470.

- Gelb, Y., and N. Delacretaz. 2009. "Windows and Vegetation: Primary Factors in Manhattan Bird Collisions." *Kingbird* 56(3): 190–198.
- Guthrie, D.A. 1990. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo*. Prepared for Valencia Company. Claremont, California. July 26, 1990.
- Guthrie, D.A. 1994. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 5, 1994.
- Guthrie, D.A. 1996. *Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 10, 1996.
- Guthrie, D.A. 1999. *Bird Surveys along the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 1999*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 26, 1999.
- Guthrie, D.A. 2000. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2000*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 19, 2003.
- Guthrie, D.A. 2001. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2001*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. September 14, 2001.
- Guthrie, D.A. 2002. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2002*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 19, 2002.
- Guthrie, D.A. 2003. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2003*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 28, 2003.
- Guthrie, D.A. 2004. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2004*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2005. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2005*. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. October 5, 2005.
- Guthrie, D.A. 2006. *Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2006*. Prepared for M. Carpenter, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 21, 2006.



- Haglund, T.R. 1989. *Current Status of the Unarmored Threespine Stickleback (Gasterosteus aculeatus williamsoni) along Portions of the Santa Clara River Drainage*. Prepared for The Newhall Land and Farming Company. Los Angeles: University of California.
- Haglund, T.R., and J.N. Baskin. 2000. *Fish and Wildlife Survey and Habitat Assessment of the Santa Clara River at Interstate 5*. Prepared for Environmental Planning Branch, California State Department of Transportation. Pomona, California: California State Polytechnic University. October 2000.
- Hickman, J.C., ed. 1996. *The Jepson Manual: Higher Plants of California*. 3rd printing, with corrections. Berkeley: University of California Press.
- Holland, D.C., and N.R. Sisk. 2001. *Habitat Use and Population Demographics of the Arroyo Toad (Bufo californicus) on MCB Camp Pendleton, San Diego County, California 1998–2000*. Contract No. M 00681-97-C-0034. Prepared for MCB Camp Pendleton, California; AC/S Environmental Security; Wildlife Management Branch.
- Huntley, C. 2008. Observation of mountain lion in the Project area (in upper Middle Canyon). Personal communication from C. Huntley (Aspen) to M. Carpenter (Newhall). 2008.
- Impact Sciences (Impact Sciences Inc.). 2001. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area, Valencia, California*. Prepared for Valencia Company. Agoura Hills, California: Impact Sciences. September 19, 2001.
- Impact Sciences. 2002. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California*. Prepared for Newhall Ranch Company. Agoura Hills, California: Impact Sciences. May 21, 2002.
- Impact Sciences. 2003a. *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch, Valencia, California*. Prepared for The Newhall Land and Farming Company. Agoura Hills, California: Impact Sciences. January 24, 2003.
- Impact Sciences. 2003b. *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area, Valencia, California*. Prepared for The Newhall Land and Farming Company. Agoura Hills, California: Impact Sciences. June 2003.
- Impact Sciences. 2003c. *Annual Status Report for Unarmored Threespine Stickleback within the Natural River Management Plan Area, Valencia, California*. Prepared for The Newhall Land and Farming Company. Agoura Hills, California: Impact Sciences. October 1, 2003.
- Impact Sciences. 2004. "2004 Newhall Ranch Reptile Trapping Results."
- Impact Sciences. 2005. *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Draft. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences. May 2005.
- Impact Sciences. 2006. *2004 and 2006 Reptile Survey Results, Newhall Specific Plan Area, Los Angeles County, California*. October 2006.

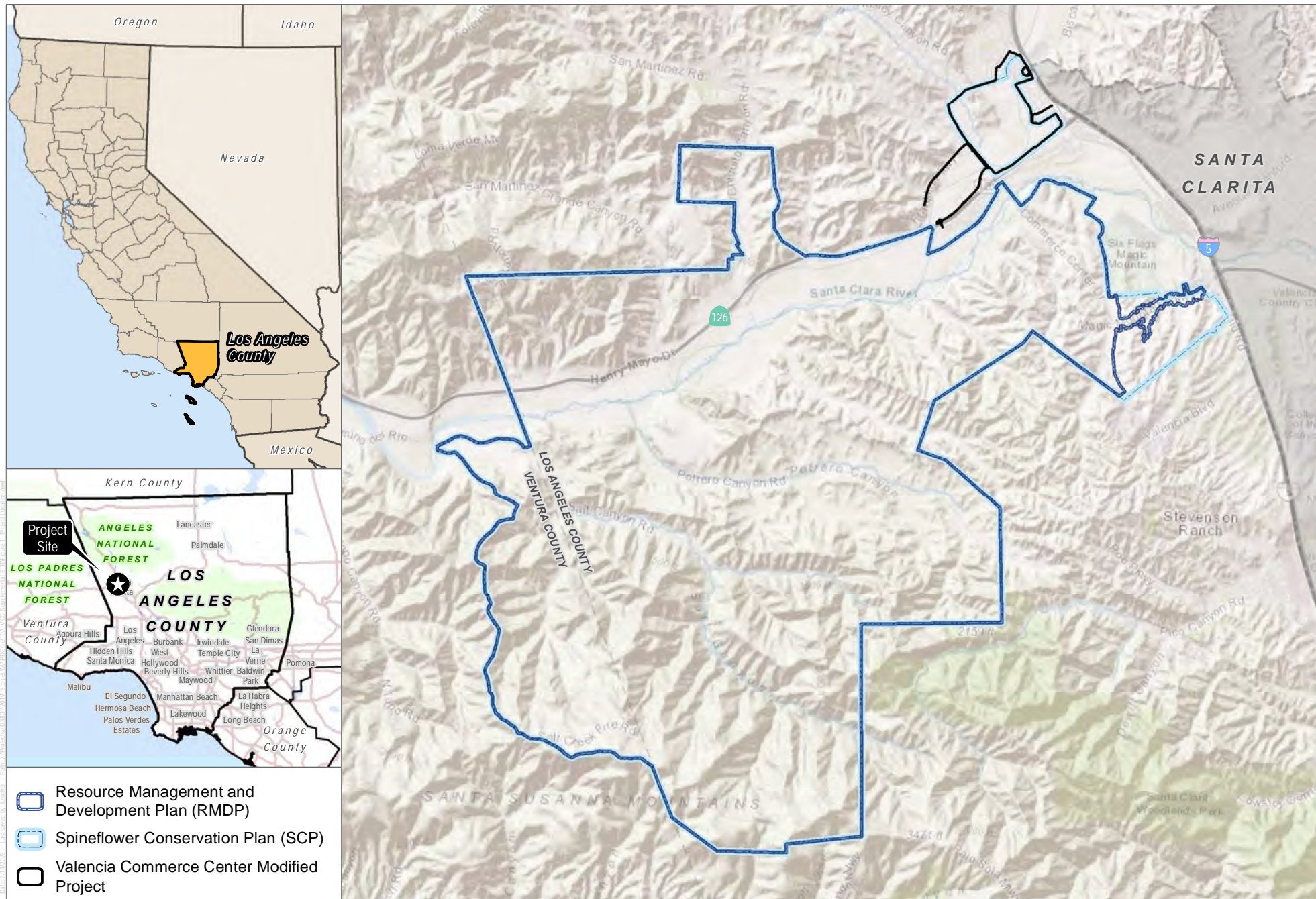
- Impact Sciences. 2015a. *Results of Second Focused Special-Status Reptile Capture and Relocation Program on the Mission Village Project Site*. Letter to S. Rojas (Newhall). September 17, 2015.
- Impact Sciences. 2015b. *Results of the 2015 Burrowing Owl (Athene cunicularia) Surveys on the Mission Village Project Site*. Letter to S. Rojas (Newhall). November 2, 2015.
- Jepson Flora Project. 2019. Jepson eFlora. Version 6.0. Berkeley: University of California.  
[http://ucjeps.berkeley.edu/cgi-bin/get\\_JM\\_name\\_data.pl](http://ucjeps.berkeley.edu/cgi-bin/get_JM_name_data.pl).
- Jones, C.E., S.E. Walker, F.M. Shropshire, R.L. Allen, D.R. Sandquist, and J.C. Luttrell. 2004. "Newhall Ranch Investigation of the San Fernando Valley Spineflower *Chorizanthe parryi* S. Watson var. *fernandina* (S. Watson) Jepson." September 2004.
- Kahle, L.Q., M.E. Flannery, and J.P. Dumbacher. 2016. "Bird-Window Collisions at a West-Coast Urban Park Museum: Analyses of Bird Biology and Window Attributes from Golden Gate Park, San Francisco." *PLoS ONE* 11(1): e0144600. <https://doi.org/10.1371/journal.pone.0144600>.
- Koford, C.B. 1953. "The California Condor." *National Audubon Society Resource Report* 4:1–154.
- Laymon, S.A., and M.D. Halterman. 1989. *A Proposed Habitat Management Plan for Yellow-Billed Cuckoos in California*. U.S. Forest Service General Technical Report PSW-110:272–277.
- Lecky, J.H. 2000. "Clarification of Critical Habitat Designation for Steelhead (*Oncorhynchus mykiss*) in the Santa Clara River Basin." Letter from J.H. Lecky (National Marine Fisheries Service) to D.J. Castanon (U.S. Army Corps of Engineers, Los Angeles District). June 23, 2000.
- Light, R.H., and L.E. Pedroni. 2002. "When Oak Ordinances Fail: Unaddressed Issues of Oak Conservation." In *Proceedings of the Fifth Symposium on Oak Woodlands: Oaks in California's Changing Landscape*, Technical Coordinators R.B. Standiford, D. McCready, and K.L. Purcell, 483–500. General Technical Report PSW-GTR-184. Albany, California: U.S. Forest Service, Pacific Southwest Research Station.
- Loft, E.R. 1996. "Spatial-Temporal Analyses of Mountain Lions in the Sierra Nevada: Looking for Patterns and 'Bulls-Eyes' Amid the Mess." Abstract. In *Fifth Mountain Lion Workshop*. Organized by the California Department of Fish and Game and the Southern California Chapter of the Wildlife Society, San Diego, California, February 27–March 1, 1996.
- McGraw, J.M. 2020. *Newhall Ranch Spineflower Conservation Plan San Fernando Valley Spineflower Areal Extent Mapping Protocol*. May 13, 2020.
- Meretsky, V.J., and N.F.R. Snyder. 1992. "Range Use and Movements of California Condors." *Condor* 94:313–335.
- Moffat & Nichol. 2016. "Pile Installation Procedures. Commerce Center Drive and Long Canyon Road Bridges (CIDH) Temporary Haul Route Bridges (Temporary Steel HP Piles)." Letter memorandum to Gatzke Dillon & Balance LLP and The Newhall Land and Farming Company, Valencia, California. August 3, 2016.
- Niemela, C. 2009. Memo from C. Niemela (Bloom Biological) to J. Grantham (U.S. Fish and Wildlife Service) regarding observations of California condor in Potrero Canyon in January 2009. March 11, 2009.

- NMFS (National Marine Fisheries Service). 2011. *Impacts to Essential Fish Habitat from Non-Fishing Activities in Alaska*. Prepared by National Marine Fisheries Service, Alaska Region. November 2011.
- Papenfuss, T.J., and J.F. Parham. 2013. "Four New Species of California Legless Lizards (*Anniella*).” *Breviora* 536:1–17.
- Penrod, K., C. Cabanero, P. Beier, C. Luke, W. Spencer, E. Rubin, R. Sauvajot, S. Riley, and D. Kamradt. 2006. *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.
- RECON. 1999. *Quino Checkerspot Butterfly Habitat Assessment for Phase 1 Development and Permit Areas of Newhall Ranch*. Prepared for Newhall Ranch Company by G.A. Scheid (RECON). San Diego, California: RECON. July 15, 1999. RECON and Impact Sciences. 1996. *Biota Report: Newhall Ranch Specific Plan; Santa Clara River Valley, California; Tentative Tract Map 44831*. Prepared for Los Angeles County, Department of Regional Planning. September 7, 1995; revised July 1996.
- Richmond, J.Q., A.R. Backlin, C. Galst, J.W. O’Brien, and R.N. Fisher. 2016a. “‘Boom and Bust’ Demography Distorts Historical Signals of Relatedness and Population Genetic Structure in the Santa Ana Sucker (*Catostomus santaanae*) of Southern California.” Unpublished manuscript.
- Richmond, J.Q., A.R. Backlin, C. Galst-Cavalcante, J.W. O’Brien, and R.N. Fisher. 2016b. “‘Boom and Bust’ Demography Distorts Genetic Signals of Population History in the Endemic Santa Ana Sucker (*Catostomus santaanae*) of Southern California.” Unpublished manuscript, in review.
- Rodriguez-Robles, J.A., C.J. Bell, and H.W. Greene. 1999. “Food Habits of the Glossy Snake, *Arizona elegans*, with Comparisons to the Diet of Sympatric Long-Nosed Snakes, *Rhinocheilus lecontei*.” *Journal of Herpetology* 33:87–92.
- Root, R.P. 2008. “Acknowledgment of Request for Formal Consultation on the Proposed Newhall Ranch Specific Plan, Santa Clarita, Los Angeles County, California.” Letter from R.P. Root (U.S. Fish and Wildlife Service) to A.O. Allen (U.S. Army Corps of Engineers). November 12, 2008.
- Rosenberg, D.K., B.R. Noon, and E.C. Meslow. 1995. “Towards a Definition of ‘Biological Corridor.’” In *Integrating People and Wildlife for a Sustainable Future*, edited by J.A. Bissonette and P.R. Krausman, 436–439. Proceedings of the First International Wildlife Management Congress. Bethesda, Maryland: The Wildlife Society.
- Rosenberg, D.K., B.R. Noon, and E.C. Meslow. 1997. “Biological Corridors: Form, Function, and Efficacy.” *BioScience* 47:677–687.
- Sandburg, N.H. 2001. “Field Summary of Santa Clara River Surveys for *Bufo californicus* and *Rana aurora draytonii*, May 8 through May 29, 2001.” Letter report from N.H. Sandburg (Biological Consultant). Santa Barbara, California. June 6, 2001.
- sb horticulture. 2015. “Arborist Survey Report for Valencia Commerce Center VTPM 18108 Los Angeles County, California.” Prepared for Valencia Company, Valencia, California. November 2015.

- SCAQMD (South Coast Air Quality Management District). 2005. Rule 403, Fugitive Dust. Adopted May 7, 1976; last amended June 3, 2005.
- SMEA (San Marino Environmental Associates). 1995. *Sensitive Aquatic Species Survey; Santa Clara River and San Francisquito Creek; Newhall Land and Farming Company Property; Los Angeles, California*. Final report. Prepared for M. Subbotin (Valencia Company) by J.N. Baskin and T.R. Haglund. San Marino, California: SMEA. December 1995.
- Snyder, N., and H. Snyder. 2000. *The California Condor: A Saga of Natural History and Conservation*. London: Academic Press.
- Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. *California Amphibian and Reptile Species of Special Concern*. Oakland: University of California Press, California Department of Fish and Wildlife.
- Thorp, R.W., D.S. Horning, Jr., and L.L. Horning. 1983. "Bumble Bees and Cuckoo Bumble Bees of California (Hymenoptera: Apidae)." *Bulletin of the California Insect Survey* 23: i–viii, 1–79.
- TNC (The Nature Conservancy). 2006. *Santa Clara River Upper Watershed Conservation Plan*. Santa Clara River Trustee Council ARCO Oil Spill Settlement. Fall 2006.
- UCSB (University of California, Santa Barbara). 1999. Gap Analysis of Mainland California. California Gap Analysis Project.
- URS (URS Corporation). 2014. *Draft Wetland Delineation and Jurisdictional Determination Report for the Valencia Commerce Center Project, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Santa Barbara, California: URS. April 28, 2014.
- USDA (U.S. Department of Agriculture). 2022. Web Soil Survey. USDA, Natural Resources Conservation Service, Soil Survey Staff. Accessed January 18, 2022. <https://websoilsurvey.sc.egov.usda.gov/>.
- USFWS (U.S. Fish and Wildlife Service). 1998. *Biological Opinion for the Valencia Company's Clean Water Act Section 404 Authorization for Portions of the Santa Clara River, Los Angeles County, California (1-8-98 F/C-61)*. November 27, 1998.
- USFWS. 2011. *Biological Opinion for the Newhall Ranch Resource Management and Development Plan, Santa Clarita, Los Angeles County, California* (File Number 2003-01264-AOA) (8-8-09-F-44). Ventura, California: USFWS. June 6, 2011.
- USFWS. 2015. "Reinitiation of Formal Consultation for the Newhall Ranch Resource Management and Development Plan, Santa Clarita, Los Angeles County, California (File Number 2003- 01264-AOA) (8-8-12-F-59R)." Letter from S.P. Henry (USFWS) to A.O. Allen (U.S. Army Corps of Engineers). January 23, 2015.
- USFWS. 2017. *Recovery Plan for the Santa Ana Sucker (Catostomus santaanae)*. Sacramento: USFWS, Region 8. February 28, 2017.
- USGS (U.S. Geological Survey). 2012. National Gap Analysis Program. Version 2. Updated 2012.

- USGS. 2024. "Active data: California condor." [Online database.] USGS ScienceBase-Catalog. <https://www.sciencebase.gov/catalog/item/53a1d33ae4b0403a441545c7?view=folder>.
- Wilbur, S.R. 1978. "The California Condor, 1966–76: A Look at Its Past and Future." *North American Fauna* 72:1–136.
- Williams, P.W., R. Thorp, L. Richardson, and S. Colla. 2014. *Bumble Bees of North America: An Identification Guide*. Princeton: Princeton University Press.
- Woodstar Biological (Woodstar Biological LLC). 2017. *Santa Clara River & Major Tributaries Riparian Bird Surveys, Valencia NRMP Areas, Newhall Ranch RMDP Areas & Other Newhall Ranch Areas*. Prepared for The Newhall Land and Farming Company.
- Woodstar Biological. 2018. *Summary of Riparian Bird Surveys Santa Clara River, Castaic Creek, San Francisquito Canyon, Los Angeles and Ventura Counties*. Prepared for The Newhall Land and Farming Company.
- Woodstar Biological. 2019a. *Summary of Riparian Bird Surveys, Castaic Creek, Los Angeles County, Spring 2019*. Prepared for FivePoint Holdings, LLC.
- Woodstar Biological. 2019b. *Summary of Riparian Bird Surveys, Resource Management and Development Plan (RMDP) Area, Santa Clara River, Los Angeles County*. Prepared for FivePoint Holdings, LLC.
- Woodstar Biological. 2019c. *Summary of Riparian Bird Surveys, Natural Resource [sic] Management Plan (NRMP) Area, Santa Clara River, Los Angeles County*. Prepared for FivePoint Holdings, LLC.
- Woodstar Biological. 2021. *Summary of Riparian Bird Surveys, Santa Clara River: Resource Management and Development Plan (RMDP) and Natural Resource [sic] Management Plan (NRMP) Areas. Santa Clarita. Los Angeles County. Spring 2021*. Prepared for FivePoint Holdings, LLC.
- Xerces Society, Defenders of Wildlife, and the Center for Food Safety. 2018. *A Petition to the State of California Fish and Game Commission to List the Crotch Bumble Bee (*Bombus crotchii*), Franklin's Bumble Bee (*Bombus franklini*), Suckley Cuckoo Bumble Bee (*Bombus suckleyi*), and Western Bumble Bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act*. Submitted by the Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. October 16, 2018.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990a. *California's Wildlife: Volume II. Birds*. Sacramento: California Department of Fish and Game.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990b. *California's Wildlife: Volume III. Mammals*. Sacramento: California Department of Fish and Game.





SOURCE: ESRI 2019; Hunsaker 2019

INTENTIONALLY LEFT BLANK





SOURCE: Eagle Aerial Solutions 2018

**DUDEK**

0 500 1,000 Feet

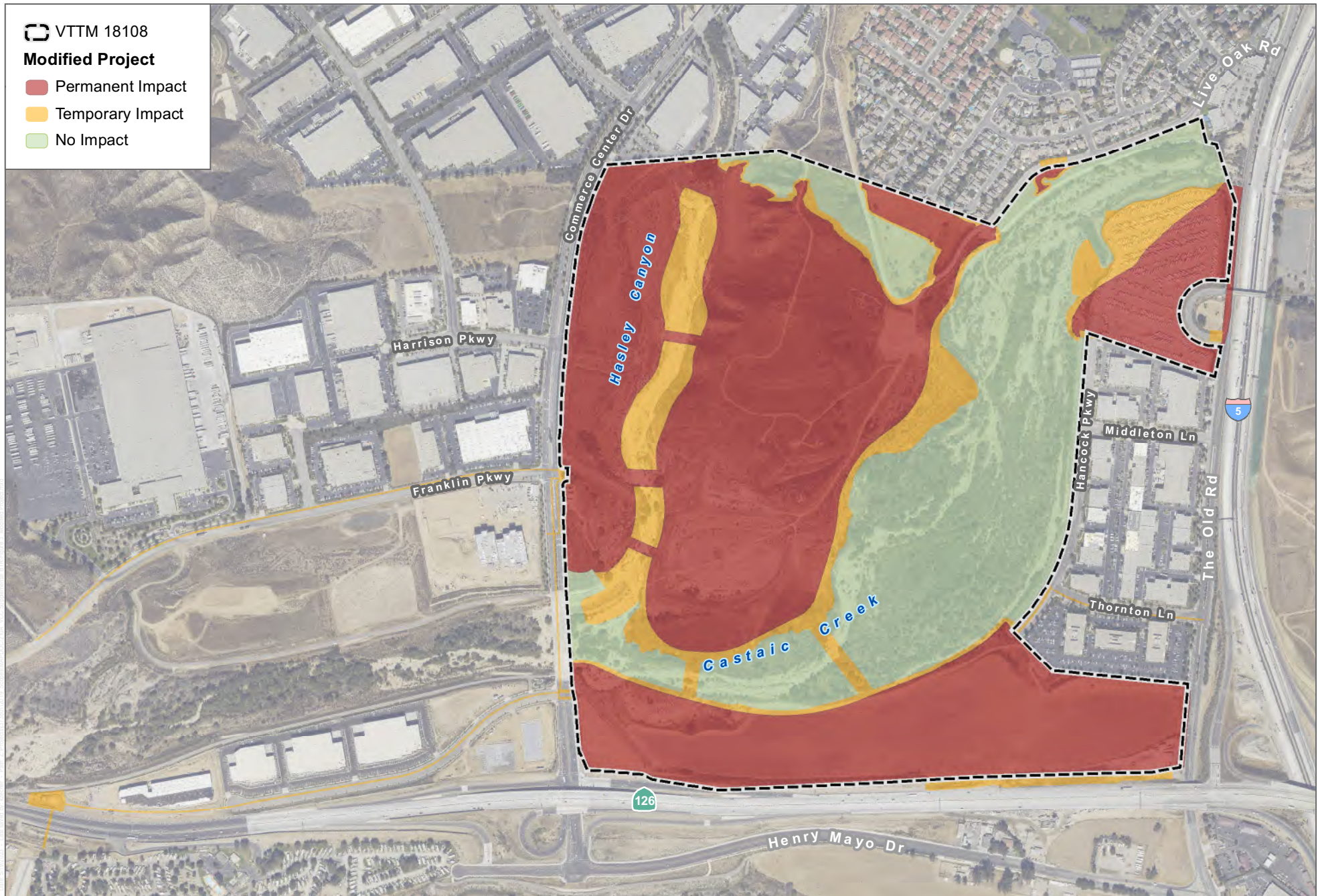
FIGURE 2

2017 Approved Project

Valencia Commerce Center Supplemental Biological Resources Technical Report

INTENTIONALLY LEFT BLANK





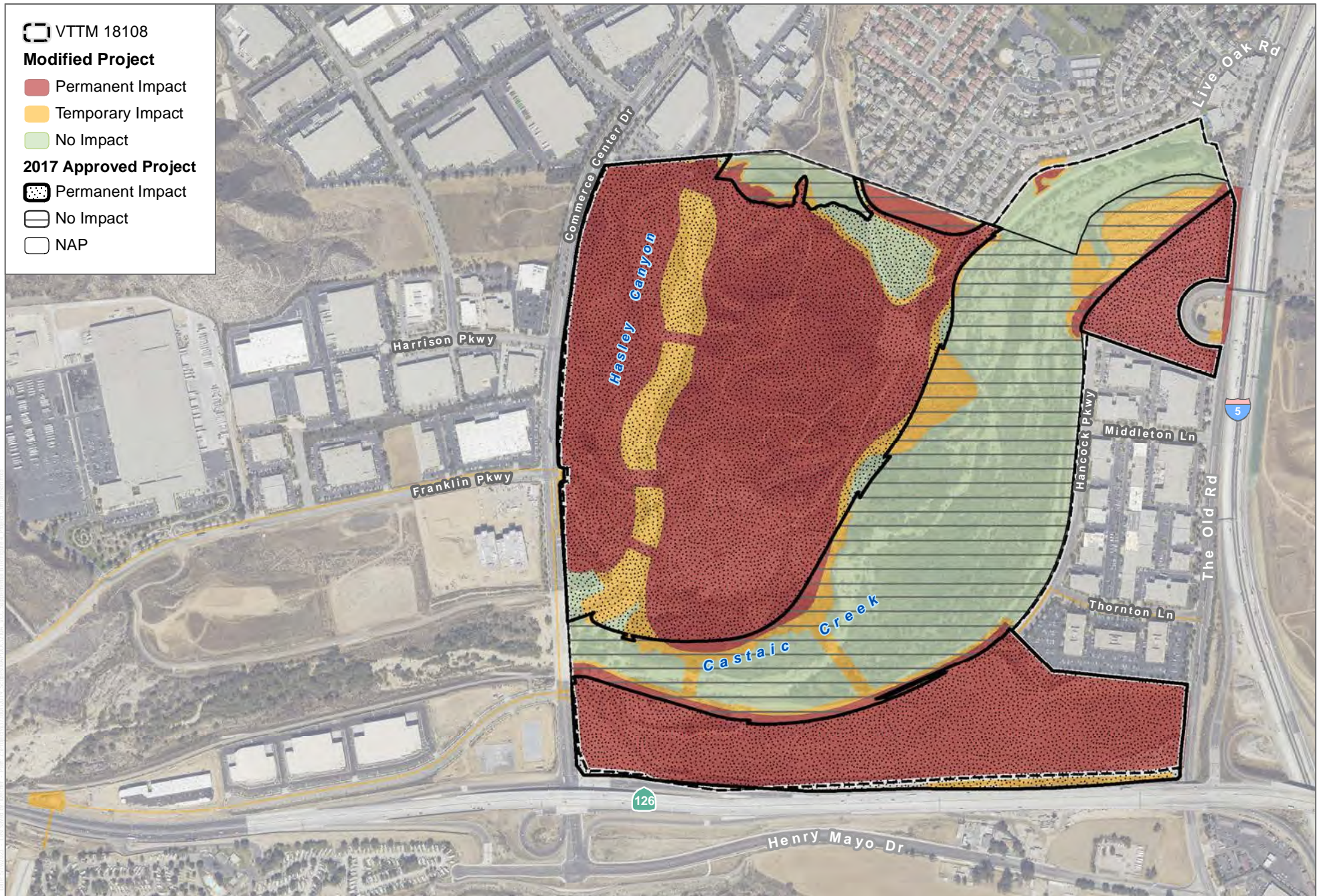
SOURCE: Eagle Aerial Solutions 2018

**FIGURE 3**

**Modified Project**



INTENTIONALLY LEFT BLANK



SOURCE: Eagle Aerial Solutions 2018

FIGURE 4

Project Comparison

INTENTIONALLY LEFT BLANK





SOURCE: USGS National Map

**DUDEK**

0 500 1,000 Feet

FIGURE 5

Topography

Valencia Commerce Center Supplemental Biological Resources Technical Report

INTENTIONALLY LEFT BLANK





SOURCE: USDA NRCS

INTENTIONALLY LEFT BLANK





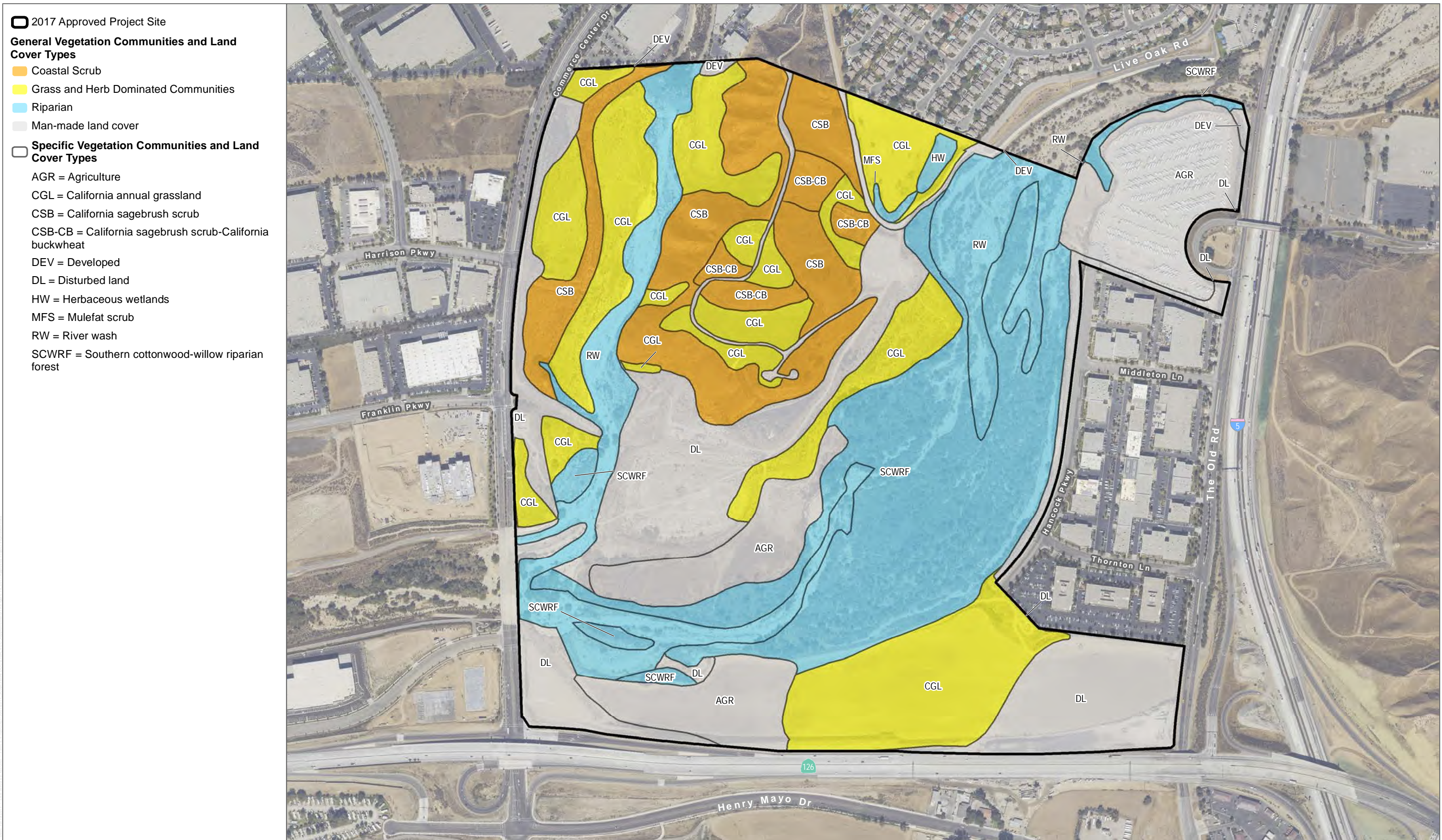
SOURCE: AECOM

FIGURE 7

Drainage Patterns

INTENTIONALLY LEFT BLANK



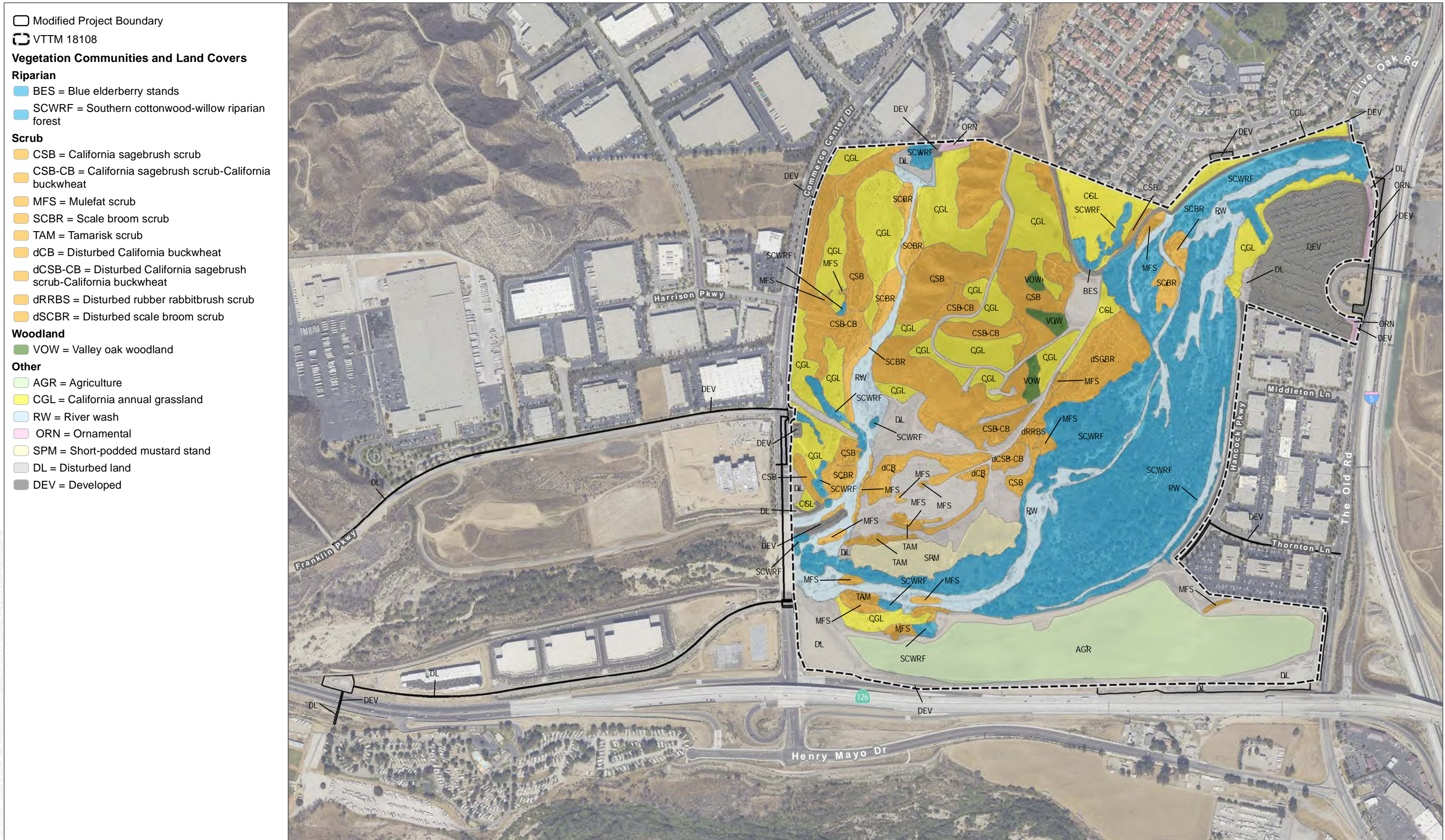


SOURCE: ESRI 2019; Hunsaker 2019



INTENTIONALLY LEFT BLANK





SOURCE: ESRI 2019; Hunsaker 2019



INTENTIONALLY LEFT BLANK





SOURCE: Eagle Aerial Solutions 2018



INTENTIONALLY LEFT BLANK



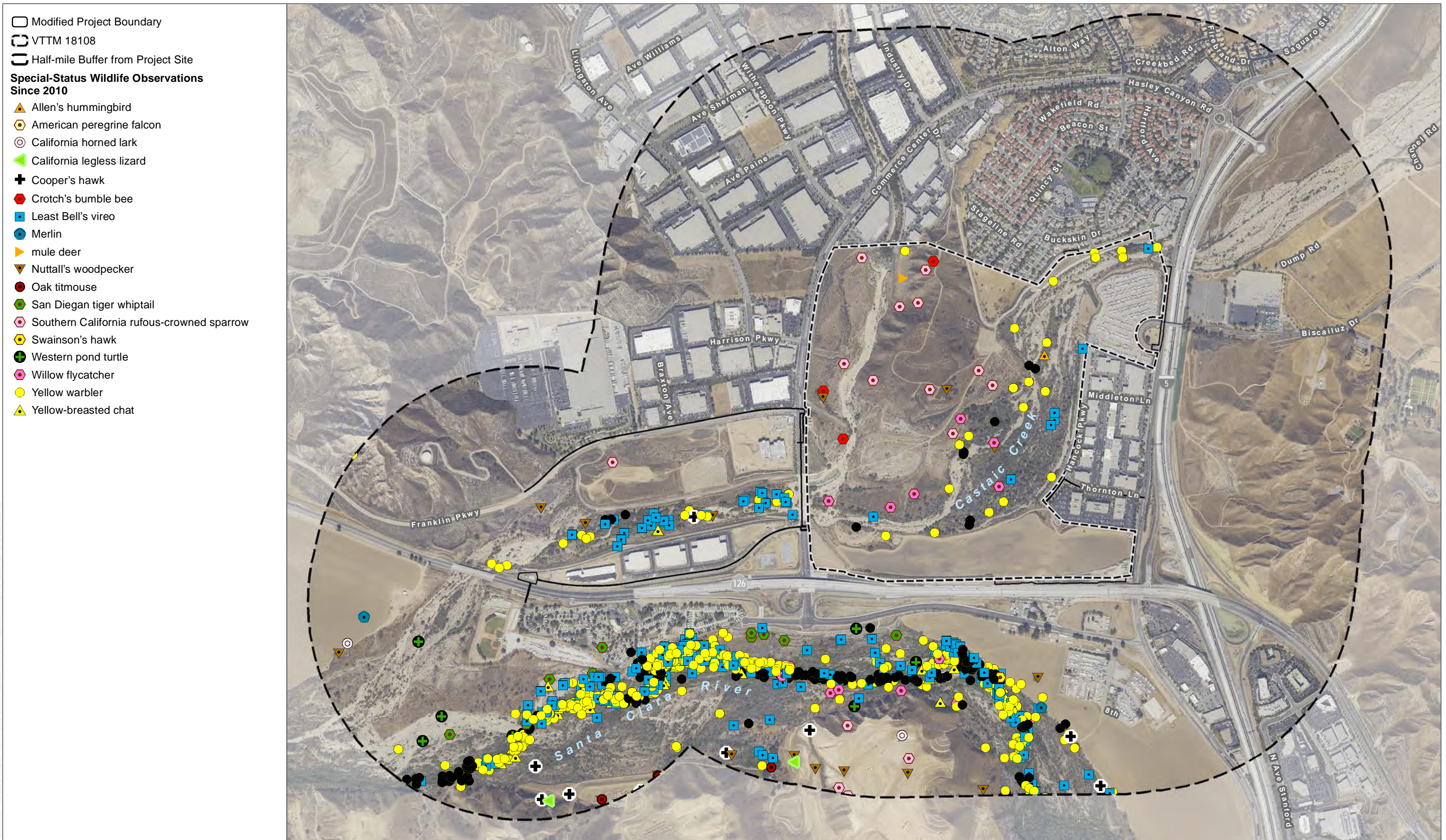


SOURCE: Eagle Aerial Solutions 2018



INTENTIONALLY LEFT BLANK



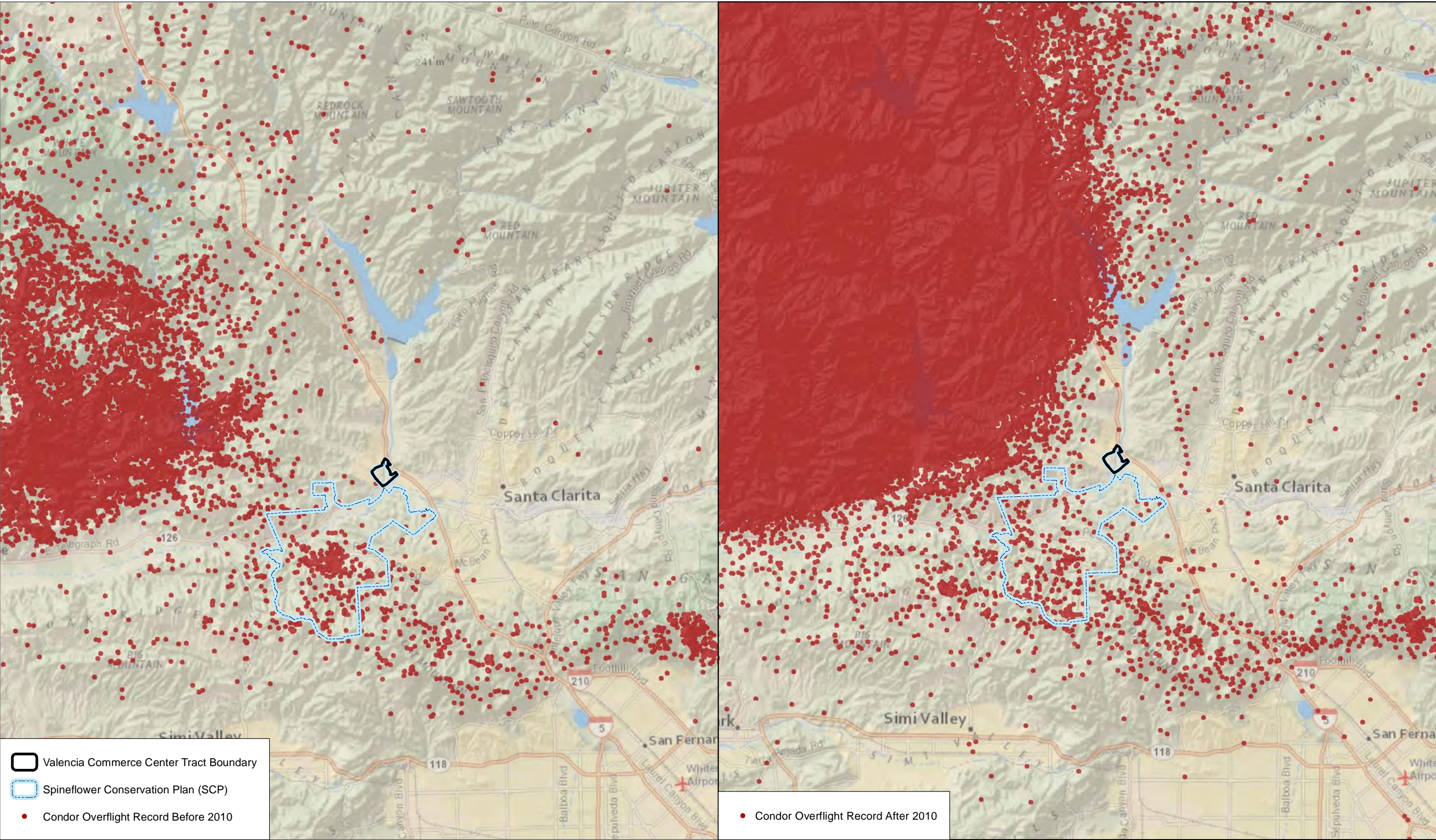


SOURCE: Eagle Aerial Solutions 2018



INTENTIONALLY LEFT BLANK



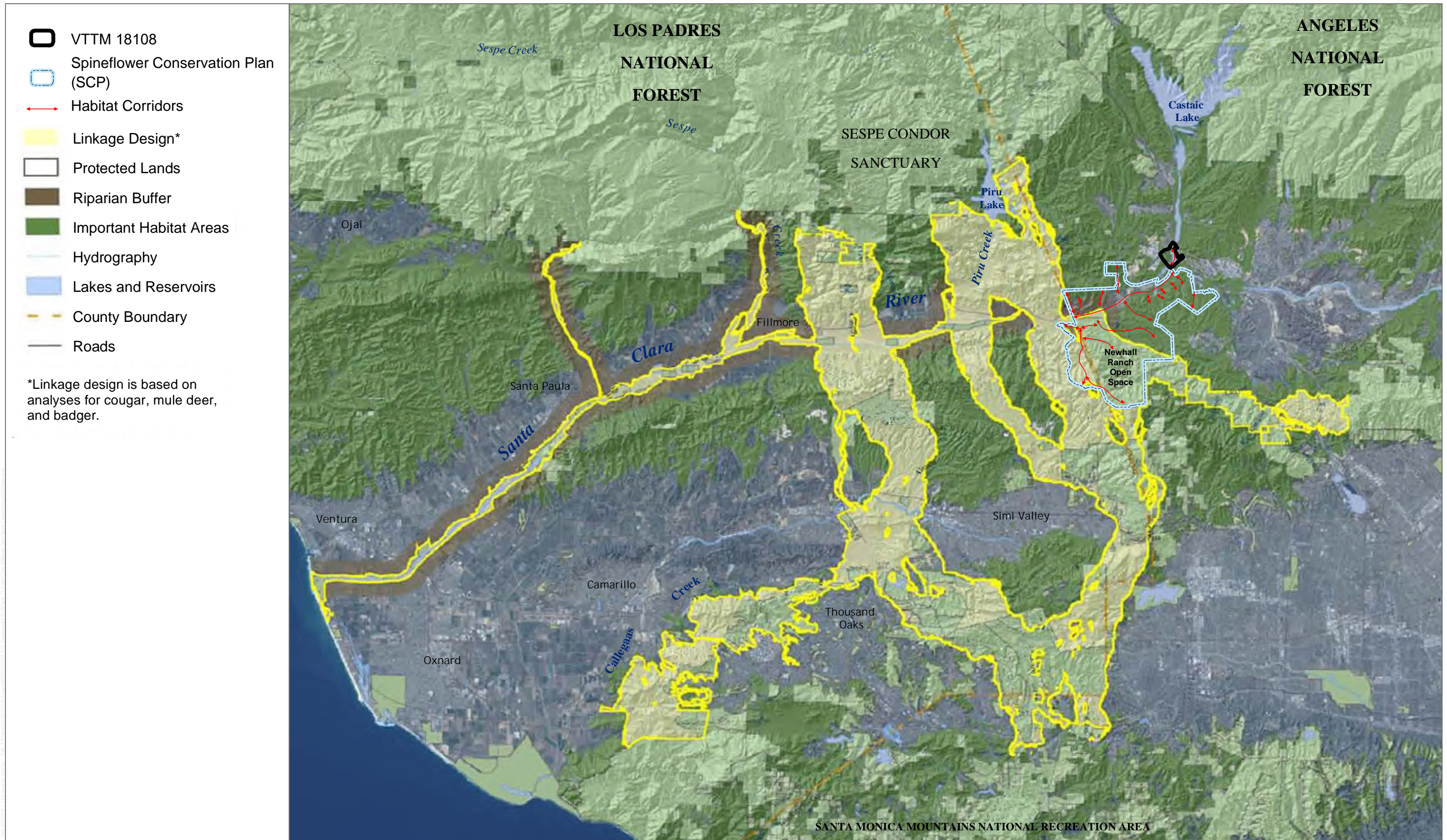


SOURCE: USFWS 2019



INTENTIONALLY LEFT BLANK





SOURCE: South Coast Wildlands (2006)

FIGURE 12



INTENTIONALLY LEFT BLANK



VTM 18108

Spineflower Conservation Plan (SCP)

Regional Habitat Linkages

1 - Santa Clara River Corridor

2 - Salt Creek Confluence

3 - Salt Creek High Country

4 - East Fork Salt Creek

5 - Potrero Canyon Salt Creek

6 - Potrero Canyon

7 - Long Canyon

8a - Humble Canyon

8b - Lion Canyon

8c - Exxon Canyon

8d - Dead End Canyon

8e - Middle Canyon

8f - Magic Mountain Canyon

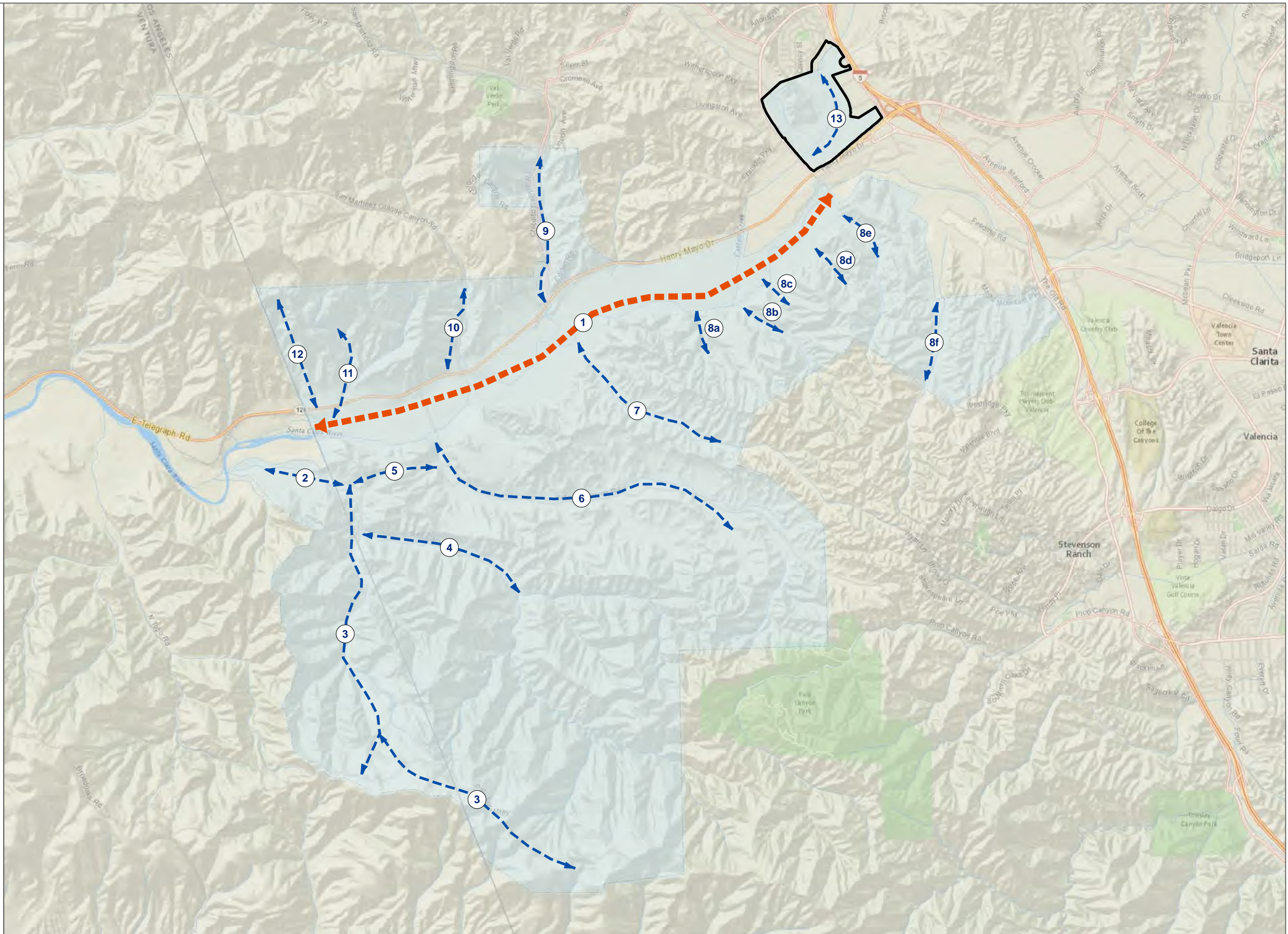
9 - Chiquito Canyon

10 - San Martinez Grande Canyon

11 - Off-Haul Canyon

12 - Homestead Canyon

13 - Castaic/Hasley Corridor



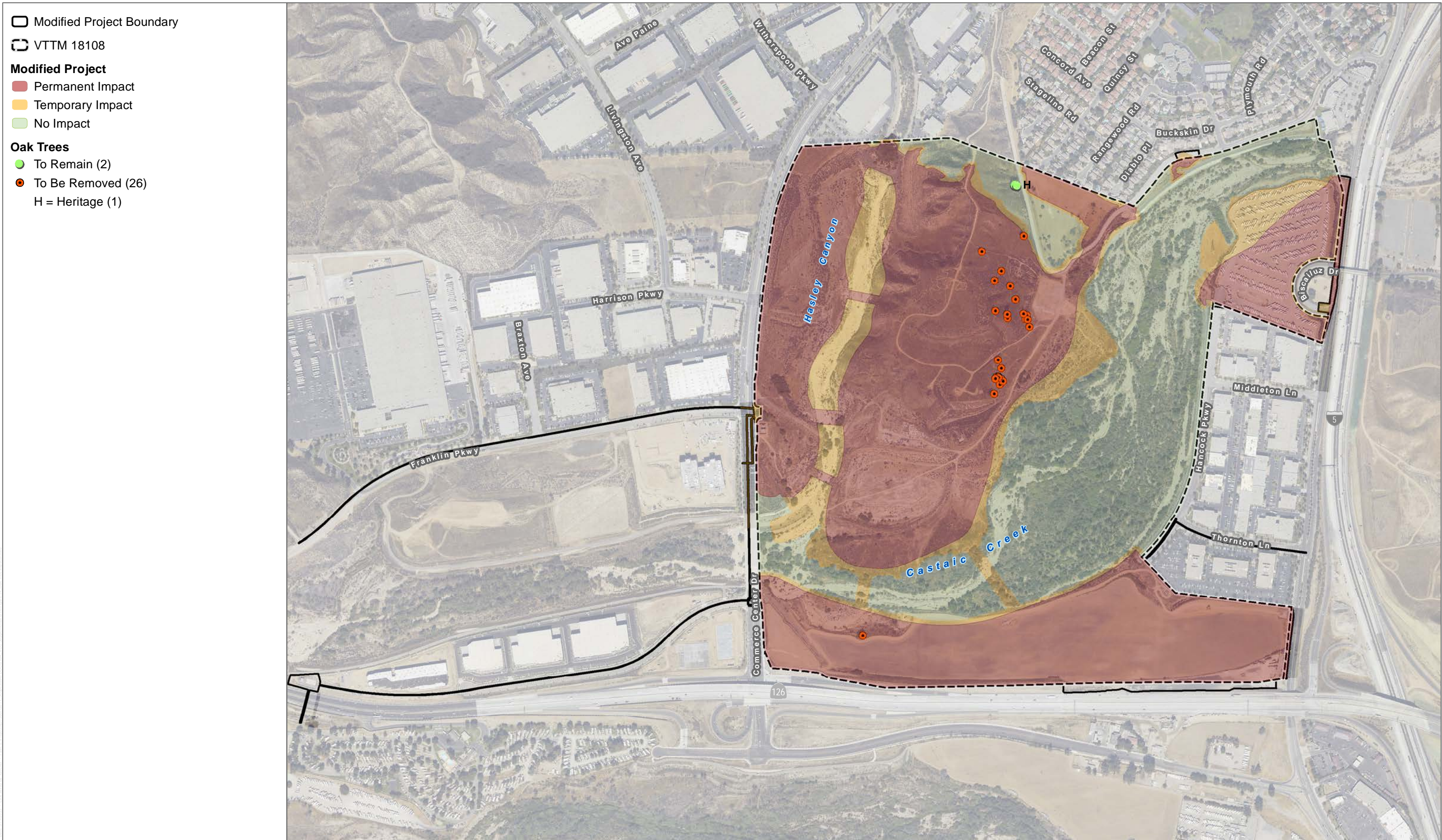
SOURCE: National Geographic 2019

FIGURE 13



INTENTIONALLY LEFT BLANK





SOURCE: Carlsberg 2021

FIGURE 14  
Oak Tree Impacts



INTENTIONALLY LEFT BLANK

---

# Appendix A

## Plant Compendium



# Vascular Species

## Eudicots

### ADOXACEAE – MUSKROOT FAMILY

*Sambucus nigra* ssp. *caerulea* – blue elderberry

### AIZOACEAE – FIG-MARIGOLD FAMILY

- \* *Mesembryanthemum crystallinum* – common iceplant
- \* *Mesembryanthemum nodiflorum* – slenderleaf iceplant

### AMARANTHACEAE – AMARANTH FAMILY

- \* *Amaranthus albus* – prostrate pigweed
- Amaranthus blitoides* – mat amaranth
- \* *Amaranthus retroflexus* – redroot amaranth

### ANACARDIACEAE – SUMAC OR CASHEW FAMILY

- Rhus aromatica* – basket bush
- Rhus ovata* – sugarbush
- \* *Schinus molle* – Peruvian peppertree
- \* *Schinus terebinthifolius* – Brazilian peppertree

### APIACEAE – CARROT FAMILY

- Apiastrum angustifolium* – mock parsley
- \* *Bowlesia incana* – hoary bowlesia
- \* *Conium maculatum* – poison hemlock
- Daucus pusillus* – American wild carrot
- \* *Foeniculum vulgare* – fennel

### APOCYNACEAE – DOGBANE FAMILY

- Asclepias eriocarpa* – woollypod milkweed
- Asclepias fascicularis* – Mexican whorled milkweed
- \* *Nerium oleander* – oleander

### ASTERACEAE – SUNFLOWER FAMILY

- Achillea millefolium* – common yarrow
- Acourtia microcephala* – sacapellote
- Agoseris grandiflora* – bigflower agoseris
- Ambrosia acanthicarpa* – flatspine bur ragweed
- Ambrosia confertiflora* – weakleaf bur ragweed
- Ambrosia dumosa* – white bursage



- Ambrosia psilostachya* – western ragweed
- \* *Arctotis hirsuta* – African daisy
- Artemisia californica* – California sagebrush
- Artemisia douglasiana* – Douglas’ sagewort
- Artemisia dracunculus* – wild tarragon
- Artemisia tridentata* ssp. *tridentata* – basin big sagebrush
- Artemisia tridentata* – big sagebrush
- Baccharis pilularis* – coyote brush
- Baccharis salicifolia* ssp. *salicifolia* – mulefat
- Baccharis sarothroides* – desertbroom
- Brickellia californica* – California brickellbush
- Brickellia nevinii* – Nevin’s brickellbush
- \* *Carduus pycnocephalus* ssp. *pycnocephalus* – Italian plumeless thistle
- \* *Centaurea benedicta* – blessed thistle
- \* *Centaurea melitensis* – Maltese star-thistle
- \* *Centaurea solstitialis* – yellow star-thistle
- Chaenactis glabriuscula* – yellow pincushion
- Cirsium occidentale* var. *californicum* – cobwebby thistle
- Cirsium scariosum* – meadow thistle
- \* *Cirsium vulgare* – bull thistle
- Corethrogyne filaginifolia* – sand-aster
- \* *Cotula australis* – Australian waterbuttons
- Deinandra fasciculata* – clustered tarweed
- \* *Dimorphotheca sinuata* – glandular Cape marigold
- Encelia actoni* – Acton’s brittle brush
- Encelia californica* – California brittle bush
- Encelia farinosa* – brittle bush
- Ericameria nauseosa* – rubber rabbitbrush
- Ericameria palmeri* var. *pachylepis* – Palmer’s rabbitbrush
- Ericameria palmeri* – Palmer’s goldenbush
- \* *Erigeron bonariensis* – asthmaweed
- Erigeron canadensis* – Canadian horseweed
- Erigeron foliosus* var. *foliosus* – leafy fleabane
- Eriophyllum confertiflorum* – golden-yarrow
- \* *Gazania linearis* – treasureflower
- Gnaphalium palustre* – western marsh cudweed
- Hazardia* sp. – hazardia
- Hazardia squarrosa* var. *grindelioides* – sawtooth bristleweed
- Helianthus annuus* – common sunflower
- \* *Helminthotheca echioides* – bristly oxtongue

- Heterotheca grandiflora* – telegraphweed  
*Heterotheca sessiliflora* ssp. *fastigiata* – sessileflower false goldenaster  
*Heterotheca sessiliflora* – sessileflower false goldenaster  
*Heterotheca subaxillaris* ssp. *latifolia* – camphorweed  
*Heterotheca villosa* – hairy false goldenaster
- \* *Hypochaeris glabra* – smooth cat’s ear  
*Isocoma menziesii* var. *menziesii* – Menzies’ goldenbush  
*Isocoma menziesii* var. *vernonioides* – Menzies’ goldenbush  
*Isocoma menziesii* – Menzies’s golden bush
- \* *Lactuca serriola* – prickly lettuce  
*Lasthenia californica* – California goldfields  
*Lasthenia glabrata* ssp. *coulteri* – Coulter’s goldfields  
*Lasthenia gracilis* – needle goldfields  
*Lepidospartum squamatum* – scale broom  
*Leptosyne bigelovii* – Bigelow’s tickseed  
*Logfia filaginoides* – California cottonrose
- \* *Logfia gallica* – narrowleaf cottonrose  
*Madia gracilis* – grassy tarweed  
*Malacothrix saxatilis* var. *commutata* – cliff desertdandelion  
*Malacothrix saxatilis* var. *tenuifolia* – cliff desertdandelion  
*Malacothrix saxatilis* – cliff desertdandelion  
*Matricaria discoidea* – disc mayweed  
*Micropus californicus* – Q-tips  
*Microseris douglasii* – Douglas’ silverpuffs  
*Pluchea odorata* – sweetscent  
*Pluchea sericea* – arrow weed  
*Pseudognaphalium biolettii* – two-color rabbit-tobacco  
*Pseudognaphalium californicum* – ladies’ tobacco  
*Pseudognaphalium canescens* – Wright’s cudweed  
*Pseudognaphalium leucocephalum* – white rabbit-tobacco
- \* *Pseudognaphalium luteoalbum* – Jersey cudweed  
*Pseudognaphalium microcephalum* – Wright’s cudweed
- \* *Pulicaria paludosa* – Spanish false fleabane  
*Rafinesquia californica* – California plumeseed  
*Senecio californicus* – California ragwort  
*Senecio flaccidus* var. *douglasii* – Douglas’ ragwort
- \* *Senecio vulgaris* – old-man-in-the-spring
- \* *Silybum marianum* – blessed milkthistle  
*Solidago velutina* ssp. *californica* – threenerve goldenrod
- \* *Sonchus asper* ssp. *asper* – spiny sowthistle

- \* *Sonchus oleraceus* – common sowthistle
- Stebbinsoseris heterocarpa* – grassland silverpuffs
- Stephanomeria exigua* – small wirelettuce
- Stephanomeria pauciflora* – brownplume wirelettuce
- Stephanomeria* sp. – wirelettuce
- Stephanomeria virgata* – rod wirelettuce
- Stylocline gnaphaloides* – mountain neststraw
- Tetradymia comosa* – hairy horsebrush
- Uropappus lindleyi* – Lindley’s silverpuffs
- Xanthium strumarium* – cocklebur

## BORAGINACEAE – BORAGE FAMILY

- Amsinckia intermedia* – common fiddleneck
- Amsinckia menziesii* – Menzies’ fiddleneck
- Amsinckia tessellata* var. *tessellata* – bristly fiddleneck
- Cryptantha intermedia* – Clearwater cryptantha
- Cryptantha microstachys* – Tejon cryptantha
- Cryptantha muricata* – pointed cryptantha
- Cryptantha nevadensis* – Nevada cryptantha
- Cryptantha* sp. – cryptantha
- Emmenanthe penduliflora* – whisperingbells
- Eriodictyon crassifolium* var. *crassifolium* – thickleaf yerba santa
- Eriodictyon crassifolium* var. *nigrescens* – thickleaf yerba santa
- Eucrypta chrysanthemifolia* – spotted hideseed
- Heliotropium curassavicum* var. *oculatum* – seaside heliotrope
- Pectocarya linearis* ssp. *ferocula* – sagebrush combseed
- Pectocarya recurvata* – curvenut combseed
- Phacelia cicutaria* var. *hispida* – caterpillar phacelia
- Phacelia cicutaria* – caterpillar phacelia
- Phacelia distans* – distant phacelia
- Phacelia minor* – wild Canterbury bells
- Phacelia parryi* – Parry’s phacelia
- Phacelia ramosissima* – branching phacelia
- Phacelia tanacetifolia* – lacy phacelia
- Plagiobothrys canescens* – valley popcornflower
- Plagiobothrys fulvus* – fulvous popcornflower
- Plagiobothrys nothofulvus* – popcorn flower
- Plagiobothrys* sp. – popcornflower

**BRASSICACEAE – MUSTARD FAMILY**

- \* *Brassica nigra* – black mustard
- \* *Brassica rapa* – field mustard
- \* *Brassica tournefortii* – Tournefort's mustard
- \* *Capsella bursa-pastoris* – shepherd's purse
- Erysimum capitatum* var. *capitatum* – sanddune wallflower
- Erysimum capitatum* – sanddune wallflower
- \* *Hirschfeldia incana* – shortpod mustard
- \* *Lobularia maritima* – sweet alyssum
- \* *Raphanus sativus* – cultivated radish
- \* *Sisymbrium altissimum* – tall tumbled mustard
- \* *Sisymbrium irio* – London rocket
- \* *Sisymbrium orientale* – Indian hedgemustard
- Stanleya pinnata* var. *pinnata* – desert princesplume
- Thysanocarpus curvipes* – sand fringe pod
- Thysanocarpus laciniatus* – mountain fringe pod

**CACTACEAE – CACTUS FAMILY**

- Cylindropuntia californica* var. *parkeri* – brownspined pricklypear
- Cylindropuntia californica* – California cholla
- Opuntia basilaris* var. *basilaris* – beavertail pricklypear
- Opuntia littoralis* – coast prickly pear

**CAPRIFOLIACEAE – HONEYSUCKLE FAMILY**

- Lonicera subspicata* – southern honeysuckle

**CARYOPHYLLACEAE – PINK FAMILY**

- \* *Silene gallica* – common catchfly
- \* *Stellaria media* – common chickweed

**CHENOPODIACEAE – GOOSEFOOT FAMILY**

- Atriplex canescens* – fourwing saltbush
- Atriplex lentiformis* – quailbush
- \* *Atriplex semibaccata* – Australian saltbush
- \* *Atriplex suberecta* – peregrine saltbush
- \* *Chenopodium album* – lambsquarters
- Chenopodium berlandieri* – pitseed goosefoot
- Chenopodium californicum* – California goosefoot
- \* *Chenopodium murale* – nettleleaf goosefoot
- \* *Salsola tragus* – prickly Russian thistle

**CLEOMACEAE – CLEOME FAMILY**

*Peritoma arborea* – bladderpod

**CONVOLVULACEAE – MORNING-GLORY FAMILY**

*Calystegia macrostegia* – island false bindweed

*Calystegia peirsonii* – Peirson's morning-glory

\* *Convolvulus arvensis* – field bindweed

*Cuscuta californica* – chaparral dodder

**CRASSULACEAE – STONECROP FAMILY**

*Crassula connata* – sand pygmyweed

*Dudleya lanceolata* – lanceleaf liveforever

**CUCURBITACEAE – GOURD FAMILY**

*Cucurbita foetidissima* – Missouri gourd

*Marah fabacea* – California man-root

*Marah macrocarpa* – Cucamonga manroot

**EUPHORBIACEAE – SPURGE FAMILY**

*Croton californicus* – California croton

*Croton setiger* – dove weed

*Euphorbia albomarginata* – whitemargin sandmat

\* *Euphorbia maculata* – spotted sandmat

*Euphorbia polycarpa* – smallseed sandmat

*Euphorbia spathulata* – warty spurge

\* *Ricinus communis* – castorbean

*Stillingia linearifolia* – queen's-root

**FABACEAE – LEGUME FAMILY**

*Acemisson americanus* – Spanish clover

*Acemisson glaber* var. *glaber* – common deerweed

*Acemisson glaber* – deer weed

*Acemisson maritimus* – coastal bird's-foot trefoil

*Acemisson micranthus* – San Diego bird's-foot trefoil

*Acemisson strigosus* – strigose bird's-foot trefoil

*Acemisson wrangelianus* – Chilean bird's-foot trefoil

*Astragalus trichopodus* – Santa Barbara milkvetch

*Lupinus arizonicus* – Arizona lupine

*Lupinus bicolor* – miniature lupine

*Lupinus excubitus* var. *hallii* – Hall's bush lupine

*Lupinus formosus* var. *formosus* – summer lupine

*Lupinus hirsutissimus* – stinging annual lupine



*Lupinus microcarpus* var. *densiflorus* – whitewhorl lupine

*Lupinus microcarpus* var. *microcarpus* – valley lupine

*Lupinus microcarpus* – valley lupine

*Lupinus sparsiflorus* – Coulter's lupine

*Lupinus succulentus* – hollowleaf annual lupine

*Lupinus truncatus* – collared annual lupine

\* *Medicago polymorpha* – burclover

\* *Medicago sativa* – alfalfa

\* *Melilotus albus* – yellow sweetclover

\* *Melilotus indicus* – annual yellow sweetclover

\* *Spartium junceum* – Spanish broom

*Trifolium albopurpureum* – rancheria clover

*Trifolium ciliolatum* – foothill clover

*Trifolium gracilentum* – pinpoint clover

*Trifolium willdenovii* – tomcat clover

\* *Vicia benghalensis* – purple vetch

*Vicia hassei* – Hasse's vetch

\* *Vicia villosa* ssp. *varia* – winter vetch

## FAGACEAE – OAK FAMILY

*Quercus agrifolia* – coast live oak

*Quercus john-tuckeri* – Tucker oak

*Quercus lobata* – valley oak

*Quercus* sp. – oak

## GERANIACEAE – GERANIUM FAMILY

\* *Erodium botrys* – longbeak stork's bill

\* *Erodium cicutarium* – redstem stork's bill

\* *Erodium moschatum* – musky stork's bill

## GROSSULARIACEAE – GOOSEBERRY FAMILY

*Ribes aureum* – golden currant

## JUGLANDACEAE – WALNUT FAMILY

*Juglans californica* – Southern California black walnut

## LAMIACEAE – MINT FAMILY

\* *Lamium amplexicaule* – henbit deadnettle

\* *Marrubium vulgare* – horehound

\* *Mentha ×piperita* – peppermint

\* *Mentha spicata* – spearmint

*Salvia apiana* – white sage

*Salvia columbariae* – chia  
*Salvia leucophylla* – purple sage  
*Salvia mellifera* – black sage  
*Trichostema lanceolatum* – vinegarweed

## LOASACEAE – LOASA FAMILY

*Mentzelia albicaulis* – whitestem blazingstar

## MALVACEAE – MALLOW FAMILY

*Malacothamnus densiflorus* – yellowstem bushmallow  
*Malacothamnus fasciculatus* – Mendocino bushmallow  
 \* *Malva parviflora* – cheeseweed mallow

## MONTIACEAE – MONTIA FAMILY

*Calandrinia menziesii* – red maids  
*Calyptidium monandrum* – common pussypaws  
*Claytonia perfoliata* ssp. *perfoliata* – miner’s lettuce

## MYRSINACEAE – MYRSINE FAMILY

\* *Lysimachia arvensis* – scarlet pimpernel

## NYCTAGINACEAE – FOUR O’CLOCK FAMILY

*Mirabilis laevis* var. *crassifolia* – California four o’clock

## OLEACEAE – OLIVE FAMILY

*Fraxinus dipetala* – California ash  
*Fraxinus velutina* – velvet ash

## ONAGRACEAE – EVENING PRIMROSE FAMILY

*Camissonia strigulosa* – sandysoil suncup  
*Camissoniopsis bistorta* – southern suncup  
*Camissoniopsis cheiranthifolia* – beach suncup  
*Camissoniopsis hirtella* – Santa Cruz Island suncup  
*Camissoniopsis micrantha* – miniature suncup  
*Clarkia purpurea* – winecup clarkia  
*Clarkia unguiculata* – elegant clarkia  
*Epilobium ciliatum* – fringed willowherb  
*Eremothera boothii* – Booth’s evening primrose  
*Eulobus californicus* – California suncup  
*Oenothera californica* ssp. *californica* – California evening primrose  
*Oenothera californica* – California evening primrose  
*Oenothera elata* – Hooker’s evening primrose

**OROBANCHACEAE – BROOM-RAPE FAMILY**

*Castilleja affinis* – coast Indian paintbrush

*Castilleja exserta* ssp. *exserta* – exserted Indian paintbrush

*Castilleja foliolosa* – Texas Indian paintbrush

**PAPAVERACEAE – POPPY FAMILY**

*Eschscholzia californica* – California poppy

*Papaver heterophyllum* – windpoppy

*Platystemon californicus* – creamcups

**PHRYMACEAE – LOPSEED FAMILY**

*Diplacus aurantiacus* – bush monkeyflower

*Diplacus brevipes* – widethroat yellow monkeyflower

**PLANTAGINACEAE – PLANTAIN FAMILY**

*Antirrhinum coulterianum* – Coulter's snapdragon

*Antirrhinum kelloggii* – Kellogg snapdragon

*Collinsia heterophylla* – purple Chinese houses

*Penstemon centranthifolius* – scarlet bugler

*Plantago erecta* – dwarf plantain

*Plantago* sp. – plantain

\* *Veronica anagallis-aquatica* – water speedwell

**PLATANACEAE – PLANE TREE, SYCAMORE FAMILY**

*Platanus racemosa* – California sycamore

**POLEMONIACEAE – PHLOX FAMILY**

*Eriastrum densifolium* ssp. *densifolium* – giant woollystar

*Eriastrum densifolium* ssp. *elongatum* – giant woollystar

*Eriastrum sapphirinum* – sapphire woollystar

*Gilia angelensis* – chaparral gilia

*Gilia capitata* – bluehead gilia

*Leptosiphon pygmaeus* – pygmy linanthus

*Linanthus californicus* – California prickly phlox

**POLYGONACEAE – BUCKWHEAT FAMILY**

*Chorizanthe parryi* var. *fernandina* – San Fernando Valley spineflower

*Chorizanthe staticoides* – Turkish rugging

*Eriogonum angulosum* – anglestem buckwheat

*Eriogonum baileyi* – Bailey's buckwheat

*Eriogonum brachyanthum* – shortflower buckwheat

*Eriogonum elongatum* var. *elongatum* – longstem buckwheat

*Eriogonum fasciculatum* var. *foliolosum* – California buckwheat

*Eriogonum fasciculatum* var. *polifolium* – California buckwheat

*Eriogonum gracile* – slender woolly buckwheat

*Eriogonum gracillimum* – rose and white buckwheat

*Lastarriaea coriacea* – leather spineflower

*Persicaria lapathifolia* – smartweed

\* *Polygonum aviculare* ssp. *depressum* – prostrate knotweed

\* *Polygonum aviculare* – prostrate knotweed

*Pterostegia drymarioides* – woodland pterostegia

\* *Rumex crispus* – curly dock

*Rumex hymenosepalus* – canaigre dock

\* *Rumex obtusifolius* – bitter dock

## PORTULACACEAE – PURSLANE FAMILY

\* *Portulaca oleracea* – little hogweed

## RANUNCULACEAE – BUTTERCUP FAMILY

*Delphinium parryi* ssp. *parryi* – San Bernardino larkspur

## RHAMNACEAE – BUCKTHORN FAMILY

*Ceanothus megacarpus* – bigpod ceanothus

*Rhamnus crocea* – redberry buckthorn

*Rhamnus ilicifolia* – hollyleaf redberry

## ROSACEAE – ROSE FAMILY

*Adenostoma fasciculatum* – chamise

*Heteromeles arbutifolia* – toyon

*Prunus ilicifolia* ssp. *ilicifolia* – hollyleaf cherry

*Rubus ursinus* – California blackberry

## RUBIACEAE – MADDER FAMILY

*Galium angustifolium* – narrowleaf bedstraw

*Galium aparine* – stickywilly

*Galium nuttallii* – climbing bedstraw

## SALICACEAE – WILLOW FAMILY

*Populus fremontii* ssp. *fremontii* – Fremont cottonwood

*Salix exigua* var. *hindsiana* – narrowleaf willow

*Salix exigua* – sandbar willow

*Salix gooddingii* – black willow

*Salix laevigata* – red willow

*Salix lasiolepis* – arroyo willow

## SCROPHULARIACEAE – FIGWORT FAMILY

*Scrophularia californica* – California figwort

## SIMAROUBACEAE – QUASSIA OR SIMAROUBA FAMILY

- \* *Ailanthus altissima* – tree of heaven

## SOLANACEAE – NIGHTSHADE FAMILY

*Datura wrightii* – sacred thorn-apple

- \* *Nicotiana glauca* – tree tobacco  
*Nicotiana quadrivalvis* – Indian tobacco  
*Solanum americanum* – American black nightshade  
*Solanum douglasii* – greenspot nightshade
- \* *Solanum elaeagnifolium* – silverleaf nightshade  
*Solanum umbelliferum* – bluewitch nightshade  
*Solanum xanti* – chaparral nightshade

## TAMARICACEAE – TAMARISK FAMILY

- \* *Tamarix gallica* – French tamarisk
- \* *Tamarix ramosissima* – tamarisk
- \* *Tamarix* sp. – tamarisk

## URTICACEAE – NETTLE FAMILY

*Urtica dioica* – stinging nettle

- \* *Urtica urens* – dwarf nettle

## VISCACEAE – MISTLETOE FAMILY

*Phoradendron leucarpum* ssp. *macrophyllum* – oak mistletoe

## ZYGOPHYLLACEAE – CALTROP FAMILY

- \* *Tribulus terrestris* – puncturevine

# Ferns and Fern Allies

## PTERIDACEAE – BRAKE FAMILY

*Pellaea andromedifolia* – coffee cliffbrake  
*Pentagramma triangularis* – goldback fern  
*Pentagramma viscosa* – silverback fern

## SELAGINELLACEAE – SPIKE-MOSS FAMILY

*Selaginella bigelovii* – bushy spikemoss



## Gymnosperms and Gnetophytes

### PINACEAE – PINE FAMILY

- \* *Pinus* sp. – pine

## Monocots

### AGAVACEAE – AGAVE FAMILY

- Chlorogalum pomeridianum* – wavyleaf soap plant
- Hesperoyucca whipplei* – chaparral yucca

### ARECACEAE – PALM FAMILY

- \* *Phoenix canariensis* – Canary Island date palm
- \* *Washingtonia robusta* – Washington fan palm

### CYPERACEAE – SEDGE FAMILY

- Cyperus esculentus* – yellow nutsedge
- Cyperus* sp. – sedge

### JUNCACEAE – RUSH FAMILY

- Juncus bufonius* – toad rush

### LILIACEAE – LILY FAMILY

- Calochortus clavatus* var. *gracilis* – slender mariposa lily

### POACEAE – GRASS FAMILY

- \* *Arundo donax* – giant reed
- \* *Avena barbata* – slender oat
- \* *Avena fatua* – wild oat
- \* *Avena sativa* – common oat
- Bromus carinatus* – California brome
- \* *Bromus diandrus* – ripgut brome
- \* *Bromus hordeaceus* – soft brome
- \* *Bromus madritensis* ssp. *rubens* – red brome
- \* *Bromus madritensis* – compact brome
- \* *Bromus tectorum* – cheatgrass
- \* *Cortaderia selloana* – Uruguayan pampas grass
- \* *Cynodon dactylon* – Bermudagrass
- Distichlis spicata* – salt grass
- Elymus condensatus* – giant wild rye
- Elymus glaucus* – blue wildrye

- Elymus triticoides* – creeping ryegrass  
*Eragrostis mexicana* – Mexican lovegrass  
\* *Festuca myuros* – rat-tail fescue  
\* *Festuca perennis* – perennial rye grass  
*Hordeum brachyantherum* ssp. *brachyantherum* – meadow barley  
\* *Hordeum murinum* – mouse barley  
*Melica imperfecta* – smallflower melicgrass  
*Melica subulata* – Alaska oniongrass  
*Muhlenbergia microsperma* – littleseed muhly  
\* *Parapholis incurva* – curved sicklegrass  
\* *Pennisetum clandestinum* – kikuyugrass  
\* *Pennisetum setaceum* – fountain grass  
\* *Phalaris minor* – littleseed canarygrass  
\* *Poa annua* – annual bluegrass  
\* *Polypogon monspeliensis* – annual rabbitsfoot grass  
\* *Schismus arabicus* – Arabian schismus  
\* *Schismus barbatus* – common Mediterranean grass  
\* *Setaria viridis* – green bristlegrass  
*Stipa cernua* – nodding needlegrass  
*Stipa coronata* – giant ricegrass  
*Stipa lepida* – foothill needlegrass  
\* *Stipa miliacea* var. *miliacea* – smilograss  
*Stipa pulchra* – purple needlegrass  
\* *Triticum aestivum* – common wheat

#### THEMIDACEAE – BRODIAEA FAMILY

- Bloomeria crocea* – common goldenstar  
*Dichelostemma capitatum* – bluedicks

#### TYPHACEAE – CATTAIL FAMILY

- Typha domingensis* – southern cattail  
*Typha latifolia* – broadleaf cattail

- \* signifies introduced (non-native) species

INTENTIONALLY LEFT BLANK

---

# **Appendix B**

## Wildlife Compendium





# Amphibian

## Frogs

### RANIDAE – TONGUELESS FROGS

- \* *Xenopus laevis* – African clawed frog

### HYLIDAE – TREEFROGS

*Pseudacris hypochondriaca* – Baja California treefrog

## Toads

### BUFONIDAE – TRUE TOADS

*Anaxyrus boreas* – western toad

# Bird

## Blackbirds, Orioles, and Allies

### ICTERIDAE – BLACKBIRDS

*Agelaius phoeniceus* – red-winged blackbird

*Agelaius tricolor* – tricolored blackbird

*Euphagus cyanocephalus* – Brewer's blackbird

*Icteria virens* – yellow-breasted chat

*Icterus bullockii* – Bullock's oriole

*Icterus cucullatus* – hooded oriole

*Xanthocephalus xanthocephalus* – yellow-headed blackbird

- \* *Molothrus ater* – brown-headed cowbird

## Bushtits

### AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

*Psaltiriparus minimus* – bushtit

## Cardinals, Grosbeaks, and Allies

### CARDINALIDAE – CARDINALS AND ALLIES

*Passerina amoena* – lazuli bunting

*Passerina caerulea* – blue grosbeak

*Passerina cyanea* – Indigo bunting

*Pheucticus melanocephalus* – black-headed grosbeak

*Piranga ludoviciana* – western tanager

## Falcons

### FALCONIDAE – CARACARAS AND FALCONS

*Falco mexicanus* – prairie falcon

*Falco sparverius* – American kestrel

## Finches

### FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

*Haemorhous mexicanus* – house finch

*Haemorhous purpureus* – purple finch

*Spinus lawrencei* – Lawrence's goldfinch

*Spinus psaltria* – lesser goldfinch

*Spinus tristis* – American goldfinch

## Flycatchers

### TYRANNIDAE – TYRANT FLYCATCHERS

*Contopus cooperi* – olive-sided flycatcher

*Contopus sordidulus* – western wood-pewee

*Empidonax difficilis* – Pacific-slope flycatcher

*Empidonax hammondi* – Hammond's flycatcher

*Empidonax oberholseri* – dusky flycatcher

*Empidonax traillii* – willow flycatcher

*Myiarchus cinerascens* – ash-throated flycatcher

*Sayornis nigricans* – black phoebe

*Sayornis saya* – Say's phoebe

*Tyrannus verticalis* – western kingbird

*Tyrannus vociferans* – Cassin's kingbird

## Goatsuckers

### CAPRIMULGIDAE – GOATSUCKERS

*Chordeiles acutipennis* – lesser nighthawk

## Hawks

### ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

- Accipiter cooperii* – Cooper's hawk
- Buteo jamaicensis* – red-tailed hawk
- Buteo lineatus* – red-shouldered hawk
- Buteo swainsoni* – Swainson's hawk
- Elanus leucurus* – white-tailed kite

## Hérons and Bitterns

### ARDEIDAE – HERONS, BITTERNs, AND ALLIES

- Ardea alba* – great egret
- Ardea herodias* – great blue heron
- Butorides virescens* – green heron
- Egretta thula* – snowy egret
- Nycticorax nycticorax* – black-crowned night-heron

## Hummingbirds

### TROCHILIDAE – HUMMINGBIRDS

- Archilochus alexandri* – black-chinned hummingbird
- Calypte anna* – Anna's hummingbird
- Calypte costae* – Costa's hummingbird
- Selasphorus rufus* – rufous hummingbird
- Selasphorus sasin* – Allen's hummingbird

## Ibises and Spoonbills

### THRESKIORNITHIDAE – IBISES AND SPOONBILLS

- Plegadis chihi* – white-faced ibis

## Jays, Magpies, and Crows

### CORVIDAE – CROWS AND JAYS

- Aphelocoma californica* – California scrub-jay
- Corvus brachyrhynchos* – American crow
- Corvus corax* – common raven

## Kingfishers

### ALCEDINIDAE – KINGFISHERS

*Megaceryle alcyon* – belted kingfisher

## Kinglets

### REGULIDAE – KINGLETS

*Regulus calendula* – ruby-crowned kinglet

## Larks

### ALAUDIDAE – LARKS

*Eremophila alpestris* – horned lark

## Mockingbirds and Thrashers

### MIMIDAE – MOCKINGBIRDS AND THRASHERS

*Mimus polyglottos* – northern mockingbird

*Toxostoma redivivum* – California thrasher

## New World Quail

### ODONTOPHORIDAE – NEW WORLD QUAIL

*Callipepla californica* – California quail

## New World Vultures

### CATHARTIDAE – NEW WORLD VULTURES

*Cathartes aura* – turkey vulture

## Nuthatches

### SITTIDAE – NUTHATCHES

*Sitta carolinensis* – white-breasted nuthatch

## Old World Sparrows

### PASSERIDAE – OLD WORLD SPARROWS

\* *Passer domesticus* – house sparrow

## Old World Warblers and Gnatcatchers

### SYLVIIDAE – SYLVIID WARBLERS

*Poliophtila caerulea* – blue-gray gnatcatcher

*Poliophtila californica californica* – coastal California gnatcatcher

## Owls

### TYTONIDAE – BARN OWLS

*Tyto alba* – barn owl

### STRIGIDAE – TYPICAL OWLS

*Athene cunicularia* – burrowing owl

*Bubo virginianus* – great horned owl

## Pigeons and Doves

### COLUMBIDAE – PIGEONS AND DOVES

*Streptopelia chinensis* – spotted dove

*Zenaida macroura* – mourning dove

\* *Columba livia* – rock pigeon (rock dove)

\* *Streptopelia decaocto* – Eurasian collared-dove

## Rails, Gallinules, and Coots

### RALLIDAE – RAILS, GALLINULES, AND COOTS

*Fulica americana* – American coot

*Gallinula galeata* – common gallinule

*Porzana carolina* – sora

## Roadrunners and Cuckoos

### CUCULIDAE – CUCKOOS, ROADRUNNERS, AND ANIS

*Geococcyx californianus* – greater roadrunner

## Shorebirds

### RECURVIROSTRIDAE – STILTS AND AVOCETS

*Himantopus mexicanus* – black-necked stilt



## CHARADRIIDAE – LAPWINGS AND PLOVERS

*Charadrius vociferus* – killdeer

## SCOLOPACIDAE – SANDPIPERS, PHALAROPES, AND ALLIES

*Actitis macularius* – spotted sandpiper

*Calidris mauri* – western sandpiper

*Calidris minutilla* – least sandpiper

*Gallinago delicata* – Wilson's snipe

*Limnodromus scolopaceus* – long-billed dowitcher

*Tringa melanoleuca* – greater yellowlegs

## Shrikes

### LANIIDAE – SHRIKES

*Lanius ludovicianus* – loggerhead shrike

## Silky Flycatchers

### PTILOGONATIDAE – SILKY-FLYCATCHERS

*Phainopepla nitens* – phainopepla

## Starlings and Allies

### STURNIDAE – STARLINGS

\* *Sturnus vulgaris* – European starling

## Swallows

### HIRUNDINIDAE – SWALLOWS

*Hirundo rustica* – barn swallow

*Petrochelidon pyrrhonota* – cliff swallow

*Stelgidopteryx serripennis* – northern rough-winged swallow

*Tachycineta bicolor* – tree swallow

*Tachycineta thalassina* – violet-green swallow

## Swifts

### APODIDAE – SWIFTS

*Aeronautes saxatalis* – white-throated swift

*Chaetura vauxi* – Vaux's swift

## Terns and Gulls

### LARIDAE – GULLS, TERNS, AND SKIMMERS

*Larus californicus* – California gull

*Larus occidentalis* – western gull

## Thrushes

### TURDIDAE – THRUSHES

*Catharus guttatus* – hermit thrush

*Catharus ustulatus* – Swainson's thrush

*Sialia mexicana* – western bluebird

*Turdus migratorius* – American robin

## Titmice

### PARIDAE – CHICKADEES AND TITMICE

*Baeolophus inornatus* – oak titmouse

## Verdin

### REMIZIDAE – PENDULINE TITS AND VERDINS

*Auriparus flaviceps* – verdin

## Vireos

### VIREONIDAE – VIREOS

*Vireo bellii pusillus* – least Bell's vireo

*Vireo gilvus* – warbling vireo

*Vireo cassinii* – Cassin's vireo

## Wagtails and Pipits

### MOTACILLIDAE – WAGTAILS AND PIPITS

*Anthus rubescens* – American pipit

## Waterfowl

### ANATIDAE – DUCKS, GEESE, AND SWANS

*Anas platyrhynchos* – mallard

*Branta canadensis* – Canada goose

*Spatula cyanoptera* – cinnamon teal

## Waxwings

### BOMBYCILLIDAE – WAXWINGS

*Bombycilla cedrorum* – cedar waxwing

## Wood Warblers and Allies

### PARULIDAE – WOOD-WARBLERS

*Cardellina pusilla* – Wilson’s warbler

*Geothlypis tolmiei* – MacGillivray’s warbler

*Geothlypis trichas* – common yellowthroat

*Oreothlypis celata* – orange-crowned warbler

*Oreothlypis ruficapilla* – Nashville warbler

*Setophaga coronata* – yellow-rumped warbler

*Setophaga nigrescens* – black-throated gray warbler

*Setophaga occidentalis* – hermit warbler

*Setophaga petechia* – yellow warbler

*Setophaga townsendi* – Townsend’s warbler

## Woodpeckers

### PICIDAE – WOODPECKERS AND ALLIES

*Colaptes auratus* – northern flicker

*Melanerpes formicivorus* – acorn woodpecker

*Dryobates nuttallii* – Nuttall’s woodpecker

*Dryobates pubescens* – downy woodpecker

*Dryobates villosus* – hairy woodpecker

## Wrens

### TROGLODYTIDAE – WRENS

*Salpinctes obsoletus* – rock wren

*Troglodytes aedon* – house wren

*Thryomanes bewickii* – Bewick’s wren

## Wrentits

### TIMALIIDAE – BABBLERS

*Chamaea fasciata* – wrentit

## Waxbills

### ESTRILDIDAE – WAXBILLS

- \* *Lonchura punctulata* – scaly-breasted munia

## New World Sparrows

### PASSERELLIDAE – NEW WORLD SPARROWS

*Aimophila ruficeps canescens* – Southern California rufous-crowned sparrow

*Chondestes grammacus* – lark sparrow

*Melospiza lincolnii* – Lincoln's sparrow

*Melospiza melodia* – song sparrow

*Melospiza crissalis* – California towhee

*Passerculus sandwichensis* – savannah sparrow

*Passerella iliaca* – fox sparrow

*Pipilo maculatus* – spotted towhee

*Pooecetes gramineus* – vesper sparrow

*Spizella pallida* – Clay-colored sparrow

*Spizella passerina* – chipping sparrow

*Zonotrichia leucophrys* – white-crowned sparrow

## Fish

## Other Bony Fishes

### COTTIDAE – SCULPINS

*Cottus asper* – prickly sculpin

### GASTEROSTEIDAE – STICKLEBACKS

*Gasterosteus aculeatus williamsoni* – unarmored threespine stickleback

### POECILIIDAE – POECILIIDS

- \* *Gambusia affinis* – mosquitofish

## Suckers

### CATOSTOMIDAE – SUCKERS

*Catostomus santaanae* – Santa Ana sucker

## Minnows and Carps

### CYPRINIDAE – MINNOWS AND CARPS

*Gila orcuttii* – arroyo chub

*Mylopharodon conocephalus*—hardhead

\* *Notemigonus crysoleucas* – golden shiner

## Sunfishes and Freshwater Basses

### CENTRACHIDAE – MINNOWS AND CARPS

\* *Micropterus salmoides* – largemouth bass

## Invertebrate

### Bees

#### APIDAE – BEES

*Bombus crotchii* – Crotch's bumble bee

*Bombus fervidus* – yellow bumble bee

*Bombus vosnesenskii* – Vosnesensky bumble bee

### Butterflies

#### LYCAENIDAE – BLUES, HAIRSTREAKS, AND COPPERS

*Icaricia acmon acmon* – Acmon blue

#### NYMPHALIDAE – BRUSH-FOOTED BUTTERFLIES

*Nymphalis antiopa* – mourning cloak

*Vanessa cardui* – painted lady

#### PIERIDAE – WHITES AND SULFURS

*Pieris rapae* – cabbage white

*Pontia protodice* – checkered white

## Mammal

### Canids

#### CANIDAE – WOLVES AND FOXES

*Canis latrans* – coyote



## Cats

### FELIDAE – CATS

*Lynx rufus* – bobcat

## Hares and Rabbits

### LEPORIDAE – HARES AND RABBITS

*Sylvilagus audubonii* – desert cottontail

## Squirrels

### SCIURIDAE – SQUIRRELS

*Sciurus griseus* – western gray squirrel

*Spermophilus (Otospermophilus) beecheyi* – California ground squirrel

## Ungulates

### CERVIDAE – DEERS

*Odocoileus hemionus* – mule deer

## Raccoons

### PROCYONIDAE – RACCOONS AND RELATIVES

*Procyon lotor* – raccoon

## Reptile

## Lizards

### PHRYNOSOMATIDAE – IGUANID LIZARDS

*Sceloporus occidentalis* – western fence lizard

*Uta stansburiana* – common side-blotched lizard

### TEIIDAE – WHIPTAIL LIZARDS

*Aspidoscelis tigris stejnegeri* – San Diegan tiger whiptail

## Snakes

### COLUBRIDAE – COLUBRID SNAKES

*Thamnophis hammondi* – two-striped gartersnake

\* signifies introduced (non-native) species

---

## **Appendix C**

### Plant and Wildlife Species Potential to Occur



# Introduction

This appendix includes three tables addressing special-status plant and wildlife species that have been observed, or have the potential to occur, within the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP) area. These tables are reproduced from the 2017 State-Certified Environmental Impact Report (EIR) (Corps and CDFG 2010) without change, except for the addition of a new column on the right, which explains whether the species is covered in the Valencia Commerce Center (VCC) Project Supplemental Biological Resources Technical Report (VCC Supplemental Bio Report) and any updated information specific to the VCC Planning Area, which is formatted in boldface type. A references section for all sources cited in this appendix is provided after the tables.

Table C-1, Special-Status Plant Species Observed in the RMDP/SCP Area, lists all special-status plant species identified in the 2017 State-Certified EIR as “observed within the Project Area” (Corps and CDFG 2010, Table 4.5-7, Special-Status Plant Species Observed within the Project Area). For each species, new information in the table addresses any change in status or name (the current status or name is shown in boldface), whether the species has been observed during the extensive focused botanical surveys of the VCC Project Site (in bold), and whether the species is addressed in the VCC Supplemental Bio Report.<sup>1</sup> The VCC Supplemental Bio Report and this appendix do not include discussion of any additional plant species identified as “potentially occurring” (Corps and CDFG 2010, Table 4.5-12), given that several years of focused surveys have been conducted since the 2017 State-Certified EIR was prepared and either none of these species were identified on site and the species are therefore presumed to be absent, or, if found, they are addressed as species observed within the VCC Project Site.

Table C-2, Special-Status Wildlife Species Observed in the RMDP/SCP Area, lists all special-status wildlife species identified in the 2017 State-Certified EIR as “observed on site” (Corps and CDFG 2010, Table 4.5-9, Special-Status Wildlife Species Observed on Site). For each species, new information in the table addresses any change in status or name (the current status or name is shown in boldface), whether or not the species has been observed on the VCC Project Site (in boldface), and whether the species is addressed in the VCC Supplemental Bio Report.<sup>2</sup>

Table C-3, Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area, lists all special-status wildlife species identified in the 2017 State-Certified EIR as having “potential to occur on site” (Corps and CDFG 2010, Table 4.5-10, Special-Status Wildlife Species with Potential to Occur on Site). As with Table C-2, for each species, new information in Table C-3 addresses any change in status or name (the current status or name is shown in boldface), whether or not the species has been observed on the VCC Project Site (in boldface), and whether or not the species is addressed in the VCC Supplemental Bio Report.

Plant and animal species that were identified in the 2017 State-Certified EIR as “not expected to occur” are not addressed in this appendix or in the VCC Supplemental Bio Report.

---

<sup>1</sup> The VCC Supplemental Bio Report addresses special-status plant species that are known to occur within the VCC Project Site (Section 5.3.1, Special-Status Plant Species).

<sup>2</sup> For wildlife species known to occur, or with the potential to occur, within the VCC Project Site, criteria for inclusion in the supplemental report include the following: “(1) the species is state and/or federally listed as threatened or endangered; (2) the species has been listed, proposed for listing, or petitioned for listing as threatened or endangered since its analysis in the 2017 State-Certified EIR; or (3) updated scientific studies suggest that the species may be more sensitive than it was considered in the 2017 State-Certified EIR or the species is otherwise considered to have heightened sensitivity” (Section 5.3.2, Special-Status Wildlife Species).



INTENTIONALLY LEFT BLANK

Table C-1. Special-Status Plant Species Observed in the RMDP/SCP Area

Scientific Name	Common Name	Status Federal/ State	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Occurrence on Site	Is Species Addressed in the VCC Supplemental Bio Report?
<i>Artemisia tridentata</i> ssp. <i>parishii</i>	Parish's sagebrush	None/ None	None	big sagebrush scrub on the margins of drainage channels/ perennial shrub/ November–August	<p>Parish's sagebrush was observed in the Salt Creek watershed and the Specific Plan area in 2006 (Dudek &amp; Associates 2006B, 2006C). Plants were found primarily intermixed with big sagebrush. This species has not been observed within the VCC planning area (Dudek &amp; Associates 2002C, 2004B, 2004G, 2006H, 2006K; Dudek 2007H). This species was not observed in the Entrada planning area (Dudek &amp; Associates 2002B, 2004E, 2004H, 2006E, 2006G, 2006J; Dudek 2007G), but there is suitable big sagebrush scrub habitat on site. Co-occurs with <i>Artemisia tridentata</i> ssp. <i>tridentata</i>. Considered special status by the County of Los Angeles.</p> <p><b>No suitable big sagebrush scrub habitat within the VCC Project Site.</b></p>	No; no suitable habitat for Parish's sagebrush on site.
<i>Calochortus clavatus</i> var. <i>gracilis</i>	slender mariposa lily	None/ None	1B; 1B.2	chaparral and coastal sage scrub/perennial herb (geophyte)/ March–May	<p>Slender mariposa lily was observed within the VCC area in 2004 and 2005 (Dudek &amp; Associates 2004G, 2006H). Plants were found primarily on northwest- and southwest-facing ridges and slopes located just east of Hasley Canyon. Within the Entrada area, slender mariposa lily was recorded annually from 2003 to 2005 (Dudek &amp; Associates 2004E, 2004H, 2006G) throughout the area, occurring primarily on south-facing slopes (70% of all individuals identified) and, to a lesser extent, on southeast-facing slopes (20% of all individuals identified). Slender mariposa lily was documented annually within the Specific Plan area from 2003 to 2006 (Dudek &amp; Associates 2004C, 2004F, 2006F, 2006I), where it was found primarily on east-, northeast-, and southwest-facing ridges and slopes in the following areas: the San Martinez Grande Canyon, Chiquito Canyon, Off-Haul Canyon, Potrero Canyon, Long Canyon, Middle Canyon, Grapevine Mesa, and Airport Mesa areas as well as the lower Castaic Creek area. Slender mariposa lily was observed primarily in the northern portion and at the southwestern end of the Salt Creek area as well as along the southern end of the High Country SMA. Within the High Country SMA and Salt Creek area, slender mariposa lily was found primarily on east-, northeast-, and southwest-facing ridges and slopes. Observations were made within the High Country SMA and Salt Creek area from 2003 through 2006 (Dudek &amp; Associates 2004F, 2004I, 2006B, 2006F). Slender mariposa lily was observed in the Entrada site fireworks area in 2004, 2005, and 2006 (FLx 2004B, 2005, 2006A). The estimated number of individuals in the study area ranged from 693 in 2006 to 65,297 in 2004. CNDDDB records also exist for mouth of Pico Canyon.</p> <p><b>Based on surveys conducted in 2015, 2019, and 2022, the total cumulative occupied footprint within the VCC Project Site has increased from 3.3 acres when the 2017 State-Certified EIR was prepared to 5.0 acres.<sup>a</sup></b></p>	Yes; present on VCC Project Site.
<i>Calochortus plummerae</i>	Plummer's mariposa lily	None/ None	4; 4.2	chaparral, coastal sage scrub, cismontane woodland, grasslands on rocky granitic substrate/perennial herb (geophyte)/ May–July	<p>Three polygons and two point locations of Plummer's mariposa lily were mapped within the High Country SMA in 2006, with an estimated number of approximately 78 individuals (Dudek &amp; Associates 2006B). Observed on steep southwest-facing slopes in the High Country SMA. No CNDDDB records exist for the Project area quads or adjacent quads; however, records exist for the Santa Susana Mountains and Simi Hills.</p> <p><b>This species has not been observed during comprehensive botanical surveys conducted on the VCC Project Site in both 2015 and 2019.</b></p>	No; does not occur on site based on results of focused surveys.

Table C-1. Special-Status Plant Species Observed in the RMDP/SCP Area

Scientific Name	Common Name	Status Federal/ State	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Occurrence on Site	Is Species Addressed in the VCC Supplemental Bio Report?
<i>Calochortus weedii</i> var. <i>vestus</i> <i>Calochortus fimbriatus</i> <sup>b</sup>	late-flowered mariposa lily	None/ None	1B: 1B.3	chaparral, cismontane and riparian woodland/ perennial herb (geophyte)/ June–August	Three polygons of late-flowered mariposa lily were mapped within the High Country SMA in 2003, with an estimated number of approximately 250 individuals (Dudek & Associates 2004I). Observed in chaparral and walnut woodlands at the head of the Salt Creek drainage on the crest of the Santa Susana Mountains. No CNDDDB records exist for the Project area quads or adjacent quads.  <b>This species has not been observed during comprehensive botanical surveys conducted on the VCC Project Site in both 2015 and 2019.</b>	No; does not occur on site based on results of focused surveys.
<i>Calystegia peirsonii</i>	Peirson’s morning-glory	None/ None	4: 4.2	chaparral, coastal sage scrub, cismontane woodland, grassland/ perennial herb/ May–June	Peirson’s morning-glory was observed within the Entrada planning area in 2002, 2003, 2004, and 2005 (Dudek & Associates 2002B, 2004C, 2004E, 2004H, 2006G). This species was observed within the VCC planning area in 2003, 2004, 2005, and 2006 (Dudek & Associates 2004B, 2004G, 2006H, 2006K). Within the Specific Plan area, Peirson’s morning-glory was recorded annually from 2002 to 2006 (Dudek & Associates 2002A, 2004C, 2004F, 2006F, 2006I; FLx 2002A). Observations of this species were made within the High Country SMA and Salt Creek area in 2003 and 2006 (Dudek & Associates 2004I, 2006B). This species is widespread on site and was observed on ridges and slopes, weakly climbing over chaparral, coastal scrub, and grasslands throughout the Specific Plan, VCC, and Entrada planning areas.  <b>Peirson’s morning-glory was observed during surveys in 2019.</b>	Yes; present on VCC Project Site.
<i>Cercocarpus betuloides</i> var. <i>blancheae</i>	island mountain- mahogany	None/ None	4; 4.3	chaparral, closed-cone coniferous forest/evergreen shrub/ February–May	Island mountain-mahogany was observed within the Entrada planning area in 2003, 2004, and 2005 (Dudek & Associates 2002B, 2004E, 2004H). Within the Specific Plan area, island mountain-mahogany was recorded annually from 2002 to 2006 (Dudek & Associates 2002A, 2004C, 2004F, 2006F, 2006I). Observations of this species were made within the Salt Creek area in 2003 (Dudek & Associates 2004I). In all three areas, plants were found primarily in chaparral at the base of north-facing slopes. Occurrences of this species were not mapped due to its low sensitivity status (CNPS List 4.3). This species has not been observed within the VCC planning area (Dudek & Associates 2002C, 2004B, 2004G, 2006H, 2006K; Dudek 2007H).  <b>This species was not observed during comprehensive botanical surveys conducted on the VCC Project Site in 2015 and 2019.</b>	No; does not occur on site based on results of focused surveys.
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	None/SE	1B; 1B.1	coastal sage scrub, sandy soils/ annual herb/April–June	In each year from 2002 through 2007, SFVS has been observed in four general areas within the Specific Plan area: Airport Mesa, Grapevine Mesa, Potrero Canyon, and San Martinez Grande Canyon (Dudek & Associates 2002A, 2004C, 2004F, 2006F, 2006I; Dudek 2007F). This species has also been observed from 2002 through 2007 in several areas at the Entrada planning area (Dudek & Associates 2002B, 2004E, 2004H, 2006G, 2006J; Dudek 2007G; FLx 2004B, 2005, 2006A), and on the western side of the VCC planning area, just east of Hasley Canyon (Dudek & Associates 2002C, 2004B, 2004G, 2006H, 2006K; Dudek 2007H). An estimated 760 to 7.4 million individuals were observed between the 2002 and 2007 growing seasons.  <b>Estimates of the number of spineflower individuals on the VCC Project Site conducted under the SCP have ranged from 336 individuals in 2012 to 21,638 individuals in 2015.</b>	Yes; present on VCC Project Site.

Table C-1. Special-Status Plant Species Observed in the RMDP/SCP Area

Scientific Name	Common Name	Status Federal/ State	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Occurrence on Site	Is Species Addressed in the VCC Supplemental Bio Report?
<i>Gnaphalium</i> sp. nova <i>Pseudognaphalium</i> <i>leucocephalum</i> <sup>c</sup>	undescribed everlasting <b>white rabbit-tobacco</b> <sup>c</sup>	None/ None	None; <b>2B.2</b>	secondary alluvial benches/ perennial herb/late summer	Within the VCC planning area, individuals were observed in 2004, 2005, and 2007 in the portion of Castaic Creek west of I5 Bridge and east of Commerce Center Drive on secondary alluvial benches (Dudek & Associates 2004G, 2006H; Causey 2007). Two main populations and a number of smaller populations of this undescribed species were documented within the Specific Plan area during the 2003, 2004, 2005, and 2007 field seasons (Dudek & Associates 2004C, 2004F, 2006F; Causey 2007; FLx 2004B). These occurrences are primarily on secondary alluvial benches in the Santa Clara River near the mouth of Long Canyon and where Castaic Creek and the Santa Clara River converge, south of SR-126.  <b>There were approximately 7,000 to 9,000 individuals recorded on the VCC Project Site in 2015. In 2019, there were approximately 3,410 individuals within 3.2 acres.</b>	Yes; present on VCC Project Site.
<i>Helianthus</i> sp. nova <i>Helianthus inexpectatus</i> <sup>d</sup>	undescribed sunflower <b>Newhall sunflower</b> <sup>d</sup>	None/ None	None; <b>1B.1</b>	seeps/perennial herb/mid- summer	A population of 10 undescribed sunflowers was found in 2002 at Middle Canyon Spring on the south side of the Santa Clara River between Middle Canyon and San Jose Flats within the Specific Plan development area (Dudek & Associates 2002A).  <b>Not observed on the VCC Project Site during focused surveys; no suitable seep habitat occurs on site.</b>	No; does not occur on site based on results of focused surveys.
<i>Juglans californica</i>	Southern California black walnut	None/ None	<b>4: 4.2</b>	chaparral, cismontane woodland, coastal sage scrub, alluvial scrub/deciduous tree/ March–May	Southern California black walnut was observed within the Entrada planning area in 2004 and 2005 (Dudek & Associates 2004H, 2006G). Within the Specific Plan area, southern California black walnut was recorded annually in 2002, 2003, and 2004 (Dudek & Associates 2002A, 2004C, 2004F; FLx 2004A). Observations of this species were made within the High Country SMA and Salt Creek area in 2003 and 2006 (Dudek & Associates 2004I, 2006B) and within the VCC planning area in 2004 and 2005 (Dudek & Associates 2004G and 2006H). Within the Specific Plan area, southern California black walnut dominates California walnut woodland and is found as an occasional component of chaparral, coastal scrub, and oak woodland (Dudek & Associates 2002A, 2004C, 2004F, 2004I, 2006B). Within the VCC planning area, an individual southern California black walnut occurs within southern cottonwood–willow riparian forest along the south side of Castaic Creek (Dudek & Associates 2004G and 2006H). Within the Entrada planning area, this species is found in chaparral, coastal scrub, and alluvial scrub (Dudek & Associates 2004H, 2006G).  <b>Four individual Southern California black walnuts were mapped just north of the agricultural field in the eastern portion of the VCC Project Site in 2015 and 2019.</b>	Yes; present on VCC Project Site.
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	None/ None	<b>4: 4.2</b>	coastal dunes, meadows, seeps, marshes, and swamps/perennial herb/May–June	Within the Specific Plan area, southwestern spiny rush individuals were observed annually from 2001 through 2006 (Dudek & Associates 2004C, 2004F, 2006F, 2006I; FLx 2002A, 2002B, 2004A). Southwestern spiny rush is known to occur in secondary channels of the floodplain of the Santa Clara River.  <b>This species does not occur on the VCC Project Site.</b>	No; does not occur on site based on results of focused surveys.

Table C-1. Special-Status Plant Species Observed in the RMDP/SCP Area

Scientific Name	Common Name	Status Federal/ State	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Occurrence on Site	Is Species Addressed in the VCC Supplemental Bio Report?
<i>Navarretia ojaiensis</i>	Ojai navarretia	None/ None	1B; 1B.1	grasslands and openings in California sagebrush scrub/ annual herb/May–July	<p>The Ojai navarretia species was located in surveys of the Salt Creek watershed (the majority of the High Country SMA and the Salt Creek area) conducted from April to July of 2003 (Dudek &amp; Associates 2004I). Two main populations totaling approximately 60,000 individuals were found growing on clay lenses with a gentle to moderate north-facing slope.</p> <p><b>This species does not occur on the VCC Project Site.</b></p>	No; does not occur on site based on results of focused surveys.
<i>Nemophila parviflora</i> var. <i>quercifolia</i>	oak-leaved nemophila	None/ None	4: 4.3	cismontane woodland, lower montane coniferous forest/ annual herb/May–June	<p>In 2003 and 2004, one occurrence of oak-leaved nemophila was found along a northeast-facing slope in an oak woodland east of Grapevine Mesa within the Specific Plan area (Dudek &amp; Associates 2004C, 2004F). This species has not been observed within the VCC planning area (Dudek &amp; Associates 2002C, 2004B, 2004G, 2006H, 2006K; Dudek 2007H) or within the Entrada planning area (Dudek &amp; Associates 2002B, 2004E, 2004H, 2006G, 2006J; Dudek 2007G).</p> <p><b>This species does not occur on the VCC Project Site.</b></p>	No; does not occur on site based on results of focused surveys.
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	mainland cherry hollyleaf cherry	None/ None	None	undifferentiated chaparral, big sagebrush scrub, and river wash/ perennial/March–May	<p>Mainland cherry was observed within the Entrada planning area as an occasional component of undifferentiated chaparral, big sagebrush scrub, and river wash in 2003, 2004, 2005, and 2006 (Dudek &amp; Associates 2004E, 2004H, 2006G, 2006J). Within the Specific Plan area, mainland cherry was recorded annually from 2001 through 2006 within undifferentiated chaparral, big sagebrush scrub, and river wash (Dudek &amp; Associates 2002A, 2004C, 2004F, 2006F, 2006I; FLx 2002A). Observations of this species were made within VCC in 2003, 2004, 2005, and 2006 within undifferentiated chaparral, big sagebrush scrub, and river wash (Dudek &amp; Associates 2004B, 2004G, 2006H, 2006K).</p> <p><b>In 2015, a single mainland cherry individual with a diameter at breast height greater than 1 inch was documented on the VCC Project Site (Dudek 2016A).</b></p>	Yes; present on VCC Project Site.
<i>Quercus</i> spp., including <i>Quercus agrifolia</i> , <i>Quercus berberidifolia</i> , <i>Quercus lobata</i> , <i>Quercus</i> x. <i>alvordiana</i> , and <i>Quercus wislizeni</i>	oak trees including coast live oak, scrub oak, valley oak, Alvord oak, and interior live oak	None/ None	None	southern coast live oak riparian forest, coast live oak woodland, mixed oak woodland, valley oak/grass, and valley oak woodland /perennial shrub/ tree/Spring	<p>In total, 3,766 trees were inventoried and assessed within the development portion of the Specific Plan, VCC, and Entrada planning areas. The majority of these trees are native coast live oak trees, which are primarily associated with drainage bottoms, north-facing slopes, and along secondary drainages on non-north-facing slopes. Present at lower, but substantial, levels are valley oak trees are strongly associated with open grassland areas on gentler slopes and valley bottoms. Preserved trees outside the GPS inventory areas were estimated with sampling and regression analysis and total 156 trees in the River Corridor SMA (Impact Sciences 2006B, 2006C, 2006D; County of Los Angeles 1999; Land Design Consultants 2007; Richard Johnson &amp; Associates 2007), 13,732 trees in the High Country SMA and 5,640 trees in the Salt Creek area (Dudek 2007D).</p> <p><b>According to updates to the oak tree inventory in 2021, a total of 28 oak trees, including 1 heritage oak, occur on the VCC Project Site (Carlberg Associates 2021).<sup>3</sup></b></p>	Yes; present on VCC Project Site.

**Notes:** CRPR = California Rare Plant Rank; VCC = Valencia Commerce Center.  
Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take a bird’s eye or aerial view when ranking sensitive elements rather than simply counting element occurrences.

<sup>3</sup> An additional six oak trees are dead, according to the oak inventory, including four valley oaks and two valley oak hybrids (Carlberg Associates 2021). No mitigation is proposed for dead trees, so they are not included in this analysis.



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

- <sup>a</sup> As noted in the 2017 State-Certified EIR, detection of individuals emerged from bulbs is related to annual environmental conditions such as rainfall amounts, timing, and extent of browsing by rodents, deer, and rabbits prior to flowering. By definition, cumulative acreage of occupied habitat increases when the species is observed in a new location but does not decrease even when the species is no longer observed in a location where it was formerly known.
- <sup>b</sup> ***Calochortus weedii* var. *vestus* is now recognized as *C. fimbriatus* (CNPS 2022; Jepson Flora Project 2022A).**
- <sup>c</sup> **White rabbit-tobacco in the vicinity of the Entrada South Project Site was originally reported as undescribed everlasting (*Gnaphalium* sp. *nova*). It was believed that plants in Southern California are distinct from those farther east and should be considered a separate species due to several differences in plant structure (stature, pubescence, and phyllary characters; Dudek & Associates 2004F) and its geographic distribution. However, the plants more recently have been described as white rabbit-tobacco (*Pseudognaphalium leucocephalum*) by David Keil, the curator of vascular plants at California Polytechnic State University, San Luis Obispo, and author of the Asteraceae treatment in the Jepson Flora Project (2022B).**
- <sup>d</sup> **Undescribed sunflower (*Helianthus* sp. *nova*) has since been described as Newhall sunflower (*Helianthus inexpectatus*).**

Legend

- SE: State listed as endangered
- CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
- CRPR 2A: Plants presumed extirpated in California but common elsewhere
- CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
- CRPR 3: Review List: Plants about which more information is needed
- CRPR 4: Watch List: Plants of limited distribution
- .1 Seriously threatened in California (more than 80% of occurrences threatened/high degree and immediacy of threat)
- .2 Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
- .3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
Insects (Butterflies)					
monarch butterfly (wintering sites) <i>Danaus plexippus</i>	— FC	***	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	Individual monarchs have been observed within the Newhall Ranch Specific Plan area (NRSP), including the High Country (Compliance Biology 2004A, 2005; Dudek & Associates 2006B) and Entrada (Compliance Biology 2004C); due to site’s distance from coast, it is unlikely that the Project site would be used by large numbers of overwintering adults (Compliance Biology 2004A). Not expected to occur in Salt Creek area or VCC.  <b>The VCC Project Site is not known to support winter roosting by monarch butterfly.</b>	No; the status of the species on the VCC Project Site has not changed, and the species is not expected to occur in winter roosts.
San Emigdio blue butterfly <i>Plebulina emigdionis</i>	—	***	Often near streambeds, washes, or alkaline areas. Associated with four-wing saltbush ( <i>Atriplex canescens</i> ) and quail brush ( <i>Atriplex lentiformis</i> ).	A colony was observed in Potrero Canyon in NRSP in association with <i>Atriplex lentiformis</i> plants (Compliance Biology 2004A and 2005). Suitable habitat occurs within Salt Creek, VCC, and Entrada.  <b>Although suitable habitat is present, the San Emigdio blue butterfly has not been observed on the VCC Project Site.</b>	No; the status of the species on the VCC Project Site has not changed, and the species is not expected to occur.
Mollusks					
<i>Pyrgulopsis castaicensis</i> n. sp.	—	—	Occupies groundwater-dependent spring, occurring on muddy and gravelly substrate and in water of depths up to several centimeters.	This species was observed on the project site in 2006 at the Middle Canyon Spring complex (Dudek 2007C). Does not occur on the Entrada South Project Site.  <b>This species has not been detected on the VCC Project Site.</b>	No; the species is not listed and is not proposed or a candidate for listing, and its status on the VCC Project Site has not changed.
Fish					
Santa Ana sucker <i>Catostomus santaanae</i>	FT	CSC	Occupies small- to medium-sized perennial streams with water ranging in depth from a few centimeters to a meter or more.	This species is known to occur in the Santa Clara River and has been sparsely observed in the portion of the river within NRSP (CDFG 2007A; Impact Sciences 2003A), and within or adjacent to Entrada (SMEA 1995A; Haglund and Baskin 2000; Impact Sciences 2003B). Population in the Santa Clara River system is not listed as threatened because it is introduced to the area. Not expected to occur in Salt Creek or VCC.  <b>An aquatic habitat assessment of Castaic Creek in 2019 reaffirmed that habitat within VCC is not suitable for Santa Ana sucker in most years (Compliance Biology 2019). The species was observed during fish surveys in 2024, but habitat is present only sporadically (Compliance Biology 2024).</b>	Yes; the species likely occurs only occasionally, as habitat is often not present, but connectivity with the Santa Clara River means individuals could be present during VCC Project activities.
unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	FE	CE, CFP	Slow-moving and backwater areas.	This species is known to occur in the Santa Clara River and has been observed evenly distributed in the portion of the river within NRSP (Aquatic Consulting Services 2002B, 2002C; Impact Sciences 2003A, 2003B; ENTRIX 2006B) and within Entrada (Aquatic Consulting Services 2002D; SMEA 1995A; Haglund and Baskin 2000; Impact Sciences 2003B). It was also observed in Castaic Creek (Haglund 1989).  <b>Despite the historic observation of unarmored threespine stickleback there, Castaic Creek and Hasley Canyon, and therefore the VCC Project Site, were not considered suitable habitat in the 2017 State-Certified EIR, and this conclusion was reaffirmed by a 2019 habitat assessment and negative surveys in 2024 (Compliance Biology 2019, 2024).</b>	Yes; although the species is not expected to occur within the VCC Project Site due to lack of perennial aquatic habitat, connectivity with the Santa Clara River means individuals could be present during VCC Project activities.
arroyo chub <i>Gila orcutti</i>	—	CSC	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 abundantly in the portion of the river within NRSP (Aquatic Consulting Services 2002B, 2002C; Impact Sciences 2003A, 2003B; ENTRIX 2006B), within Entrada (Aquatic Consulting Services 2002D; SMEA 1995A; Haglund and Baskin 2000), and within VCC (Haglund 1989). Not expected to occur in Salt Creek.  <b>Although the species was present historically, the 2017 State-Certified EIR considered habitat in Castaic Creek and Hasley Canyon to be unsuitable. This conclusion was</b>	Yes; although the species occurs only sporadically within the VCC Project Site due to lack of perennial aquatic habitat, connectivity with the Santa Clara River means individuals could be present during VCC Project activities.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
				reaffirmed by a 2019 habitat assessment, but the species was recorded during fish surveys in 2024 (Compliance Biology 2019, 2024).	
Amphibians					
arroyo toad <i>Bufo californicus</i>	FE	CSC	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.	Numerous focused surveys have been conducted for the arroyo toad throughout the Project site and along the Santa Clara River east of the Project site. Surveys include SMEA (1995A); RECON (1999A); Aquatic Consulting Services (2002A, 2002B, 2002C, 2002D); Nancy Sandburg (2001); Impact Sciences (2001, 2002); Ecological Sciences (2003A, 2003B, 2003C, 2003D, 2003E, 2003F, 2004A, 2004B, 2004C, 2004D); Compliance Biology 2004D). Adult toads have been documented in limited numbers upstream of the Project area along the Santa Clara River and tributaries (Impact Sciences 2001; Sandburg 2001). 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; 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.  Although federally designated critical habitat occurs within the VCC Project Site, this species has not been recorded there.	Yes; although the species is not expected to occur within the VCC Project Site due to lack of suitable habitat, the site contains designated critical habitat for the species.
western spadefoot toad western spadefoot <i>Spea hammondi</i>	— FPT	CSC	Open areas in lowland grasslands, chaparral, and pine–oak woodlands; requires temporary rain pools that last approximately three weeks.	Two pools were found with western spadefoot toad tadpoles, one near the western boundary of Mission Village and the other near Grapevine Mesa (Compliance Biology 2006C). Western spadefoot toad eggs and tadpoles were observed in VCC in an area that has now been developed (Dave Crawford, pers. comm., 2007; Compliance Biology, Inc. 2004G). Upstream of the Commerce Center Bridge, one western spadefoot toad was observed in an isolated pool (Aquatic Consulting Services 2002A). Seasonal backwater areas within NRSP, as well as seasonal stock ponds and depressions within existing dirt roads, provide breeding habitat. Given documented occurrences of the species at several on-site locations, and the presence of suitable breeding habitat, the species could occupy additional suitable on-site habitats.  Focused surveys in 2024 were negative for this species and for suitable ponding. This species has not been detected on the VCC Project Site.	Yes; although the status of the species has remained unchanged, and suitability of habitat remains the same, western spadefoot is under review for federal listing and has been documented in the vicinity of the VCC Project Site.
Reptiles					
silvery legless lizard <i>Anniella pulchra pulchra</i> California legless lizard <i>Anniella</i> sp.	—	CSC	Stabilized dunes, beaches, dry washes, chaparral, scrubs, pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils.	This species has been observed within NRSP in 2004 (Impact Sciences 2006A) in leaf litter of coast live oak woodland; suitable habitat occurs within Salt Creek, VCC, and Entrada in association with California sagebrush scrub, chaparral, oak woodland, and riverbank habitats.  What was formerly known as “silvery legless lizard” is now considered several species, including two that potentially occur within the RMDP/SCP area: Northern California legless lizard ( <i>Anniella pulchra</i> ) and Southern California legless lizard ( <i>Anniella stebbinsi</i> ). No legless lizard species has been recorded on the VCC Project Site.	Yes; although the status of legless lizards in general has not changed, this species is addressed because changes in our understanding of legless lizard taxonomy suggest these species may be more sensitive than previously believed.
coastal western whiptail San Diegan tiger whiptail <i>Aspidoscelis tigris stejnegeri</i>	—	***	Open areas in semiarid grasslands, scrublands, and woodlands.	Observed within NRSP in the High Country (Dudek & Associates 2006B) and one was observed off site in Castaic Mesa (Compliance Biology 2006D); suitable habitat occurs within Salt Creek, VCC and Entrada in association with grassland, scrub, oak woodland and riverbank habitats.  The 2017 State-Certified EIR considers the VCC Project Site as supporting habitat for San Diegan tiger whiptail, although the species had not been observed there at the time. San Diegan tiger whiptail was subsequently observed on the VCC Project Site in 2022.	No; the species is not listed or a proposed or candidate species for listing, and its potential for occurrence has not changed since 2010.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
southwestern pond turtle <i>Actinemys pallida</i>	— FPT	CSC	Streams, ponds, freshwater marshes, and lakes with growth of aquatic vegetation.	<p>This species was observed in the reach of the Santa Clara River within NRSP (SMEA 1995A; Aquatic Consulting Services 2002D; Impact Sciences 2002; Compliance Biology 2004D), within the Santa Clara River in Entrada (Impact Sciences 2001; Ecological Sciences 2004A; Dudek &amp; Associates 2006E), and in Salt Creek (Dudek &amp; Associates 2006B); river and riparian habitats within NRSP, Salt Creek, and VCC provide suitable habitat.</p> <p><b>The 2017 State-Certified EIR considers the VCC Project Site as supporting habitat for southwestern pond turtle, and this conclusion was reaffirmed by a 2019 habitat assessment of Castaic Creek. This species has not been observed on the VCC Project Site.</b></p>	Yes; although the status of this species has not changed on the VCC Project Site, it is now proposed for federal listing as threatened.
coast horned lizard <i>Phrynosoma coronatum</i> <b>Blainville's horned lizard</b> <i>Phrynosoma blainvillii</i>	—	CSC	Exposed gravelly-sandy soils with minimal shrubs, riparian woodland clearings, dry chamise chaparral, and annual grasslands with scattered seepweed or saltbush.	<p>This species was also observed during reptile surveys in 2004 and 2006 (Impact Sciences 2006A). Suitable habitat occurs within NRSP, Salt Creek, VCC, and Entrada in association with scrub, chaparral, and riverbank habitats; species presumed to occur on site within suitable habitat.</p> <p><b>Blainville's horned lizard has not been observed on the VCC Project Site, but the site supports suitable habitat for the species, and it has potential to occur.</b></p>	No; the species is not listed or a proposed or candidate species for listing, and its potential for occurrence has not changed since 2010.
two-striped garter snake <i>Thamnophis hammondi</i>	—	CSC	Perennial and intermittent streams with rocky or sandy beds and artificially created aquatic habitats (manmade lakes and stock ponds); requires dense riparian vegetation.	<p>This species was observed in the reach of the Santa Clara River within and adjacent to the NRSP (Aquatic Consulting Services 2002C; Impact Sciences 2002; Compliance Biology 2004D, 2004F), within Entrada (Impact Sciences 2001), and within VCC (Ecological Sciences 2003A); river and riparian habitats within Salt Creek, VCC, and Entrada provide suitable habitat.</p> <p><b>Two-striped garter snake was observed along Castaic Creek in the VCC Project Site in 2003.</b></p>	No; the species is not listed or a proposed or candidate species for listing, and its potential for occurrence has not changed since 2010.
Birds					
Cooper's hawk (nesting) <i>Accipiter cooperii</i>	—	WL	Dense stands of live oak, riparian woodlands, or other woodland habitats near water.	<p>This species is known to be a year-round resident within the NRSP (Bloom Biological 2007A) and Entrada and VCC (Guthrie 2001A); it occurs commonly along the Santa Clara River and in Potrero Canyon (Bloom Biological 2008). This species has been observed nesting within NRSP near Grapevine Mesa and in Entrada north of the Santa Clara River (Guthrie 2000B; Bloom Biological 2007A, respectively), and with active territories in NRSP (Bloom Biological 2007A). It has observed over multiple years foraging within Salt Creek, VCC, and Entrada adjacent to the Santa Clara River during annual bird surveys. The Project site provides foraging and nesting habitat for the species.</p> <p><b>Observed in multiple years along Castaic Creek. Nesting observed on site in dry riparian forest along Castaic Creek in 2005 and 2006.</b></p>	No; this species is not listed, and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
sharp-shinned hawk (nesting) <i>Accipiter striatus</i>	—	WL	Nests in woodlands and forages over dense chaparral and scrublands.	<p>This species has been observed within the NRSP hunting along agriculture fields along the Santa Clara River (Bloom Biological 2008) and was observed by Guthrie in the NRSP (Guthrie 1997B, 1999C) and Entrada (Guthrie 2002A). It was also observed east of the site along the Santa Clara River (Guthrie 1995A) and one individual was observed in Salt Creek (Bloom Biological 2008). All observations were thought to be migrants and/or wintering birds. The Project site is outside the known breeding range for this species. This species forages in woodlands, chaparral, scrublands, and edge/ecotone areas be</p> <p><b>Sharp-shinned hawk has a high potential for winter foraging on the VCC Project Site but has not been observed.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
tricolored blackbird (nesting colony) <i>Agelaius tricolor</i>	BCC, USBC	CSC ST	Freshwater marshes and riparian scrub (nesting). Grassland and agriculture (foraging).	<p>This species has been observed on the Project site during focused bird surveys. A flock of approximately 200 breeding pairs of tricolored blackbirds was observed in Castaic Junction (Guthrie 1994A). Another flock of approximately 20 breeding pairs of tricolored blackbirds was observed next to Castaic Creek (Guthrie 1994A). In 1995 (Guthrie 1995A) and 1996</p>	Yes; although the occurrence status of tricolored blackbird on the VCC Project Site has not changed since 2010, the



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
				(Guthrie 1996A) small flocks visited the Castaic Creek site again in April and May, but did not breed there. Labinger et al. (1995) observed a small nesting colony within the Project site (specific location is not known). Migrants have also been observed within the RMDP (Guthrie 1996B, 1999B), VCC (Guthrie 1999A, 2006C) and Entrada (Guthrie 2000E, 2001A, 2006A; Dudek & Associates 2006E) boundaries during surveys, but no breeding colonies have been observed since 1994, despite annual surveys through 2007. A flock of 20 tricolored blackbirds was observed in Potrero Canyon in 1994 (Guthrie 1994A), and a flock of 50 birds was seen on the Newhall Ranch property north of Mayo Crossing (County of Los Angeles 2003A).  <b>The Castaic Junction occurrence from 1994 was within the VCC Project Site, but there have been no additional occurrences since the mid-1990s.</b>	species is now state listed as threatened.
southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	—	WL	Coastal scrub.	This species has been observed over multiple years as a fairly common resident within the Coastal scrub within NRSP, Salt Creek, VCC, and Entrada during annual bird surveys and has been observed foraging in upland scrub on the south side of the Santa Clara River, and in upland areas (Bloom Biological 2008), and near the Santa Clara River (Guthrie 2000A, 2000B, 2001A, 2002C, 2004A, 2004D), and nesting in 2007 (Bloom Biological 2007A); the Project site provides suitable nesting and foraging habitat with large concentrations of coastal scrub in the northeastern portion of NRSP and southeastern portion of High Country.  <b>Southern California rufous-crowned sparrow has been recorded on several locations on the VCC Project Site before and since the 2017 State-Certified EIR.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
golden eagle (nesting and wintering) <i>Aquila chrysaetos</i>	BCC	WL, CFP	Nests on cliff-walled canyons and large trees in open areas. Forage in open shrublands, agriculture, and grassland.	One pair was seen frequently in upper Potrero Canyon and a juvenile was seen once in the same area; this is likely a resident pair, but no nests have been observed to date (Bloom Biological 2008). An individual was observed over the Santa Clara River corridor in Castaic Junction area in 1993 and 1995 (Guthrie 1993A, 1993B, 1995A) and another was flushed in a woodland west of Grapevine Mesa in the NRSP in 2000 (Guthrie 2000B); no nesting eagles have been observed on the Project site but suitable nesting and foraging habitat is present within NRSP, Salt Creek, VCC, and Entrada. These species have also been observed along Santa Clara River east and west of the project site (Guthrie 1993A, 1997A, 2004F, 2006A; Labinger et al. 1997A).  <b>Golden eagles have not been observed on the VCC Project Site. They are not expected to nest on the site, due to the absence of nesting habitat.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
short-eared owl (nesting) <i>Asio flammeus</i>	USBC	CSC	Grassland, prairies, dunes, meadows, irrigated lands, saline and freshwater emergent wetlands.	This species was observed in the Salt Creek area just west of the Ventura/Los Angeles County line in the fall of 2005 (Dudek & Associates 2006B). 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 (Olson 2007).  <b>Short-eared owl has not been observed on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
long-eared owl (nesting) <i>Asio otus</i>	—	CSC	Dense riparian and live oak thickets near meadow edges, nearby woodland and forest habitats. Also found in dense conifer stands at higher elevations. Forages in grassland and agriculture.	This species was observed within NRSP near Via Canyon in Fall 2005 (Dudek & Associates 2006B). Some suitable nesting habitat is present along the Santa Clara River and Castaic Creek, and foraging habitat is present throughout the NRSP, Salt Creek, VCC, and Entrada.  <b>Long-eared owl has not been observed on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western burrowing owl (burrow sites) <i>Athene cunicularia</i>	BCC	CSC	Grasslands, open scrub, and agriculture, particularly with ground squirrel burrows.	A single individual was observed within NRSP (Babcock 2007). Given the timing of the sighting (winter 2006), the observed individual may have been wintering on site or temporarily using the site during migration. Another individual was observed in December 2006 and on April 11, 2007 (Miller, pers. comm., 2007). NRSP, Salt Creek, VCC, and	Yes; although the status of the species has not changed, western burrowing owl is considered highly sensitive and the



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
				Entrada provide suitable foraging and nesting habitat for the species; California ground squirrel burrows occur on the Project site.  <b>A winter season occurrence in 2007 was not known at the time of the 2017 State-Certified EIR. This observation was consistent with the conclusion in the EIR that the VCC Project Site provided suitable habitat.</b>	VCC Project Site contains suitable habitat for the species.
oak titmouse (nesting) <i>Baeolophus inornatus</i>	USBC	***	Montane hardwood–conifer, montane hardwood, blue oak, valley oak and coastal oak woodlands, montane and valley foothill riparian habitats.	This species is a common resident and nests on site in cottonwood riparian and coast live oak communities; it has been observed over multiple years in the NRSP, Entrada and VCC sites. Recent observations have been in 2006 (Guthrie 2006C) and 2007 and 2008 (Bloom Biological 2007A, 2008).  <b>This species is known to occur on the VCC Project Site and is presumed to nest there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
ferruginous hawk (wintering) <i>Buteo regalis</i>	BCC	WL	Grasslands, agricultural fields, and open scrublands.	This species is an infrequent seasonal migrant. Individuals of this species were observed almost every day in east alfalfa fields, Wolcott fields, and Potrero Canyon, and other agriculture fields along the Santa Clara River in winter 2008 (Bloom Biological 2008). Although suitable foraging habitat is present on the Project site, this species has not been documented to nest in California and is expected to forage on the site.  <b>Ferruginous hawk has not been observed on the VCC Project Site, although it has potential to occur there in winter.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Costa’s hummingbird (nesting) <i>Calypte costae</i>	USBC	***	Shrubs and arid habitats. Edges of desert riparian and valley foothill riparian, coastal scrub, desert scrub, desert succulent scrub, arid shrublands, lower elevation chaparral, and palm oasis.	This species has been observed over multiple years within the NRSP, Entrada and VCC sites; it is thought to be a summer resident, although does not appear to be an abundant species within the Project site based on the number of sightings each year. Recent observations have been in 2006 (Guthrie 2006C).	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Lawrence’s goldfinch <i>Carduelis lawrencei</i> <b><i>Spinus lawrencei</i></b>	BCC, USBC	***	Valley foothill hardwood, valley foothill hardwood–conifer; and, in southern California, desert riparian, palm oasis, pinyon–juniper, and lower montane habitats.	This species has been observed as a resident in the coastal scrub in the northern and northeastern portions of the Project site and has been observed within the riparian habitats of the Santa Clara River over multiple years within NRSP and Entrada during annual bird surveys. Recent observations have been in 2006 (Guthrie 2006C) and 2007 and 2008 (Bloom Biological 2007A, 2008). Suitable nesting and foraging habitat is present within NRSP, Salt Creek, VCC, and Entrada.  <b>Lawrence’s goldfinch has been observed on multiple occasions before and since the 2017 State-Certified EIR.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
turkey vulture <i>Cathartes aura</i>	—	†	Rangeland, agriculture, grassland; uses cliffs and large trees for roosting, nesting, and resting.	This species has been observed over multiple years within NRSP, Salt Creek, VCC, and Entrada; recent observations in the Project site have been made in 2006 (Guthrie 2006C; Bloom Biological 2007A); nesting opportunities are also present within the Project site.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
northern harrier (nesting) <i>Circus cyaneus</i> <b><i>Circus hudsonius</i></b>	—	CSC	Coastal salt marsh, freshwater marsh, grasslands, and agricultural fields.	This species has been observed within NRSP in 1999 and 2000 (Guthrie 1999B, 2000A) and in 2007 and 2008 near the Santa Clara River in the NRSP and Entrada sites (Bloom Biological 2007A, 2008). This species has also been observed within the vicinity of the project site (Compliance Biology 2003B, 2006A); suitable foraging and nesting habitat is present within NRSP, Salt Creek, VCC, and Entrada.  <b>Northern harriers have not been observed on the VCC Project Site but it has not been observed nesting.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western yellow-billed cuckoo (nesting) <i>Coccyzus americanus occidentalis</i>	FC, BCC FT	CE	Nests along the broad, lower flood-bottoms of larger river systems. Also nests in riparian forests and riparian jungles of willow often mixed with cottonwoods, with	One individual was heard at the Magic Mountain (Entrada) area in 1997 and thought to be a migrant (Labinger et al. 1997B). Single individuals (thought to be migrants) were observed along the Santa Clara River east of the Project site in 1997 and 1998 (Guthrie 1997A; Labinger and Greaves 1999A), and west of the Ventura county line (Guthrie	Yes; the status of this species on the VCC Project Site has not changed, but it is included in this report because it is state listed as endangered, and since

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
			an understory of blackberry, nettles, or wild grape.	1997B); none have been observed since then; species has not been observed nesting on site; suitable nesting and foraging habitat present within NRSP, VCC, and Entrada. This species has been observed historically in 1979, 1981, and 1992 (Labinger et al. 1997A).  <b>Western yellow-billed cuckoo has not been observed on the VCC Project Site, despite the presence of suitable habitat.</b>	the analysis for the 2017 State-Certified EIR, has been federally listed as threatened.
hermit warbler (nesting) <i>Dendroica occidentalis</i> <b><i>Setophaga occidentalis</i></b>	—	***	Breeds in mature ponderosa pine, montane hardwood-conifer, mixed conifer, Douglas fir, redwood, red fir, and Jeffrey pines. Uses live oak woodlands and deciduous trees during migration, and valley foothill hardwood in winter.	Individuals of this species have been observed within or adjacent to the Specific Plan in 1994, 1996, and 2002 (Guthrie 1994B, 1996B, 2002C). All observations were thought to be migrants. The Project site is within this species’ winter range. Suitable habitat for migration and wintering habitat occurs on site, but no suitable nesting habitat occurs on site.  <b>Hermit warbler has been recorded on the VCC Project Site during migration.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
yellow warbler (nesting) <i>Dendroica petechia brewsteri</i> <b><i>Setophaga petechia brewsteri</i></b>	—	CSC	Riparian thickets and woodlands.	This species has been observed over multiple years during annual bird surveys and nests in the riparian areas within NRSP, Salt Creek, VCC, and Entrada. These species have been observed both during nesting season and migration. Recent observations of these species within the Project site in 2006 (Guthrie 2006A, 2006B, 2006C) and 2007 (Bloom Biological, Inc. 2007A).  <b>This species has occurred annually on the VCC Project Site before and since the 2017 State-Certified EIR.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
white-tailed kite (nesting) <i>Elanus leucurus</i>	—	CFP	Inhabits herbaceous and open stages of most habitats, common in cismontane in California. Nests are placed near top of dense oak, willow, or other tree stand; usually 6 to 20 meters (20 to 100 feet) above ground. Nest located near open foraging area.	This species has been observed successfully nesting on site and in the vicinity of the project site along the Santa Clara River over multiple years within NRSP, Salt Creek, VCC, and Entrada during annual bird surveys (Guthrie 1994A, 1995A, 1997A, 1998B, 2000E, 2000F, 2006B) and during focused survey (Bloom Biological 2007A, 2009); suitable foraging and nesting habitat is present on the Project site.  <b>White-tailed kites were known to nest on Castaic Creek prior to the 2017 State-Certified EIR.</b>	No; this species is not listed, and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
willow flycatcher (nesting) <i>Empidonax traillii</i>	USBC	CE	Riparian woodlands that contain water and low willow thickets.	This species has been observed along the Santa Clara River over multiple years within the NRSP, Entrada and VCC project sites. The observations have usually been of individual species, thought to be migrants passing through the area based on their behavior and time of year (no observations occurred after June 22). Recent observations along the Santa Clara River within the NRSP, Entrada, and VCC have been made in 2005 and 2006 (Guthrie 2005B, 2006B). These species have also been observed adjacent to the project site. No nesting has been observed.  <b>Presumed migrant willow flycatchers have been observed periodically along Castaic Creek before and since the 2017 State-Certified EIR.</b>	No; this species is discussed only with respect to the expected breeding subspecies in the region, southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> ).
southwestern willow flycatcher (nesting) <i>Empidonax traillii extimus</i>	FE, USBC	CE	Riparian woodlands that contain water and low willow thickets.	Most of the observations of the willow flycatcher have not identified individuals to the subspecies level. Individuals were considered to be migrating through the site as they were not located after June 22. Within the vicinity of the project site, two individuals identified as southwestern willow flycatchers were observed in Castaic Creek in 2006 (Forde Biological Consultants 2006). These individuals, however, were not displaying any nesting behavior. Suitable nesting and foraging habitat is present within the Specific Plan area, VCC, and Entrada. The most recent observation of this subspecies displaying territorial behavior is downstream approximately 18 miles, near Saticoy (Labinger and Greaves 1999A).  <b>Although willow flycatchers have been observed periodically on the VCC Project Site, the subspecies of the individuals detected is unknown.</b>	Yes; although the occurrence status of southwestern willow flycatcher on the VCC Project Site has not changed, the southwestern willow flycatcher is both state and federally listed as endangered, and critical habitat has been designated for the species within the VCC Project Site.

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
California horned lark <i>Eremophila alpestris actia</i>	—	WL	Grasslands, disturbed areas, agriculture fields, and beach areas.	<p>This species has been observed within NRSP, Entrada, and VCC during annual bird surveys foraging in plowed and graded fields near the Santa Clara River and Castaic Creek over multiple years. In winter 2008 flocks of 250–500 individuals were observed in the Wolcott agriculture fields and east alfalfa field on several occasions (Bloom Biological 2008) and was observed in agriculture fields in 2007 (Bloom Biological 2007A); this species is thought to be a resident with recent observations (Guthrie 2000A, 2000C, 2001A, 2005B, 2006C); no nesting has been observed, but suitable foraging and nesting habitat is present on the Project site.</p> <p><b>This species has been observed on the VCC Project Site before and since the 2017 State-Certified EIR.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
merlin (wintering) <i>Falco columbarius</i>	—	WL	Coastlines, wetlands, woodlands, agricultural fields, and grasslands.	<p>Several individuals observed on different occasions hunting over agriculture fields along the Santa Clara River and in Potrero Canyon (Bloom Biological 2008). A male and female were observed flying over agriculture fields bordering riparian habitat near Indian Dunes in the NRSP in March 2007 (Bloom Biological 2007A). Although this species does not nest in California, CDFG considers wintering birds to be of Special Concern.</p> <p><b>Merlin has not been observed on the VCC Project Site, but it has the potential to occur there in winter and during migration.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
prairie falcon (nesting) <i>Falco mexicanus</i>	BCC	WL	Grasslands, savannas, rangeland, agricultural fields, and desert scrub; requires sheltered cliff faces for shelter and nesting.	<p>At least 2 individuals were observed on several occasions in Potrero Canyon; and two other individuals were observed along the Santa Clara River on single occasions (Bloom Biological 2008). Individuals observed foraging within NRSP in 2000 (Guthrie 2000A), along Castaic Creek in 2001 (Guthrie 2001A), and Salt Creek in 2005 (Dudek &amp; Associates 2006B); it was observed flying north over the NRSP on April 29, 2007 (Bloom Biological 2007A); all of these occurrences were thought to be migrants in the Project site; moderate potential to occur within Entrada. No nesting individuals have been observed and available nesting habitat is marginal.</p> <p><b>This species has been observed on the VCC Project Site since the 2017 State-Certified EIR, but suitable habitat does not occur there.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
American peregrine falcon <i>Falco peregrinus anatum</i>	BCC, Delisted	CE Delisted CFP	Nests near wetlands, lakes, rivers, or other water bodies, on cliffs, banks, dunes, and other human-made structures.	<p>One individual was observed on one occasion over Wolcott agriculture field (Bloom Biological 2008). An individual was observed foraging over the Santa Clara River corridor near the Grapevine Mesa area within NRSP in 2000 (Guthrie 2000B); no other occurrences of this species have been documented on site during annual bird surveys. No nesting peregrine falcons have been observed on the Project site. Moderate potential for foraging within NRSP, Salt Creek, VCC, and Entrada. The species may nest in the Santa Susana Mountains, south of the Project site (Guthrie 2000B).</p> <p><b>Peregrine falcon has not been observed on the VCC Project Site.</b></p>	No; although this species was formerly federally listed as endangered, it is no longer listed or a candidate or proposed for listing. Its occurrence status has not changed since 2010.
California condor <i>Gymnogyps californianus</i>	FE, USBC	CE, CFP	Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags.	<p>Until April 2008, California condors had not been known to nest or land within the Project area within the last 25 years (Bloom Biological 2007A, 2008). 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 area when moving between the Sespe Wilderness area to the northwest and the San Gabriel Mountains to the southeast of the Project area and that the species appears to be increasing its use of the area. It is</p>	Yes; although the occurrence status of California condor has not changed since 2010, the species is state and federally listed and could forage within the VCC Project Site.



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
				expected to continue to forage opportunistically in portions of the Project area for dead cattle and other large mammal carcasses.  <b>Flight data show that California condors have flown over the VCC Project Site, but they have not been recorded landing on the site.</b>	
yellow-breasted chat (nesting) <i>Icteria virens</i>	—	CSC	Riparian thickets and riparian woodlands with a dense understory.	This species was observed nesting in riparian thickets in 2007 (Bloom Biological 2007A) and has been observed over multiple years along the Santa Clara River within dry riparian woodland habitat in the NRSP, Salt Creek, Entrada, and VCC during annual bird surveys. Recent observations were made within the Project site in 2006 (Guthrie 2006A, 2006C); suitable foraging and nesting habitat is present on the Project site.  <b>This species has been observed annually along Castaic Creek on the VCC Project Site, before and since the 2017 State-Certified EIR.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
loggerhead shrike <i>Lanius ludovicianus</i>	BCC	CSC	Grasslands and open shrublands with scattered shrubs, trees, fences, or other perches.	This species is a resident on site (Bloom Biological 2007A, 2008). In winter 2008 it was observed regularly in Potrero Canyon, Tapo Canyon, near Magic Mountain ranch gate, and Wolcott agriculture fields (Bloom Biological 2008). Observed to be fairly common within California sagebrush scrub and grasslands in the NRSP and also observed within VCC (Guthrie 1995A, 2004H), Salt Creek (Dudek & Associates 2006B) and Entrada (Dudek & Associates 2006E); it was observed nesting near Potrero Canyon and near an agriculture field near the Santa Clara River in 2007 (Bloom Biological 2007A); it was thought to have nested within and adjacent to the Entrada site (Guthrie 2000D, 2004G); suitable nesting and foraging habitat is present on the Project site.  <b>Loggerhead shrike has been recorded on the VCC Project Site but has not been confirmed to nest there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
black-crowned night-heron (rookery) <i>Nycticorax nycticorax</i>	—	***	Riparian; nests in dense-foliaged trees and dense emergent wetlands.	This species has been observed along the Santa Clara River within the NRSP, most recently in 2007 (Bloom Biological 2008), and in 2006 (Guthrie 2006A and Bloom Biological 2007A); within Entrada, in 2006 (Guthrie 2006C); and along Castaic Creek, in 2000 (Guthrie 2000E). This species was observed early in the year and is thought to be a wintering or migratory species within the Project site. No rookery sites have been detected on or near the site (Bloom Biological 2008). It is not known if this species has a rookery site within or adjacent to the Project site (Bloom Biological 2007A). Some suitable foraging and nesting habitat is present on site.  <b>Black-crowned night-heron has been observed on the VCC Project Site, but it has not been recorded nesting.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Nuttall's woodpecker (nesting) <i>Picoides nuttallii</i>	USBC	***	Lower elevation riparian deciduous and oak habitats.	This species is a common, year-round resident in cottonwood and willow riparian habitat along the Santa Clara River and Castaic Creek (Bloom Biological 2007A, 2008). It has been observed nearly every year since surveys began in 1988 (see Guthrie and Bloom Biological surveys).  <b>Nuttall's woodpecker is known to occur on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
summer tanager (nesting) <i>Piranga rubra</i>	—	CSC	Cottonwood-willow riparian habitats, especially older, dense stands along rivers and streams.	Individuals have been observed during annual bird surveys within NRSP in 1994 (Guthrie 1994B), in Entrada in 1991 and 1993 (Guthrie 1991A, 1993A, 1993B); it has also been observed east of the project site in 2000 and 2003 (Guthrie 2000E, 2003A); suitable nesting and foraging habitat present along the Santa Clara River and Castaic Creek within NRSP, VCC, and Entrada.  <b>Summer tanager has not been observed on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
coastal California gnatcatcher	FT, USBC	CSC	Various sage scrub communities, often dominated by California sage and	Suitable nesting and/or foraging habitat types are present on site, but all at higher elevations and/or with steeper slopes than typical of this species. The species has not	Yes; although the occurrence status of coastal California gnatcatcher has not

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
<i>Polioptila californica californica</i>			buckwheat; generally avoids nesting in areas with a slope of greater than 40%, and typically less than 820 feet in elevation.	been observed on site during numerous annual bird surveys (including USFWS protocol surveys). Focused protocol surveys have been conducted throughout the Project site in 2000 (Guthrie 2000A, 2000B, 2000D), 2004 (Guthrie 2004A, 2004B, 2004D, 2004E, 2004G), and 2007 (Dudek 2007B). Focused surveys have also been conducted off site in Legacy Village (Guthrie 2004C; Impact Sciences, Inc 2000; SAIC 2003) and other areas (Compliance Biology 2002, 2006A; PCR 1998). However, during the course of biological monitoring conducted in the VCC planning area, an individual California gnatcatcher was observed on October 5, 2007, by Dudek biologist Jeff Priest and biologist Ron Francis, a sub-consultant to Dave Crawford, Compliance Biology, Inc. (Priest 2007A). Given the time of year and the fact that no other California gnatcatchers have ever been observed within the Project site (despite extensive focused and general surveys), this observation is believed to have been that of a dispersing or transient individual.  <b>No additional coastal California gnatcatchers have been observed on the VCC Project Site, despite surveys over several years since this initial observation.</b>	changed since 2010, the species is federally listed as threatened, and suitable habitat occurs on the VCC Project Site.
vermillion flycatcher (nesting) <i>Pyrocephalus rubinus flammeus</i>	—	CSC	Breeding habitat includes riparian woodlands, riparian scrub, and freshwater marshes.	A single individual was observed along the Santa Clara River in 1993 (Guthrie 1993B); suitable breeding and foraging habitat present on site along the Santa Clara River in the NRSP and Entrada and along Castaic Creek in VCC; some suitable habitat exists in Salt Creek.  <b>This species has not been observed on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Allen’s/rufous hummingbird (nesting) <i>Selasphorus sasin/rufus</i>	USBC/ USBC, BCC	***	Breeds in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats. Migrates in woodland and scrub habitats.	This species has been observed along the Santa Clara River within and adjacent to the NRSP (Bloom Biological 2008; Guthrie 1998A, 1999B, and 2004F), in the upland area of the Entrada site (Guthrie 2004G), and along Castaic Creek in VCC (Guthrie 2004B). These observations were thought to be of migrants. The Project site provides suitable foraging, nesting, and migrating habitat throughout the NRSP, Entrada and VCC. The Project site is within this species’ year-long range.  <b>Both rufous hummingbird and Allen’s hummingbird have been recorded on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
chipping sparrow (nesting) <i>Spizella passerina</i>	—	***	Open woodlands with sparse or low shrubs.	This species has been observed as a common migrant in the Project site (Bloom Biological 2007A); additional observations are within and adjacent to the NRSP near the Santa Clara River (Guthrie 1994B, 1997B, 1999B, and 2002A), near Grapevine Mesa (Guthrie 2000B) and Homestead Canyon (Guthrie 2004A), in Entrada (Guthrie 1991A, 1992, 1993A, and 1999A), and in VCC (Guthrie 1991B). Suitable habitat occurs on site, mostly in High Country with some open woodland areas in Potrero Canyon as well. The Project site is within this species’ year-long range.  <b>Chipping sparrow has been recorded on the VCC Project Site, and it has a moderate potential to nest.</b>	No; this species is not listed, and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
least Bell’s vireo (nesting) <i>Vireo bellii pusillus</i>	FE, USBC, BCC	CE	Riparian vegetation with extensive willows below 2,000 feet.	This species has been observed almost every year along the Santa Clara River within the NRSP, and over multiple years in Entrada and VCC. It has been observed nesting within NRSP and Entrada most recently in 2007 (Bloom Biological 2007A) during annual bird surveys; on-site nesting sites in willow riparian habitats associated with the Santa Clara River and Castaic Creek. Suitable nesting and foraging habitat present within NRSP, VCC, and Entrada.  <b>It has been observed occasionally along Castaic Creek within the VCC Project Site, before and since the 2017 State-Certified EIR, with the latest observations being from 2024.</b>	Yes; although the occurrence status of this species on the VCC Project Site has not changed, it is state and federally listed as endangered and has been documented within the VCC Project Site.



Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
Mammals					
pallid bat <i>Antrozous pallidus</i>	—	CSC	Arid habitats, including grasslands, shrublands, woodlands and forests; prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging.	This species was detected within NRSP during ANABAT surveys (Impact Sciences 2005) and in 2006 (Johnson 2006); on-site habitats and structures (e.g., oak woodlands, buildings, SR-126 bridge) provide suitable roosting habitat within NRSP, Salt Creek, VCC, and Entrada.  <b>This species has not been detected on the VCC Project Site, but it has potential to occur there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western mastiff bat <i>Eumops perotis californicus</i>	—	CSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub and urban.	This species was not detected within NRSP during ANABAT surveys (Impact Sciences 2005), but it was observed in 2006 (Johnson 2006) within the NRSP; suitable roosting and foraging habitat is present within the Project site.  <b>Western mastiff bat has not been detected on the VCC Project Site, but it has potential to forage there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western red bat <i>Lasiurus blossevillii</i>	—	CSC	Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas.	There were three acoustic detections of the western red bat in the Project area. Two 2004 detections (Impact Sciences 2005) were in willow riparian habitat, and the 2006 detection was under The Old Road Bridge (Johnson 2006). Suitable roosting and foraging habitat is present throughout the Project site.  <b>Western red bat has not been detected on the VCC Project Site, but it has potential to roost and forage there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	—	CSC	Open chaparral and California sagebrush scrub, grassland and agriculture.	Observed at mouth of Potrero Canyon within NRSP (Impact Sciences 2005). Suitable habitat is present within California sagebrush scrub and chaparral habitats within NRSP, Salt Creek, High Country, VCC, and Entrada.  <b>This species has not been detected on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
fringed myotis <i>Myotis thysanodes</i>	—	***	Occurs in a wide variety of habitats. Optimal habitats include pinyon–juniper, valley foothill hardwood and hardwood–conifer woodlands. Forms maternity colonies and roosts in caves, mines, buildings, and crevices.	This species was detected within NRSP in coast live oak habitat during ANABAT surveys (Impact Sciences 2005); suitable roosting and foraging habitat is present within the Project site in oak woodlands scattered throughout NRSP and larger concentrations in High Country.  <b>This species has not been detected on the VCC Project Site, but it has potential to occur there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Yuma myotis <i>Myotis yumanensis</i>	—	***	Inhabits open forests and woodlands with sources of water. Species is closely tied to bodies of water, over which it feeds. Forms maternity colonies in caves, mines, buildings, or crevices.	This species was not detected within NRSP during ANABAT surveys (Impact Sciences 2005), but it was observed in 2006 (Johnson 2006) within the NRSP; suitable roosting and foraging habitat is present within the Project site.  <b>Yuma myotis has not been recorded on the VCC Project Site, but it has potential to occur there.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	—	CSC	Open chaparral, California sagebrush scrub, cactus patches and the understory of tree thickets.	A species of desert woodrat was observed during 2004 small mammal surveys within NRSP (Impact Sciences 2005). Single woodrat middens were observed within Entrada (Dudek & Associates 2006E) and within High Country (Dudek & Associates 2006B). Moderate potential to occur within Salt Creek and VCC. Based on the known range of this species, it is assumed that the animals observed were the San Diego ( <i>intermedia</i> ) subspecies.  <b>Suitable habitat for San Diego desert woodrat occurs on the VCC Project Site, and the species is assumed to be present.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	—	CSC	Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas.	The pocketed free-tailed bat was acoustically detected in 2006 in lower Potrero Creek (Johnson 2006). It roosts in crevices in cliffs and forages in open air in all habitats. The	No; this species is not listed and is not a candidate or proposed for listing. Its

Table C-2. Special-Status Wildlife Species Observed in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	On-Site Status	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
				Project area is at the extreme northwestern part of pocketed free-tailed bat range in California and does not contain the desert habitats typically used by this species.  <b>Pocketed free-tailed bat has not been detected on the VCC Project Site, and it has a low potential to roost there, but may occasionally forage.</b>	occurrence status has not changed since 2010.
mule deer <i>Odocoileus hemionus</i>	—	†	Variety of habitats including forests, woodlands, brush, meadows and standing waters.	This species has been observed during surveys within Entrada (Dudek & Associates 2006E), NRSP (Impact Sciences 2005), and High Country and Salt Creek (Dudek & Associates 2006B). Suitable habitat exists throughout the Project site.  <b>Mule deer has been recorded occasionally on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
mountain lion <b>cougar</b> <i>Puma concolor</i>	—	✦, CC	Occurs in a variety of scrub and forested habitats.	This species has been observed within NRSP (Impact Sciences 2005), and High Country and Salt Creek (Dudek & Associates 2006B); the Project site is expected to host transient individuals and to be part of local lion(s)’ home range.  <b>Cougars have not been documented on the VCC Project Site directly, through sign (e.g., scat, tracks), or during camera studies.</b>	Yes; although its occurrence status has not changed since the analysis for the 2017 State-Certified EIR, this species has been designated a candidate for state listing in the region.
American badger <i>Taxidea taxus</i>	—	CSC	Grasslands, agriculture, drier open stages of shrub, forest, and herbaceous habitats with friable soils.	Observed during small mammal surveys within NRSP (Impact Sciences 2005; Dudek & Associates 2006B). Suitable habitat exists within central portions of NRSP. Moderate potential to occur in some areas of VCC and Entrada.  <b>American badger has not been detected on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
black bear <i>Ursus americanus</i>	—	†	Dense forests; forages in brush forests, valley foothill riparian and wet meadows.	Observed within High Country in 2005 (Dudek & Associates 2006B). Some suitable habitat occurs within the southern portion of High Country.  <b>This species has not been detected on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

Notes: RMDP/SCP = Resource Management Plan/Spineflower Conservation Plan; VCC = Valencia Commerce Center.

- Federal:**

FE: Federally listed as endangered

FT: Federally listed as threatened

**FC:** Federal candidate for listing as threatened or endangered

FPT: Federally proposed for listing as threatened

BCC: Bird of Conservation Concern

USBC: United States Bird Conservation Watch List
- State:**

CE: California-listed (state-listed) as endangered

**CC:** California candidate species

CFP: California Fully Protected

CSC: California Species of Special Concern

WL: Watch List

\*\*\*: Special Animal

✦: Specially protected mammal

†: Trust resource

Table C-3. Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	Habitat Suitability	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
Fish					
southern steelhead <i>Oncorhynchus mykiss</i>	FE	—	As juveniles and for spawning: relatively cool freshwater streams, well oxygenated water with adequate depth and cover in the way of gravel, cobble, boulder, undercut banks, large and small woody debris, and overhanging vegetation. As non-spaw <u>n</u> ing adults: Pacific Ocean.	Within the Santa Clara River drainage, southern steelhead historically inhabited Piru Creek, Sespe Creek, Santa Paula Creek, Hopper Creek, and possibly Pole Creek (Titus et al. 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 and Pole Creeks (Stoeker and Kelly 2005). Although reconnaissance surveys conducted along the Santa Clara River and tributary drainages within the Specific Plan area of the RMDP were negative in 2004 and 2005 (ENTRIX 2009), this species was included in this category (Potential to Occur on Site) due to potential downstream effects of the proposed Project.  <b>Southern steelhead is not expected to occur on the VCC Project Site.</b>	Yes; although this species does not potentially occur on the VCC Project Site, it is federally listed as endangered in the region, and it potentially occurs downstream, in the Santa Clara River.
Terrestrial Mollusks					
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.	Suitable microhabitats within coastal scrub, riparian, and chaparral occur throughout the RMDP development area and mitigation lands in the River Corridor SMA, High Country SMA, and Salt Creek area. 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) on site indicate that the special-status Trask shoulderband snail has potential to occur.  <b>This species has not been recorded on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Amphibians					
California red-legged frog <i>Rana aurora draytonii</i>	FT	CSC	Water sources such as ponds, lakes, reservoirs, streams, and adjacent riparian woodlands.	Field investigations indicate that potential breeding or summer habitat is generally absent from the portion of the Santa Clara River within the NRSP (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 1988). Not documented in the Santa Clara River (CDFG 2008E). Surveys for this species were conducted within the Santa Clara River in 1995 (SMEA 1995A) and 2001 (Sandburg 2001) with negative results. The species has been documented within the Piru Creek and San Francisquito Creek tributaries to the River; given the occurrence of California red-legged frog in nearby upstream and downstream tributaries, non-breeding frogs could occur within the portion of the Santa Clara River (and other drainages) on the Project site. Additionally, the stock ponds on the NRSP provide suitable habitat and could support breeding frogs, although none have been found there.  <b>California red-legged frog has not been recorded on the VCC Project Site.</b>	No; although this species is federally listed as threatened, it has no potential to occur within the VCC Project Site.
Reptiles					
rosy boa	—	***	Inhabits desert and chaparral habitats with rocky soils in coastal canyons and hillsides, desert canyons, washes, and mountains.	Suitable scrub and chaparral habitat occurs within the Project site with large concentrations in the northeastern portion of NRSP and southeastern	No; this species is not listed and is not a candidate or

Table C-3. Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	Habitat Suitability	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
<i>Charina trivirgata</i> ssp. <i>roseofusca</i> <b><i>Lichanura orcutti</i></b>				portion of High Country, and some in Potrero Canyon; riverbank habitat occurs on site along the Santa Clara River and Castaic Creek; oak woodlands are sparsely scattered throughout the NRSP with larger concentrations in High Country; this species is known to occur in the Project region and presumed to occur on site.  <b>Rosy boa has not been observed on the VCC Project Site.</b>	proposed for listing. Its occurrence status has not changed since 2010.
San Bernardino ringneck snake <i>Diadophis punctatus modestus</i>	—	***	Inhabits open, relatively rocky areas, often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation.	Suitable habitat occurs within the Project site in association with oak woodland and riverbank habitats; riverbank habitat occurs on site along the Santa Clara River and Castaic Creek; oak woodlands are sparsely scattered throughout the Specific Plan area with larger concentrations in the High Country; species is known to occur in the Project region and presumed to occur on site.  <b>San Bernardino ringneck snake has not been observed on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	—	CSC	Inhabits brushy or shrubby vegetation. Requires small mammal burrows for refuge and overwintering sites.	Suitable habitat occurs throughout the Project site in association with shrub habitats (upland and riparian scrub, chaparral and riverwash); California ground squirrel and Botta’s pocket gopher burrows occur on site; species is known to occur in the Project region and presumed to occur on site.  <b>Coast patch-nosed snake has not been recorded on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
south coast garter snake <i>Thamnophis sirtalis</i> spp.	—	CSC	Inhabits scrub, chaparral, annual and native grassland, freshwater marsh, and agriculture.	Suitable habitat occurs throughout the Project site in association with scrub, chaparral, grassland, and agriculture habitats.  <b>South coast garter snake has not been recorded on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
<b>Birds</b>					
grasshopper sparrow <i>Ammodramus savannarum</i>	—	***	Dense, dry or well-drained annual and native grasslands with mix of grasses and forbs. May occur in fallow agricultural fields, especially those periodically planted in oats and barley.	The Project site is just south of the southern edge of the portion of this species’ summer range, which occurs at approximately the Los Angeles/ Kern County boundary. There is at least moderate potential for this species to breed/forage in grasslands and some agricultural areas, which occur mostly in the central portion of NRSP, San Martinez Grande, along portions of the Santa Clara River and Castaic Creek, and some portions of VCC and Entrada.  <b>Grasshopper sparrow has not been recorded on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Bell’s sage sparrow (nesting) <i>Amphispiza belli belli</i> <b>Bell’s sparrow</b> <i>Artemisiospiza belli</i>	BCC	WL	Coastal scrub and chaparral.	This species has been observed off site in Castaic Mesa (Compliance Biology 2006A), near Soledad Canyon in 2002 (Compliance Biology 2003B), and in the Legacy Village project site, adjacent to the NRSP and Salt Creek area (Guthrie 2004C). Suitable nesting and foraging habitat present within the Project site with concentrations of coastal scrub and chaparral in the northeastern portion of the NRSP and southeastern portion of High Country.  <b>Bell’s sparrow has not been observed on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
black-chinned sparrow (nesting) <i>Spizella atrogularis</i>	BCC, USBC	***	Chaparral and sagebrush scrub.	Suitable habitat occurs within Project site in association with chaparral and coastal scrub habitats, which are concentrated in the northeastern portion of the NRSP and the southeastern portion of High Country.  <b>Black-chinned sparrow has not been recorded on the VCC Project Site.</b>	No; this species is not listed and is not a candidate or proposed for listing. Its



Table C-3. Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	Habitat Suitability	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
					occurrence status has not changed since 2010.
Mammals					
ringtail <i>Bassariscus astutus</i>	—	CFP	Mixture of forest and shrubland in close association with rocky areas and riparian habitats; uses hollow trees, snags, and logs for cover and reproduction.	<p>This species was surveyed for during the mammal surveys in 2004 (Impact Sciences 2005). Cameras, scent/track stations, and spotlight survey techniques were used to detect these species. Low potential to occur based on lack of suitable habitat, such as hollow trees, logs, snags, and abundant rocky areas. In addition, these species are not usually found more than 1 kilometer away from permanent water; therefore these species would most likely have been detected during the numerous studies performed near the Santa Clara River and its tributaries (Haglund and Baskin 2000; Impact Sciences 2005; Dudek &amp; Associates 2006D, 2006E).</p> <p><b>Ringtail has not been recorded on the VCC Project Site.</b></p>	No; this species is not listed, and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
Townsend’s big-eared bat <i>Corynorhinus townsendii</i>	—	CSC	Utilizes a variety of communities, including conifer and oak woodlands and forests, arid grasslands and deserts and high-elevation forests and meadows. Requires appropriate roosting, maternity, and hibernacula sites free from human disturbance.	<p>This species was not detected within NRSP during ANABAT surveys (Impact Sciences 2005). Suitable roosting and foraging habitat is present within the Project site.</p> <p><b>Townsend’s big-eared bat has not been recorded on the VCC Project Site but it has potential to forage there.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
western small-footed myotis <i>Myotis ciliolabrum</i>	—	CSC	Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas. Requires appropriate roosting, maternity, and hibernacula sites free from human disturbance.	<p>Impact Sciences (2005) identified the 40 kHz frequency range species in 2004 as the western small-footed myotis, but without additional information (e.g., longer time-series recording or capture), this identification could not be confirmed because this frequency is characteristic of at least two other species that could occur on site: long-legged myotis and little brown bat. In 2006, 40 kHz bat species were recorded in all three survey locations along Potrero Creek, along the Santa Clara River at Walcott Road, and at the plant nursery site in upper Long Canyon. Without definitive presence/absence information, for the purpose of this analysis, it is assumed that the western small-footed myotis occurs in the Project area.</p> <p><b>Western small-footed myotis has not been recorded on the VCC Project Site, but it has potential to occur there.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.
long-legged myotis <i>Myotis volans</i>	—	CSC	Occurs in a wide variety of habitats, including scrub, grassland, woodland, and riparian areas. Requires appropriate roosting, maternity, and hibernacula sites free from human disturbance.	<p>The presence of the long-legged myotis was not confirmed in the Project area during the acoustic and mist netting surveys conducted in 2004 and 2006 (Impact Sciences 2005; Johnson 2006). However, bats with acoustic signatures in the 40 kHz range, which is the range for the long-legged myotis, were detected on site in 2004 and 2006. Impact Sciences (2005) identified the 40 kHz frequency-range species in 2004 as the western small-footed myotis, but without additional information (e.g., longer time-series recording or capture), this identification could not be confirmed. Based on the frequency data alone, the 40 kHz species could be western small-footed myotis, long-legged myotis, or little brown bat; therefore, all three species should be considered to be potentially present on site. In 2006, 40 kHz bat species were recorded in all three survey locations along Potrero Creek, along the Santa Clara River at Walcott Road, and at the plant nursery site in upper Long Canyon.</p> <p><b>Long-legged myotis has potential to occur on the VCC Project Site.</b></p>	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.



Table C-3. Special-Status Wildlife Species with Potential to Occur in the RMDP/SCP Area

Common Name Scientific Name	Status		Habitat Requirements	Habitat Suitability	Is Species Addressed in the VCC Supplemental Bio Report?
	Federal	State			
southern grasshopper mouse <i>Onychomys torridus ramona</i>	—	CSC	Inhabits desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	This species has not been detected within the NRSP during small mammal trapping (Impact Sciences 2005). This species has potential to occur at least in low densities on site within coastal scrub and grassland vegetation communities; it is not expected to occur within other habitats on the Project site.  Southern grasshopper mouse has not been recorded on the VCC Project Site.	No; this species is not listed and is not a candidate or proposed for listing. Its occurrence status has not changed since 2010.

Notes: RMDP/SCP = Resource Management Plan/Spineflower Conservation Plan; VCC = Valencia Commerce Center.

- Federal:**

FE: Federally listed as endangered

FT: Federally listed as threatened

FC: Federal candidate for listing as threatened or endangered

BCC: Bird of conservation concern

USBC: United States Bird Conservation watch list
- State:**

CE: California-listed (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

# References

- Aquatic Consulting Services. 2002A. Aquatic Surveys along the Santa Clara River; Part II: Commerce Center Bridge Project Area, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Ventura, California: Aquatic Consulting Services. June 2002.
- Aquatic Consulting Services. 2002B. Aquatic Surveys along the Santa Clara River; Part III: West of Commerce Center Bridge to the Ventura County Line, California. Revised. Prepared for Newhall Land Company. Ventura, California: Aquatic Consulting Services. June 18, 2002.
- Aquatic Consulting Services. 2002C. Aquatic Surveys along the Santa Clara River; Part IV: Ventura County Line to Las Brisas Bridge, Ventura County, California. Revised. Prepared for Newhall Land Company. Ventura, California: Aquatic Consulting Services. June 25, 2002.
- Aquatic Consulting Services. 2002D. Aquatic Surveys along the Santa Clara River; Part I: Castaic Junction Project Area, Los Angeles County, California. Prepared for Newhall Land. Ventura, California: Aquatic Consulting Services. April 2002.
- Babcock, K. 2007. Telephone call from K. Babcock (Dudek) to C. Ford (Dudek). October 2007.
- Bloom Biological. 2007A. Summary of Late Winter and Spring Avian Survey with Focus on the California Condor (*Gymnogyps californianus*) on Portions of Newhall Land and Farming Company Property, Los Angeles County, California. Revised. Prepared for Newhall Land Company. Ventura, California: Bloom Biological. July 13, 2007.
- Bloom Biological. 2008. Interim Report of Winter Surveys of Special-Status Bird Species on Portions of Newhall Land and Farming Company Property (Including Newhall Ranch), Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Santa Ana, California: Bloom Biological. February 28, 2008.
- Bloom Biological. 2009. Report on White-Tailed Kites on Portions of Newhall Land and Farming Company Property (including Newhall Ranch); Los Angeles and Ventura Counties, California. Prepared for The Newhall Land and Farming Company. Santa Ana, California: Bloom Biological. January 22, 2009. Carlberg Associates. 2021.
- Carpenter, M. 2008. Personal communication by M. Carpenter (Newhall Land and Farming Company) reporting that a California condor was observed feeding on a dead calf in a Potrero side canyon by wildlife biologist Chris Niemela in a Potrero side canyon, 2008.
- Causey, A. 2007. "Focused Surveys for the Undescribed Everlasting Species in Castaic Creek and the Santa Clara River in Los Angeles County, California." Memorandum from A. Causey (Dudek) to M. Carpenter (Newhall). December 14, 2007.
- CDFG. 2007A. RareFind. Version 3. California Natural Diversity Database. Accessed October to December 2007. <http://www.dfg.ca.gov/bdb/html/cnddb.html>.
- CDFG. 2008E. RareFind. Version 3.1.0. California Natural Diversity Database. Accessed October 29, 2008. <http://www.dfg.ca.gov/bdb/html/cnddb.html>.

- CNPS (California Native Plant Society). 2022. "Species Details: *Calochortus fimbriatus* (late-flowered mariposa-lily)." *CNPS Rare Plant Inventory* [website]. <https://rareplants.cnps.org/Plants/Details/1601>.
- Compliance Biology, Inc. 2002. "Results of Focused Surveys for Coastal California Gnatcatcher Surveys; River Park Project. Santa Clarita, Los Angeles County, California." Letter report from D. Crawford (Compliance Biology, Inc.) to S. Tebo (Impact Sciences, Inc.). January 24, 2003.
- Compliance Biology. 2003B. "Results of Focused Survey for Coastal California Gnatcatcher Surveys [sic]; River Park Project, Santa Clarita, Los Angeles County, California." Letter report from D. Crawford (Compliance Biology) to S. Tebo (Impact Sciences). January 24, 2003 (February 5, 2003).
- Compliance Biology, Inc. 2004A. Results of Butterfly Surveys on the Newhall Ranch Project Site, Los Angeles County, California. Camarillo, California: Compliance Biology, Inc. September 16, 2004.
- Compliance Biology, Inc. 2004C. Results of Butterfly Surveys on Magic Mountain Entertainment Site, Los Angeles County, California. Camarillo, California: Compliance Biology, Inc. August 4, 2004.
- Compliance Biology, Inc. 2004D. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, River Village Project; Newhall Ranch, Valencia, California*. Prepared for Newhall Ranch Company. Camarillo, California: Compliance Biology, Inc. October 2004.
- Compliance Biology, Inc. 2004F. *Results of Focused Surveys for Arroyo Toad and Special Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California*. Prepared for Newhall Ranch Company. Camarillo, California: Compliance Biology, Inc. September 2004.
- Compliance Biology, Inc. 2004G. Western Spadefoot Toad Habitat Enhancement and Monitoring Plan, Valencia Commerce Center Project, Los Angeles County, California. Prepared for Newhall Ranch Company. Camarillo, California: Compliance Biology, Inc. November 2004.
- Compliance Biology, Inc. 2005. Results of Butterfly Surveys on Newhall Salt Canyon Habitat Preservation Area, Los Angeles County, California. Prepared for Newhall Land and Farming Company. Camarillo, California: Compliance Biology, Inc. July 31, 2005.
- Compliance Biology, Inc. 2006A. Results of Focused Coastal California Gnatcatcher Surveys; Castaic Mesa Project, Los Angeles County, California. Prepared for Impact Sciences, Inc. Camarillo, California: Compliance Biology.
- Compliance Biology, Inc. 2006C. Results of the Focused Western Spadefoot Toad Surveys on the Mission Village Project Site. Prepared for Newhall Land. Camarillo, California: Compliance Biology.
- Compliance Biology, Inc. 2006D. Biological Resource Assessment, Castaic Mesa Project, Los Angeles County, California. Prepared for Newhall Land and Farming Company. Camarillo, California: Compliance Biology, Inc. October 16, 2006.
- Compliance Biology, Inc. 2019. "Results of 2019 Aquatic Habitat Assessment for Special-Status Species – Valencia Commerce Center, Castaic Creek (PM18108)." Letter report to S. Rojas (Newhall) from D. Crawford (Compliance Biology, Inc.). August 12, 2019.

- Compliance Biology. 2024. "Summary of Special-Status Biological Resource Surveys in Portions of Valencia Commerce Center Project Area." Letter from D. Crawford (Compliance Biology) to D. Compton (Dudek). July 1, 2024.
- Corps and CDFG (U.S. Army Corps of Engineers and California Department of Fish and Game). 2010. *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan Final Joint Environmental Impact Statement and Environmental Impact Report*. SCH No. 2000011025. Seven volumes. June 2010.
- County of Los Angeles. 1999. *Environmental Impact Report for the Newhall Ranch Specific Plan and Water Reclamation Plant*. SCH No. 95011015. March 1999.
- County of Los Angeles. 2003A. Revised Draft Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Environmental Impact Report (Volumes 1 and 2) and Final Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plant Final Environmental Impact Report (Volumes 3–7). Project No. 94087, SCH No. 95011015. Seven volumes, November 2002 to May 2003. Prepared by Impact Sciences, Inc. for Los Angeles County Department of Regional Planning. Agoura Hills, California: Impact Sciences, Inc.
- Crawford, D. 2007. Telephone call from D. Crawford (Compliance Biology) to S. Miller (Dudek). November 2007.
- Dudek & Associates. 2002A. 2002 Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. November 20, 2002.
- Dudek & Associates. 2002B. 2002 Sensitive Plant Survey Results for Entrada [Magic Mountain Entertainment], Los Angeles County, California. Draft. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. January 2003.
- Dudek & Associates. 2002C. 2002 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California. Draft. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. January 2003.
- Dudek & Associates. 2004B. 2003 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2004.
- Dudek & Associates. 2004C. 2003 Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2004.
- Dudek & Associates. 2004E. 2003 Sensitive Plant Survey Results for the Magic Mountain Entertainment Site, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2004.

- Dudek & Associates. 2004F. 2004 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2004.
- Dudek & Associates. 2004G. 2004 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2004.
- Dudek & Associates. 2004H. 2004 Sensitive Plant Survey Results for the Entrada Site, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2004.
- Dudek & Associates. 2004I. 2003 Sensitive Plant Survey Results for the Salt Creek Site, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. June 2004.
- Dudek & Associates. 2006B. Biological Resources Technical Report for the Newhall Ranch High Country Specific Management Area and the Salt Creek Area. Prepared for the Newhall Land and Farming Company by Dudek & Associates.
- Dudek & Associates. 2006C. Biological Resources Technical Report for the Newhall Ranch Specific Plan Area, Los Angeles County, California. Prepared for the Newhall Land and Farming Company by Dudek & Associates.
- Dudek & Associates. 2006D. Biological Resources Technical Report for the Valencia Commerce Center, Los Angeles County, California. Prepared for the Newhall Land and Farming Company by Dudek & Associates.
- Dudek & Associates. 2006E. Biological Resources Technical Report for the Entrada Site, Los Angeles County, California. Prepared for the Newhall Land and Farming Company by Dudek & Associates.
- Dudek & Associates. 2006F. 2005 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek & Associates. 2006G. 2005 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek. October 2006.
- Dudek & Associates. 2006H. 2005 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek. October 2006.
- Dudek & Associates. 2006I. 2006 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek. October 2006.



- Dudek & Associates. 2006J. 2006 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek & Associates. 2006K. 2006 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek & Associates. October 2006.
- Dudek. 2007B. *Newhall Ranch – Noise Levels Monitored Along SR-126*. Prepared for the Newhall Land and Farming Company. Encinitas, California: Dudek. August 2007.
- Dudek. 2007C. *Draft Middle Canyon Spring Survey and Status Report*. Prepared for Newhall Land and Farming. Valencia, California: Dudek. August 2007.
- Dudek. 2007D. “Oak Tree Estimate for High Country SMA and the Salt Creek Area.” Memorandum from A. Thomson (Dudek) to M. Carpenter and S. Rojas (Newhall). January 10, 2007.
- Dudek. 2007F. *2007 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2007.
- Dudek. 2007G. *2007 Sensitive Plant Survey Results for the Entrada [Magic Mountain Entertainment] Site, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2007.
- Dudek. 2007H. *2007 Sensitive Plant Survey Results for the Valencia Commerce Center, Los Angeles, California*. Prepared for The Newhall Land and Farming Company. Valencia, California: Dudek. December 2007.
- Dudek. 2016A. *2016 Survey Results for San Fernando Valley Spineflower within the Spineflower Conservation Plan Area*. Prepared for The Newhall Land and Farming Company. Encinitas, California: Dudek. July 2016.
- Ecological Sciences, Inc. 2003A. “Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Oxnard, California: Ecological Sciences, Inc. August 31, 2003.
- Ecological Sciences, Inc. 2003B. “Results of Focused Arroyo Toad Surveys, Castaic Reservoir Site, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Oxnard, California: Ecological Sciences, Inc. August 27, 2003.
- Ecological Sciences, Inc. 2003C. “Results of Focused Arroyo Toad Surveys, Hart/Pony Baseball Site and Hart/Pony Commercial Site, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Oxnard, California: Ecological Sciences, Inc. August 21, 2003.
- Ecological Sciences, Inc. 2003D. “Results of Focused Arroyo Toad Surveys, NRMP Project Area, Santa Clarita, California.” Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Oxnard, California: Ecological Sciences, Inc. August 31, 2003.

- Ecological Sciences, Inc. 2003E. "Results of Focused Arroyo Toad Surveys, Round Mountain Site, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Oxnard, California: Ecological Sciences, Inc. August 25, 2003.
- Ecological Sciences, Inc. 2003F. "Results of Focused Arroyo Toad Surveys, Soledad Site, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Oxnard, California: Ecological Sciences, Inc. August 23, 2003.
- Ecological Sciences, Inc. 2004A. "Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Santa Paula, California: Ecological Sciences, Inc. August 11, 2004.
- Ecological Sciences, Inc. 2004B. "Results of Focused Arroyo Toad Surveys, Portions of Santa Clara River/South Fork, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Santa Paula, California: Ecological Sciences, Inc. August 21, 2004.
- Ecological Sciences, Inc. 2004C. "Results of Focused Arroyo Toad Surveys, NRMP Soledad/Riverpark Area, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences, Inc.) to Susan Tebo (Impact Sciences). Santa Paula, California: Ecological Sciences, Inc. August 29, 2004.
- Ecological Sciences, Inc. 2004D. "Results of Focused Arroyo Toad Surveys, San Francisquito Creek, Santa Clarita, California." Letter report from S.D. Cameron (Ecological Sciences, Inc.) to M. Subbotin (Newhall Ranch Company). Santa Paula, California: Ecological Sciences, Inc. August 25, 2004.
- ENTRIX, Inc. 2006B. *Focused Special-Status Aquatic Species Assessment—Santa Clara River, Landmark Village Project, Newhall Ranch, California*. Prepared for Newhall Land. Ventura, California: ENTRIX.
- ENTRIX, Inc. 2009. *Focused Special-Status Fish Species Habitat Assessment—Santa Clara River and Tributary Drainages, Newhall Ranch, Los Angeles County, California*. Prepared for Newhall Land. Ventura, California: ENTRIX.
- FLx. 2002A. "Rare Plant Surveys: Newhall Ranch Specific Plan Project Sites, Los Angeles County, California." Prepared for Impact Sciences, Inc. Santa Barbara, California: FLx. September 2002.
- FLx. 2002B. "Rare Plant Survey for *Helianthus* sp., River Village and Water Reclamation Plant, Los Angeles County, California." Prepared for Impact Sciences, Inc. Santa Barbara, California: FLx.
- FLx. 2004A. "Sensitive Plant Species Surveys: Santa Clara River, Newhall Ranch/Valencia Company Project Sites, Los Angeles County, California." Prepared for Newhall Land and Farming Company. Santa Barbara, California: FLx. October 2004.
- FLx. 2004B. "Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area." Letter report from N. Gale and A.K. Parikh (FLx) to C. Perez (The Newhall Land and Farming Company). Santa Barbara, California: FLx. May 8, 2004.

- FLx. 2005. "Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area." Letter report from N. Gale and A.K. Parikh (FLx) to C. Perez (The Newhall Land and Farming Company). Santa Barbara, California: FLx. May 7, 2004.
- FLx. 2006A. "Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area." Letter report from N. Gale and A.K. Parikh (FLx) to C. Perez (The Newhall Land and Farming Company). Santa Barbara, California: FLx. May 7, 2006.
- Forde Biological Consultants. 2006. "Least Bell's Vireo and Southwestern Willow Flycatcher Presence Absence Survey; Castaic Creek below Castaic Lagoon to halfway between Lake Hughes Road and Tapia Canyon Road, Castaic, Los Angeles County, California." Prepared for Compliance Biology, Inc., Camarillo, California. August 14, 2006.
- Guthrie, D.A. 1991A. Surveys for Least Bell's Vireo Along the Santa Clara River and Its Tributaries near Valencia. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: Joint Science Department, Claremont Colleges.
- Guthrie, D.A. 1991B. Surveys along Castaic Creek for least Bell's Vireo. Claremont, California: Joint Science Department, Claremont Colleges.
- Guthrie, D.A. 1992. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: Joint Science Department, Claremont Colleges.
- Guthrie, D.A. 1993A. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center.
- Guthrie, D.A. 1993B. Bird Surveys along the Santa Clara River, 1993; Castaic Creek Downstream to just below Newhall Ranch. Prepared for B. Braly, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. August 4, 1993.
- Guthrie, D.A. 1994A. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 5, 1994.
- Guthrie, D.A. 1994B. Bird Surveys along the Santa Clara River, 1994; Castaic Creek Downstream to just below Las Brisas Crossing. Prepared for B. Braly, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. July 5, 1994.
- Guthrie, D.A. 1995A. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 12, 1995.
- Guthrie, D.A. 1996A. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 10, 1996.

- Guthrie, D.A. 1996B. Bird Surveys along the Santa Clara River, 1996; Castaic Creek Downstream to just below Las Brisas Crossing. Prepared for J. Harter, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. July 11, 1996.
- Guthrie, D.A. 1997A. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. June 23, 1997.
- Guthrie, D.A. 1997B. Bird Surveys along the Santa Clara River, 1997; Castaic Creek Downstream to just below Las Brisas Crossing. Prepared for J. Harter, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. June 23, 1997.
- Guthrie, D.A. 1998A. Bird Surveys along the Santa Clara River, 1998; Castaic Creek Downstream to just below Las Brisas Crossing. Prepared for M. Subbotin, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. July 28, 1998.
- Guthrie, D.A. 1998B. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1998. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 28, 1998.
- Guthrie, D.A. 1999A. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 1999. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 26, 1999.
- Guthrie, D.A. 1999B. Bird Surveys in the Proposed Riverwood Project Area, near Valencia, California. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 26, 1999.
- Guthrie, D.A. 1999C. Bird Surveys along the Santa Clara River, 1999; Ventura County Line Downstream to just below Las Brisas Crossing. Prepared for M. Subbotin, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. August 26, 1999.
- Guthrie, D.A. 2000A. Bird Observations for Spring 2000 in the Proposed Potrero and Long Canyon Development Area near Valencia, California. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 17, 2000.
- Guthrie, D.A. 2000B. Bird Observations for Spring 2000 in the Proposed Mesa Development near Valencia, California. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 17, 2000.
- Guthrie, D.A. 2000C. Bird Surveys along the Santa Clara River, 2000; Mouth of Castaic Creek Downstream to the Los Angeles/Ventura County Line. Prepared for M. Subbotin, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. August 2, 2000.
- Guthrie, D.A. 2000D. Bird Surveys in the Proposed Magic Mountain Entertainment Project Area, near Valencia, California, 2000. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 17, 2000.

- Guthrie, D.A. 2000E. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2000. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 2, 2000.
- Guthrie, D.A. 2000F. Bird Surveys of Castaic Junction, an Area on the North Side of the Santa Clara River at the Junction of State Route 126 and Interstate 5, near Valencia, California. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 17, 2000.
- Guthrie, D.A. 2001A. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2001. Corrected version. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. September 14, 2001.
- Guthrie, D.A. 2002A. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2002. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 16, 2002.
- Guthrie, D.A. 2002C. Bird Surveys along the Santa Clara River, 2002; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing. Prepared for M. Subbotin, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. August 16, 2002.
- Guthrie, D.A. 2003A. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California, 2003. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 28, 2003.
- Guthrie, D.A. 2004A. Bird Observations for Spring 2004 in the Proposed Homestead and Chiquito Areas, near Valencia, California. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004B. Bird Observations in the Commerce Center Project Site, near Valencia, California, 2004. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004C. Bird Observations in the Stevenson Ranch, Phase 5 Area, near Valencia, California, 2004. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. July 2, 2004.
- Guthrie, D.A. 2004D. Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak Valley and Onion Fields Development Areas near Valencia, California. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004E. Bird Observations for Spring 2004 in the Proposed Mesa East and West Development near Valencia, California. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004F. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2004. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 24, 2004.



- Guthrie, D.A. 2004G. Bird Observations in the Proposed Magic Mountain Entertainment Project Area, near Valencia, California, 2004. Revised. Prepared for M. Subbotin, Valencia Corporation. Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2004H. Bird Surveys along the Santa Clara River, 2004; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing. Prepared for M. Subbotin, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. August 24, 2004.
- Guthrie, D.A. 2005B. Bird Surveys along the Santa Clara River, 2005; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing. Prepared for M. Subbotin, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center.
- Guthrie, D.A. 2006A. Bird Surveys along the Santa Clara River, 2006; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing. Final Report. Prepared for M. Carpenter, Newhall Land and Farming. Claremont, California: W.M. Keck Science Center. October 11, 2006.
- Guthrie, D.A. 2006B. Bird Surveys of The Old Road Phase III Environmental Project Study Area, near Valencia, California, 2006. Claremont, California: W.M. Keck Science Center. July 20, 2006.
- Guthrie, D.A. 2006C. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia California. Prepared for M. Carpenter, Valencia Corporation. Claremont, California: W.M. Keck Science Center. October 11, 2006.
- Haglund, T.R. 1989. *Current Status of the Unarmored Threespine Stickleback (Gasterosteus aculeatus williamsoni) along Portions of the Santa Clara River Drainage*. Prepared for Newhall Land and Farming Company. Los Angeles, California: University of California.
- Haglund, T.R., and J.N. Baskin. 2000. *Fish and Wildlife Survey and Habitat Assessment of the Santa Clara River at Interstate 5*. Prepared for Environmental Planning Branch, California State Department of Transportation. Pomona: California State Polytechnic University. October 2000.
- Hayes, M.P., and M.R. Jennings. 1988. "Habitat Correlates of Distribution of the California Red-Legged Frog (*Rana aurora draytonii*) and the Foothill Yellow-Legged Frog (*Rana boylei*): Implications for Management." In *Proceedings of the Symposium on the Management of Amphibians, Reptiles, and Small Mammals in North America*, technical coordinators R. Sarzo, K.E. Severson, and D.R. Patton, 144–158. U.S. Forest Service General Technical Report RM-166.
- Huntley, C. 2010. "Re: Snail Methods, etc." Email from C. Huntley (Aspen) to P. Behrends (Dudek), A.C. Lynch (Sohagi Law Group), D. Bedford (CDFG), K. Drewe (CDFG), S. White (Aspen), M. Carpenter (Newhall), S. Rojas (Newhall), and S. Miller (Dudek). March 12, 2010.
- Impact Sciences, Inc. 2000. "Results of Focused Surveys for the Coastal California Gnatcatcher, ±156-Acre Project Site, Santa Clarita, Los Angeles County, California." Letter report from S.D. Cameron (Impact Sciences, Inc.) to M. Weinstein (Science Applications International Corporation). Agoura Hills, California: Impact Sciences, Inc. July 7, 2000.

- Impact Sciences, Inc. 2001. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area, Valencia, California*. Prepared for Valencia Company. Agoura Hills, California: Impact Sciences, Inc. September 19, 2001.
- Impact Sciences, Inc. 2002. *Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians, Newhall Ranch, Valencia, California*. Prepared for Newhall Ranch Company. Agoura Hills, California: Impact Sciences, Inc. May 21, 2002.
- Impact Sciences, Inc. 2003A. *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Newhall Ranch, Valencia, California*. Prepared for Newhall Land and Farming. Agoura Hills, California: Impact Sciences, Inc. January 24, 2003.
- Impact Sciences, Inc. 2003B. *Results of Focused Surveys for Unarmored Threespine Stickleback and Other Special-Status Fish Species; Natural River Management Plan Area, Valencia, California*. Prepared for Newhall Land and Farming. Agoura Hills, California: Impact Sciences, Inc. June 2003.
- Impact Sciences, Inc. 2005. *Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area, Los Angeles County, California*. Draft. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences, Inc. May 2005.
- Impact Sciences, Inc. 2006A. *2004 and 2006 Reptile Survey Results, Newhall Ranch Specific Plan Area, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences, Inc. October 2006.
- Impact Sciences, Inc. 2006B. *Newhall Ranch Oak Tree Survey*. Camarillo, California: Impact Sciences, Inc.
- Impact Sciences, Inc. 2006C. *Mission Village Oak Tree Report, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences, Inc. December 2006.
- Impact Sciences, Inc. 2006D. *Landmark Village Planning Area Oak Tree Report, Los Angeles County, California*. Prepared for The Newhall Land and Farming Company. Camarillo, California: Impact Sciences, Inc. September 2006.
- Jepson Flora Project. 2022A. *Jepson eFlora*. [https://ucjeps.berkeley.edu/eflora/search\\_eflora.php?name=](https://ucjeps.berkeley.edu/eflora/search_eflora.php?name=).
- Jepson Flora Project. 2022B. "Asteraceae (Compositae)." In *Jepson eFlora*, Revision 10. Prepared by D.J. Keil. [https://ucjeps.berkeley.edu/eflora/eflora\\_display.php?tid=58](https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=58).
- Johnson, H.L. 2006. "Bat Survey; August 7–10, 2006 for the Newhall Ranch, Valencia, California." Letter report by H.L. Johnson prepared for G. Ainsworth (Impact Sciences, Inc.). October 10, 2006.
- Labinger, Z., and J. Greaves. 1999A. *Results of 1998 Avian Surveys and Least Bell's Vireo Monitoring: Restoration Phase of the ARCO/Four Corners January 17, 1994 Oil Spill on the Santa Clara River, California*. Draft. Prepared for the U.S. Fish and Wildlife Service. Goleta, California: Labinger Biological Consulting. March 1, 1999.

- Labinger, Z., J. Greaves, and D. Haupt. 1995. *Preliminary Results of Avian Surveys Following the January 17, 1994, ARCO/Four Corners Oil Spill on the Santa Clara River, California*. Draft. Goleta, California: Labinger Biological Consulting.
- Labinger, Z., J. Greaves, and D. Haupt. 1997A. *1996 Avian Survey Results following the ARCO/Four Corners Oil Spill (January 17, 1994) on the Santa Clara River, California*. Draft. Prepared for the U.S. Fish and Wildlife Service. Goleta, California: Labinger Biological Consulting. January 9, 1997.
- Labinger, Z., J. Greaves, and D. Haupt. 1997B. *Results of 1997 Avian Surveys and Least Bell's Vireo Monitoring: Restoration Phase of the ARCO/Four Corners January 17, 1994, Oil Spill on the Santa Clara River, California*. Draft. Prepared for the U.S. Fish and Wildlife Service. Goleta, California: Labinger Biological Consulting. November 30, 1997.
- Land Design Consultants. 2007. *Entrada Oak Tree Report*. Prepared for Newhall Land and Farming Company. February 2007.
- Miller, S. 2007. Verbal communication from S. Miller (Dudek) to C. Ford (Dudek). November 2007.
- Niemela, C. 2009. Memo from C. Niemela (Bloom Biological) to Jesse Grantham (USFWS) regarding observations of California condor in Potrero Canyon in January 2009. March 11, 2009.
- Olson, G. 2007. Letter containing comments on the Draft Environmental Impact Report for Landmark Village. Letter from G. Olson (Audubon California) to D. Fierros (County of Los Angeles, Department of Regional Planning), January 19, 2007.
- PCR (Planning Consultants Research). 1998. "Results of Focused California Gnatcatcher Surveys for the West Creek/East Creek Project Site, Valencia, Los Angeles County." Letter report from S.G. Nelson (PCR) to D. Krofta (U.S. Fish and Wildlife Service). Santa Monica, California: PCR. August 25, 1998.
- Priest, J. 2007A. "Documentation of California Gnatcatcher Observation at Newhall, Valencia Commerce Center Project on 10/5/07." Memorandum from J. Priest (Dudek) to D. Crawford and R. Francis (Compliance Biology, Inc.), October 8, 2007.
- RECON. 1999A. *Survey for Arroyo Southwestern Toad for Newhall Ranch*. Prepared for Newhall Ranch Company. San Diego, California: RECON. July 12, 1999.
- Richard Johnson & Associates. 2007. *Arborist Survey Report for Valencia Commerce Center VTPM 18108, Los Angeles County, California*. Prepared for Valencia Company, Valencia, California. April 3, 2007.
- Root, R.P. 2008. "Acknowledgement of Request for Formal Consultation on the Proposed Newhall Ranch Specific Plan, Santa Clarita, Los Angeles County, California." Letter from R.P. Root (USFWS) to A.O. Allen (Corps), November 12, 2008.
- SAIC (Science Applications International Corporation). 2003. "Results of Focused Coastal California Gnatcatcher Surveys for the Stevenson Ranch Phase V Project Site, Los Angeles, California." Letter report from M. Blain (SAIC) to R. Farris (U.S. Fish and Wildlife Service). September 3, 2003.

Sandburg, N.H. 2001. "Field Summary of Santa Clara River Surveys for *Bufo californicus* and *Rana aurora draytonii*, May 8 through May 29, 2001." Letter report from N.H. Sandburg (Biological Consultant). Santa Barbara, California. June 6, 2001.

SMEA (San Marino Environmental Associates). 1995A. *Sensitive Aquatic Species Survey; Santa Clara River and San Francisquito Creek; Newhall Land and Farming Company Property; Los Angeles, California*. Final report. Prepared for M. Subbotin, Valencia Company by J.N. Baskin and T.R. Haglund. San Marino, California: SMEA. December 1995.

Stoeker, M., and E. Kelly. 2005. *Santa Clara River Steelhead Trout: Assessment and Recovery Opportunities*. Prepared for The Nature Conservancy and The Santa Clara River Trustee Council.

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

INTENTIONALLY LEFT BLANK



---

## **Appendix D**

### Project Mitigation Measures and Project Design Features



The Newhall Ranch Resource Management and Development Plan (RMDP)/Spineflower Conservation Plan (SCP) Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) adopted in 2010 used mitigation measures already adopted under the Newhall Ranch Specific Plan Program EIR as revised (March 1999), as well as a set of additional mitigation measures to minimize impacts to biological resources. The following mitigation measures include measures from the Specific Plan and the Newhall Ranch RMDP/SCP EIS/EIR that apply to the proposed Valencia Commerce Center Project (“VCC Project”). The Specific Plan measures use the format SP-4.6-XX, whereas the RMDP/SCP EIS/EIR measures use the format RMDP-SCP-BIO-XX. The State-Certified EIR also added several project design features (PDFs) and mitigation measures in 2017 to address unarmored threespine stickleback (“stickleback”; *Gasterosteus aculeatus williamsoni*), some of which apply to VCC Project activities within Castaic Creek. Those PDFs use the format RMDP/SCP-AEA-PDF-3-XX, and the additional stickleback mitigation measures use the format RMDP/SCP-AEA-3-XX. An additional mitigation measure (ES/VCC-MM-BIO-1) specific to surveys and relocation of California glossy snake and one (ES/VCC-MM-BIO-2) specific to surveys for and avoidance of nests of Crotch’s bumble bee, two species that were not considered special-status species at the time of the analysis for the State-Certified EIR, are included. Finally, several measures (VCC-4.x-X) included in the Mitigation Monitoring and Reporting Program for the 1990 EIR certified by the County of Los Angeles in approving the larger Valencia Commerce Center development, of which the current VCC Project is a part, apply to the VCC Project and are also included.

Note that the Newhall Ranch Specific Plan Program EIR predated approval of the SCP and associated incidental take permit (ITP) by CDFW. Therefore, many of the spineflower-related mitigation measures adopted under the Newhall Ranch Specific Plan Program EIR have been fully satisfied and/or superseded by preparation, approval and, in some cases, implementation of the SCP and do not apply to the VCC Project.

## D.1 Project Design Features

**RMDP/SCP-AEA-PDF-3-1:** To avoid impacts on the unarmored threespine stickleback, as well as other sensitive fish in the Santa Clara River, no construction activities shall take place in the wetted channel of the Santa Clara River.

*(Although the VCC Project Site does not contain any part of the Santa Clara River, to avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this PDF will also be applied to the wetted channel of Castaic Creek within the VCC Project Site.)*

**RMDP/SCP-AEA-PDF-3-8:** With respect to the temporary haul route bridges, all steel pile supports shall be installed and removed when the column and pile locations are outside of the wetted portion of the Santa Clara River and when there is a clear weather window as predicted by NOAA weather data. A clear weather forecast is defined for this project as a 40 percent or less chance of a 0.1 inch or greater precipitation event within the next 48 hours. Modular bridge decks, and all travel surface materials above the deck, shall be removed from the river prior to November 30 and shall not be installed until after May 1 of each year they are in use, consistent with NOAA weather data.

*(Although the VCC Project Site does not contain any part of the Santa Clara River, to avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this PDF will also be applied to the wetted portion of Castaic Creek within the VCC Project Site. To reflect hydrologic conditions specific to Castaic Creek, any modular bridge decks and travel surface materials shall not be installed until after April 1 of each year they are in use.)*

RMDP/SCP-AEA-PDF-3-11: All construction dewatering of seepage water, associated with bank stabilization shall be conducted in a manner that does not create a risk of fish stranding, either through draw down (zone of influence) or by flow discharge creating temporary habitat suitable for unarmored threespine stickleback.

*(Although the VCC Project Site does not contain any part of the Santa Clara River, to avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this PDF will also be applied to bank stabilization construction within Castaic Creek in the VCC Project Site.)*

RMDP/SCP-AEA-PDF-3-12: All long-term maintenance of project facilities on the Santa Clara River shall adhere to timing and work zone restrictions, specifically: (1) maintenance activities shall not take place in the wetted channel of the Santa Clara River; (2) maintenance, repair or replacement of bridge structures requiring access to the riverbed shall be restricted to the period from June 1 to September 30; (3) any dewatering necessary during any maintenance activities shall not create a risk of fish stranding, either through draw down (zone of influence) or by flow discharge creating temporary habitat suitable for unarmored threespine stickleback, nor shall it involve direct removal of surface water from, or discharge to, the wetted channel of the Santa Clara River.

*(Although the VCC Project Site does not contain any part of the Santa Clara River, to avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this PDF will also be applied to the wetted channel of Castaic Creek within the VCC Project Site. However, item (2) is not applicable to the VCC Project, as the VCC Project will not construct any permanent bridge structure across the Santa Clara River or Castaic Creek that would require maintenance, repair, or replacement.)*

VCC-PDF-BIO-1: Within six months following completion of development within the VCC Planning Area, the Applicant shall offer a conservation easement (as defined in Civil Code Section 815.1) over preserved streambeds and riparian areas within Castaic Creek and Hasley Canyon that are subject to the California Department of Fish and Wildlife's jurisdiction under Fish and Game Code Sections 1602 et seq. to ensure those areas are maintained in an undeveloped, open space condition in perpetuity. The conservation easement shall be offered to a qualified natural lands management organization or other entity qualified to hold conservation easements under Civil Code Section 815.3.

*(This measure applies to the VCC Project as written.)*

VCC-PDF-BIO-2: With respect to any at-grade temporary haul route crossing of Castaic Creek, such crossing shall be installed and removed when the crossing location is outside any wetted portion of Castaic Creek and when there is a clear weather window as predicted by NOAA weather data. A clear weather forecast is defined for this project as a 40 percent or less chance of a 0.1 inch or greater precipitation event within the next 48 hours. Upon removal of any at-grade crossing, the bed and banks of Castaic Creek shall be restored to pre-construction elevations and contours and revegetated with native vegetation cover.

*(This measure applies to the VCC Project as written.)*

## D.2 Specific Plan Program EIR Biology and Waters Mitigation Measures Applicable to the VCC Project

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.

*(This measure applies to the VCC Project without change.)*

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.

*(This measure applies to the VCC Project without change.)*

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.

*(This measure applies to the VCC Project without change.)*

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.

*(This measure applies to the VCC Project without change.)*

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.

*(This measure applies to the VCC Project without change.)*

- 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.

*(This measure applies to the VCC Project without change.)*

- 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.

*(This measure applies to the VCC Project without change.)*

- 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.

*(This measure applies to the VCC Project without change.)*

- SP-4.6-9 Monitoring reports for the mitigation site shall be reviewed by the permitting State and/or Federal agency.

*(This measure applies to the VCC Project without change.)*

- SP-4.6-10 Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan.

*(This measure applies to the VCC Project without change.)*

- 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.).

*(This measure applies to the VCC Project without change.)*

- 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).

*(This measure applies to the VCC Project without change.)*

- 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.

*(This measure applies to the VCC Project without change.)*

- 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.

*(This measure applies to the VCC Project without change.)*

- 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.

*(This measure applies to the VCC Project without change.)*

- 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 MM SP-4.6-1 through MM SP-4.6-11 and MM SP-4.6-13 through MM SP-4.6-16, above.

Mitigation requirements for oak tree replacement are set forth in MM SP-4.6-48, below.

*(This measure applies to the VCC Project without change.)*

- SP-4.6-27 Removal of grazing from the High Country SMA except for those grazing activities associated with long-term resource management programs, is a principal means of enhancing habitat values in the creeks, brushland and woodland areas of the SMA. The removal of grazing in the High Country SMA

is discussed below under (b) 4. Long Term Management. All enhancement activities for riparian habitat within the High Country SMA shall be governed by the same provisions as set forth for enhancement in the River Corridor SMA. Specific Plan Table 2.6-3 of the Resource Management Plan provides a list of appropriate plant species for use in enhancement areas in the High Country SMA.

*(This measure applies to the VCC Project without change.)*

- SP-4.6-28 Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources, shall be conducted pursuant to the Oak Resource Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.

*(This measure applies to the VCC Project without change.)*

- 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.

*(This measure applies to the VCC Project without change.)*

- 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

*(This measure applies to the VCC Project without change.)*

- 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.

*(This measure applies to the VCC Project without change.)*

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.

*(This measure applies to the VCC Project without change except that the requirement for the Specific Plan to conform does not apply.)*

SP-4.6-56 All lighting along the perimeter of natural areas shall be downcast luminaries with light patterns directed away from natural areas.

*(This mitigation measure applies to the VCC Project without change.)*

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.

*(This measure applies to the VCC Project without change, except that the reference to the Specific Plan does not apply.)*

SP-4.6-62 When a map revision or Substantial Conformance determination on any subdivision map or Conditional Use Permit would result in changes to an approved oak tree permit, then the oak tree report for that oak tree permit must be amended for the area of change, and the addendum must be approved by the County Forester prior to issuance of grading permits for the area of the map or CUP being changed.

*(This measure applies to the VCC Project without change.)*

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.

*(This measure applies to the VCC Project without change.)*

## D.3 RMDP/SCP Final EIS/EIR Biology

### Mitigation Measures Applicable to the VCC Project

RMDP/SCP-BIO-1: Mitigation Measures SP-4.6-1 through SP-4.6-16<sup>1</sup> 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 RMDP/SCP 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.<sup>2</sup>

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 subnotification 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 RMDP/SCP BIO-2 and RMDP/SCP BIO-10. The detailed wetlands mitigation plans shall provide for the 3:1 replacement of any southern California black walnut to be removed from the riparian corridor for individual projects. The plan shall be subject to the approval of CDFG and the Corps and approved prior to the impact to riparian resources. RMDP/SCP BIO-4 describes that the functions and values will be assessed for the riparian areas that will be removed, and

---

<sup>1</sup> SP-4.6 mitigation measures were previously adopted by the Newhall Ranch Specific Plan Program EIR (1999, 2003) and the EIS/EIR for the RMDP/SCP (2010).

<sup>2</sup> 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.



RMDP/SCP BIO-2 and RMDP/SCP BIO-10 describe the replacement ratios for the habitats that will be impacted.

*(This measure applies to the VCC Project with the following exceptions and/or changes: approval of mitigation plans will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*

**RMDP/SCP-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 RMDP/SCP BIO-4 and MM SW-3 of Section 4.6 of the Final EIS/EIR) on the Project Site, or as allowed under RMDP/SCP 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 RMDP/SCP BIO-2b.

- b. For permanent and temporary impacts to CDFG jurisdiction, consistent with the subnotification, quantities of mitigation acreage required shall be calculated in accordance with the criteria below:
  - If suitable mitigation sites have met success criteria (RMDP/SCP 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 13. 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 13 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 13 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 subnotification 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 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 one 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 13. CDFG Jurisdictional Permanent Impacts Mitigation Ratios**

Ratios Listed by Vegetation Types & Quality		(Mit. Ratio)	(Mit. Ratio)	(Mit. Ratio)
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
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 using the HARC methods described in Section 4.2, Geomorphology and Riparian Resources, of the RMDP/SCP EIS/EIR.
- \*\* MEDIUM reach value indicates a portion of the Santa Clara River or main tributary that scored between 0.4 and 0.79 Total Score using the HARC methods described in Section 4.2 of the RMDP/SCP EIS/EIR.
- \*\*\* LOW reach value indicates a portion of the Santa Clara River or main tributary that scored below 0.4 Total Score using the HARC methods described in Section 4.2 of the RMDP/SCP EIS/EIR.

*(This measure applies to the VCC Project with the following exceptions and/or changes: mitigation ratios will be applied when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. Mitigation sites may be located within the VCC Project Site and/or within the larger RMDP/SCP area, subject to the site approval process described in Mitigation Measure RMDP/SCP-BIO-3.)*

**RMDP/SCP-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 creek bed or other disturbance shall receive the highest level of priority for vegetation community restoration. Restoration sites may 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 RMDP/SCP BIO-12). Sites will be approved when the detailed wetlands mitigation plans are submitted to the Corps and CDFG as part of the subnotification letters submitted for individual projects. Status of the sites will be addressed through agency review of the annual mitigation status report and mitigation accounting form 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.

*(This measure applies to the VCC Project with the following exceptions and/or changes: mitigation site approval will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. The mitigation accounting form referenced in the measure is not required.)*

**RMDP/SCP-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 14 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 14. 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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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 subnotification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation status report and mitigation accounting form.

*(This measure applies to the VCC Project with the following exceptions and/or changes: restoration plans will be reviewed and approved when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*

**RMDP/SCP-BIO-6:** The revegetation site will be considered “complete” upon meeting all of the following success criteria. In a subnotification letter, the applicant may request modification of success criteria on a project by project basis. Acceptance of such request will be at the discretion of CDFG and the Corps.

1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion.
2. The percent cover and species richness of native vegetation shall be evaluated based on local reference sites established by CDFG and the Corps for the plant communities in the impacted areas.
3. Native shrubs and trees shall have at least 80% 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 Plan<sup>3</sup> for Waters of the United States.

*(This measure applies to the VCC Project with the following exceptions and/or changes: modification of success criteria may occur when the Applicant obtain permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. In addition, the HARC assessment may be replaced by another agency-approved method.)*

**RMDP/SCP-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 provided for in RMDP/ SCP BIO-6. Should a second act of God occur prior to Agency approval of the restoration area, the applicant shall

---

<sup>3</sup> 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.



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.

*(This mitigation measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the VCC Project without change.)*

**RMDP/SCP-BIO-9:** In areas where invasive exotic plant species control is authorized by CDFG in lieu of other riparian habitat mitigation (RMDP/SCP 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.

*(This mitigation measure applies to the VCC Project without change.)*

**RMDP/SCP-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 Environmental Impact Report, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval. 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.

*(This mitigation measure applies to the VCC Project without change.)*

**RMDP/SCP-BIO-12:** An annual monitoring report shall be submitted to the Corps and CDFG by April 1 of each year until satisfaction of success criteria identified in RMDP/SCP BIO-6, and consistent with the requirements of RMDP/SCP BIO-12. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed “in-lieu fees,” restoration methods, and vegetation community restoration performance standards. For active vegetation community creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; an accounting of colonization by native plants; and photographs. The report shall also include the mitigation account form (see RMDP/SCP BIO-11), which outlines account 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.

*(This mitigation measure applies to the VCC Project with the following exceptions and/or changes: the functional assessment of the compensatory mitigation site may use a method other than the HARC assessment methodology, subject to the approval of the Corps and CDFW. The mitigation account form referenced in the measure is not required because the VCC Project will not utilize or require any permits issued for the RMDP.)*

**RMDP/SCP-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.

*(This applies to the VCC Project without change.)*

**RMDP/SCP-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, containerized 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 RMDP/SCP BIO-2. The growth and survival of the replacement trees shall meet the performance standards specified in RMDP/SCP 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 RMDP/SCP BIO-6, RMDP/SCP BIO-11, and RMDP/SCP BIO-12.

*(This mitigation measure applies to the VCC Project with the following exceptions and/or changes: mitigation accounting in accordance with RMDP/SCP-BIO-11 is not required, because the VCC Project will not utilize or require any permits issued for the RMDP.)*

**RMDP/SCP-BIO-16:** Vegetation communities temporarily impacted by the proposed Project shall be revegetated as described in RMDP/SCP 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 on 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 RMDP/SCP BIO-1, RMDP/SCP BIO-2, and RMDP/SCP BIO-6. Annual monitoring reports on the status of the recovery or

temporarily impacted areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (RMDP/SCP BIO-11 and RMDP/SCP BIO-12).

*(This mitigation measure applies to the VCC Project with the following exceptions and/or changes: mitigation accounting in accordance with RMDP/SCP-BIO-11 is not required, because the VCC Project will not utilize or require any permits issued for the RMDP.)*

**RMDP/SCP-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 supersede these measures. If arroyo toads are determined to be present, the applicant shall develop and implement a monitoring plan that includes the following measures in consultation with the USFWS and CDFG:

1. The applicant shall retain a qualified biologist with demonstrated expertise with arroyo toads to monitor all construction activities in potential arroyo toad habitat and assist the applicant in the implementation of the monitoring program. This person will be approved by the USFWS prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of arroyo toad.
2. Prior to the onset of construction activities, the applicant shall provide all personnel who will be present on work areas within or adjacent to the Project area the following information:
  - a. A detailed description of the arroyo toad, including color photographs;
  - b. The protection the arroyo toad receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act;
  - c. The protective measures being implemented to conserve the arroyo toad and other species during construction activities associated with the proposed Project; and
  - d. A point of contact if arroyo toads are observed.
3. All trash that may attract predators of the arroyo toad will be removed from work sites or completely secured at the end of each work day.
4. Prior to the onset of any construction activities, the applicant shall meet on site with staff from the USFWS and the authorized biologist. The applicant shall provide information on the general location of construction activities within habitat of the arroyo toad and the actions taken to reduce impacts to this species. Because arroyo toads may occur in various locations during different seasons of the year, the applicant, USFWS, and authorized biologists will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on arroyo toads. The goal of this effort is to reduce the level of mortality of arroyo toads during construction. The parties realize that, if arroyo toads are present, complete prevention of all mortality is likely not possible because some arroyo toads may occur anywhere

- within suitable habitat during any given season; the detection of every individual over large areas is impossible because of the small size, fossorial habits, and cryptic coloration of the arroyo toad.
5. Where construction can occur in habitat where arroyo toads are widely distributed, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG. All workers will be advised that equipment and vehicles must remain within the fenced work areas.
  6. The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any arroyo toads from within the fenced area to suitable habitat outside of the fence. If arroyo toads are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS/CDFG.
  7. Fencing to exclude arroyo toads will be at least 24 inches in height.
  8. The type of fencing must be approved by the authorized biologist and the USFWS/CDFG.
  9. Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of arroyo toads may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the applicant in scheduling its work activities accordingly.
  10. If arroyo toads are found within an area that has been fenced to exclude arroyo toads, activities will cease until the authorized biologist moves the arroyo toads.
  11. If arroyo toads are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the arroyo toads. The authorized biologist in consultation with USFWS/CDFG will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS.
  12. Any arroyo toads found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.
  13. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
  14. Staging areas for all construction activities will be located on previously disturbed upland areas designated for this purpose. All staging areas will be fenced within potential toad habitat.
  15. To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force (DAPTF 2009) will be followed at all times.
  16. Drift fence/pitfall trap surveys will be implemented in toad sensitive areas prior to construction in an effort to reduce potential mortality to this species. Prior to any construction activities in the Project area, silt fence shall be installed completely around the proposed work area and a qualified biologist should conduct a preconstruction/clearance survey of the work area for arroyo

toads. Any toads found in the work area should be relocated to suitable habitat. The silt fence shall be maintained for the duration of the work activity.

17. The applicant shall restrict work to daylight hours, except during an emergency, in order to avoid nighttime activities when arroyo toads may be present on the access road. Traffic speed should be maintained at 15 mph or less in the work area.

*(As written, this measure applies to the Santa Clara River, which does not exist within the VCC Project Site. To protect resources that may have the potential to occur within Castaic Creek under certain conditions, this measure also applies to VCC Project activities within Castaic Creek, with the following exceptions and/or changes: the USFWS Biological Opinion for the RMDP does not apply to the VCC Project, but if the USFWS issues a biological opinion or other approval for the VCC Project that addresses arroyo toad, the Applicant shall implement any measures from such biological opinion or approval that either supplement or supersede this measure.)*

**RMDP/SCP-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 supersede these measures. If present, the Applicant shall develop and implement a monitoring plan that includes the following measures in consultation with the USFWS and CDFG:

1. The Applicant shall retain a qualified biologist with demonstrated expertise with California red-legged frogs to monitor all construction activities in potential red-legged frog habitat and assist the Applicant in the implementation of the monitoring program. This person will be approved by the USFWS prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of California red-legged frogs.
2. Prior to the onset of construction activities, the Applicant shall provide all personnel who will be present on work areas within or adjacent to the Project area the following information:
  - a. A detailed description of the California red-legged frogs, including color photographs;
  - b. The protection the California red-legged frog receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act;
  - c. The protective measures being implemented to conserve the California red-legged frogs and other species during construction activities associated with the proposed Project; and
  - d. A point of contact if California red-legged frogs are observed.
3. All trash that may attract predators of the California red-legged frogs will be removed from work sites or completely secured at the end of each work day.



4. Prior to the onset of any construction activities, the Applicant shall meet on-site with staff from the USFWS and the authorized biologist. The Applicant shall provide information on the general location of construction activities within habitat of the California red-legged frogs and the actions taken to reduce impacts to this species. Because California red-legged frogs may occur in various locations during different seasons of the year, the Applicant, USFWS, and authorized biologist will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on California red-legged frogs. The goal of this effort is to reduce the level of mortality of California red-legged frogs during construction.
5. Work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG. All workers will be advised that equipment and vehicles must remain within the fenced work areas.
6. The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any California red-legged frogs from within the fenced area to suitable habitat outside of the fence. If California red-legged frogs are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS/CDFG.
7. Fencing to exclude California red-legged frogs will be at least 24 inches in height.
8. The type of fencing must be approved by the authorized biologist and the USFWS/CDFG.
9. Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of California red-legged frogs may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the Applicant in scheduling its work activities accordingly.
10. If California red-legged frogs are found within an area that has been fenced to exclude California red-legged frogs, activities will cease until the authorized biologist moves the California red-legged frog(s).
11. If California red-legged frogs are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the California red-legged frogs. The authorized biologist in consultation with USFWS/CDFG will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS.
12. Any California red-legged frogs found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, access to deep perennial pools, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.
13. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
14. Staging areas for all construction activities will be located on previously disturbed upland areas, if possible, designated for this purpose. All staging areas will be fenced.

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.

*(As written, this measure applies to the Santa Clara River, which does not exist within the VCC Project Site. To protect resources that may have the potential to occur within Castaic Creek under certain conditions, this measure also applies to VCC Project activities within Castaic Creek, with the following exceptions and/or changes: the USFWS Biological Opinion for the RMDP does not apply to the VCC Project, but if the USFWS issues a biological opinion or other approval for the VCC Project that addresses California red-legged frog, the Applicant shall implement any measures from such biological opinion or approval that either supplement or supersede this measure.)*

**RMDP/SCP-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 (RMDP/SCP 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 MM RMDP/SCP BIO-21 will be implemented for coastal scrub restoration.

*(This mitigation measure applies to the VCC Project, with the following exceptions and/or changes: approximately 66.5 acres of coastal scrub shall be preserved on lands identified in the CMIP to offset impacts to coastal scrub associated with the VCC Project. The preserved lands may include areas of the VCC Project Site not subject to development, if identified in the CMIP as appropriate.)*

**RMDP/SCP-BIO-21:** Supplemental restoration of coastal scrub shall be conducted as an adaptive management measure pursuant to ES 5.4-16/RMDP-SCP 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 ES 5.4-16/RMDP-SCP 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 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.

*(This measure applies to the VCC Project without change.)*

#### RMDP/SCP-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 (RMDP/SCP BIO-22b) and the additional measures required by this EIS/EIR (RMDP/SCP BIO-2 for woodlands in jurisdictional streambeds and RMDP/SCP BIO-22c and RMDP/SCP 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 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 RMDP/SCP BIO-22b and

RMDP/SCP 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 eight 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.
  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 (RMDP/SCP BIO-22b), 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 15.

**Table 15. Additional RMDP/SCP 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 (RMDP/SCP BIO-22b).

General performance standards for woodland creation or enhancement sites include the following:

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 trees 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 16.

**Table 16. 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 invasive plant inventory (Cal-IPC 2006, 2007) will not be present on the revegetation site at the time that project success is determined.

*(This mitigation measure applies to the VCC Project without change.)*

RMDP/SCP-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.



*(This measure applies to the VCC Project without change in regard to preserve management and funding requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Project Site.)*

RMDP/SCP-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 implementation of spineflower preserve management as described in the SCP and all mitigation measures listed in this document.

*(This mitigation measure applies to the VCC Project without change in regard to preserve management and funding requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Project Site.)*

RMDP/SCP-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.

*(This mitigation measure applies to the VCC Project without change in regard to preserve management and funding requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Project Site.)*

RMDP/SCP-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 RMDP/SCP 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 MM 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 five 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.

*(This mitigation measure applies to the VCC Project without change in regard to preserve management and funding requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Project Site.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the VCC Project without change in regard to preserve management requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Project Site.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the VCC Project without change in regard to preserve management requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Project Site.)*

**RMDP/SCP-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 MM 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.

*(This mitigation measure applies to the VCC Project without change in regard to preserve management requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Project Site.)*

**RMDP/SCP-BIO-40:** The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan (Dudek 2007c) shall be revised and submitted to CDFG for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The revised plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open space (i.e., the Salt Creek area or High Country SMA, 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 feet elevational difference from the mitigation site, unless otherwise approved by CDFG. Bulbs may be salvaged and transplanted from slender mariposa lily occurrences to be lost; alternately, seed may be collected from protected occurrences, following CDFG-approved seed collection guidelines (i.e., MOU for rare plant seed collection). No bulbs will be translocated into areas within 300 feet of proposed or existing development. 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., as a means to ensure regional biodiversity of the species.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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 that four inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers shall occur only

after consultation with CDFG. A written report documenting the badger removal shall be provided to CDFG within 30 days of relocation.

Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(As written, this mitigation measure applies to the Santa Clara River, which does not exist within the VCC Project Site. To avoid potential impacts to the identified fish species that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to Castaic Creek within the VCC Project Site. However, to the extent this measure conflicts with PDFs RMDP/SCP-AEA-PDF-3-1, 3-8, or 3-11 or applicable requirements of Mitigation Measures RMDP/SCP-AEA-3-1 through 3-3, requirements of ES/VCC-MM-BIO-1, or requirements imposed on the VCC Project by CDFW or any other regulatory agency with jurisdiction over the VCC Project, the latter shall take precedence over this measure.)*



## RMDP/SCP-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 MM RMDP/SCP 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 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.

*(As written, this mitigation measure applies to the Santa Clara River, which does not exist within the VCC Project Site. To avoid potential impacts to special-status fish species that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to Castaic Creek within the VCC Project Site. However, to the extent this measure conflicts with PDFs RMDP/SCP-AEA-PDF-3-1, 3-8, or 3-11 or applicable requirements of mitigation measures RMDP/SCP-AEA-3-1 through 3-3, requirements of ES/VCC-MM-BIO-1, or requirements imposed on the VCC Project by CDFW or any other regulatory agency with jurisdiction over the VCC Project, the latter shall take precedence over this measure.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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/recording of the numbers of animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground-disturbing activities within potentially occupied habitat.

If southwestern pond turtles are detected in or adjacent to the Project, nesting surveys shall be conducted. Focused surveys for evidence of southwestern pond turtle nesting shall be conducted in, or adjacent to, the Project when suitable nesting habitat exists within 1,300 feet of occupied habitat in an area where Project-related ground disturbance will occur (e.g., development, ground disturbance). If both of those conditions are met, a qualified biologist shall conduct focused, systematic surveys for southwestern pond turtle nesting sites. The survey area shall include all suitable nesting habitat within 1,300 feet of occupied habitat in which Project-related ground disturbance will occur. This area may be adjusted based on the existing topographical features on a case-by-case basis with the approval of CDFG. Surveys will entail searching for evidence of pond turtle nesting, including remnant eggshell fragments, which may be found on the ground following nest depredation.

If a southwestern pond turtle nesting area would be adversely impacted by construction activities, the applicant shall avoid the nesting area. If avoidance of the nesting area is determined to be infeasible, the authorized biologist shall coordinate with CDFG to identify if it is possible to relocate the pond turtles. Eggs or hatchlings shall not be moved without written authorization from CDFG.

The qualified biologist shall be present during all activities immediately adjacent to or within habitat that supports populations of southwestern pond turtle. Clearance surveys for pond turtles shall be conducted within 500 feet of potential habitat by the authorized biologist prior to the initiation of construction each day. The resume of the proposed biologist will be provided to CDFG for approval prior to conducting the surveys.

*(As written, this mitigation measure applies to the Santa Clara River, which does not exist within the VCC Project Site. To avoid potential impacts to southwestern pond turtle that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to Castaic Creek within the VCC Project Site.)*

RMDP/SCP-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 in the field for more than five days without participating in the WEAP. Night work and use of lights on equipment shall not be allowed unless CDFG approves of the night work and use of lights. Lighting shall not be used where threatened or endangered species occur. Lights shall be directed from natural areas and remain 200 feet away from natural areas unless otherwise approved by CDFG. The qualified biologist shall provide ongoing guidance to construction personnel and contractors to ensure compliance with environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following:

- Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements.

- A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of non-compliance with these acts;
- Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts);
- Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction limitations (e.g., limitations on nighttime work) will be provided to the environmental monitors and construction crews prior to ground disturbance. This applies to preconstruction activities, such as site surveying and staking, natural resources surveying or reconnaissance, establishment of water quality BMPs, and geotechnical or hydrological investigations;
- Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife;
- Review/designate the construction area in the field with the contractor in accordance with the final grading plan;
- Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected);
- Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity;
- Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas;
- Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented;
- To reduce the potential for the spread of 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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

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.

*(This measure applies to the VCC Project with the following exceptions or changes: replacement habitat also may be created within areas of the VCC Project Site not subject to development, where approved by CDFW.)*

**RMDP/SCP-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 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.

*(This measure applies to the VCC Project without change. Note that coast horned lizard and coastal western whiptail are referred to as Blainville's horned lizard and San Diegan tiger whiptail, respectively, in this document.)*

## RMDP/SCP-BIO-55

- a. As a supplement to RMDP/SCP BIO-1 through RMDP/SCP 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, in the RMDP/SCP EIS/EIR). 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 RMDP/SCP BIO-1 through RMDP/SCP 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 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 RMDP/SCP 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.

*(This measure applies to the VCC Project without change. Figure 4.5-86, Alternative 2 Impacts to Least Bell's Vireo Habitat, is provided in the 2017 State-Certified EIR.)*

**RMDP/SCP-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.

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  $L_{eq}$  at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician.

If the noise meets or exceeds the 60 dBA  $L_{eq}$  threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dBA  $L_{eq}$  hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. The qualified biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to CDFG and USFWS.

For coastal California gnatcatcher, the applicant shall conduct USFWS protocol surveys in suitable habitat within the Project area and all areas within 500 feet of access or construction-related disturbance areas. Suitable habitats, according to the protocol, include "coastal sage scrub, alluvial fan, chaparral, or intermixed or adjacent areas of grassland and riparian habitats." A permitted biologist shall perform these surveys according to the USFWS' (1997a) Coastal California Gnatcatcher Presence/Absence Survey Guidelines. If a territory or nest is confirmed, the USFWS and CDFG shall be notified immediately. If present, a 500-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. No Project activities may occur in these areas unless otherwise authorized by USFWS and CDFG. Construction activities in suitable gnatcatcher habitat will be monitored by a full-time qualified biologist. The monitoring shall be of a sufficient intensity to ensure that the biologist could detect the presence of a bird in the construction area.

*(This measure applies to the VCC Project without change.)*

RMDP/SCP-BIO-57: Thirty days prior to construction activities, a qualified biologist shall conduct CDFG protocol surveys to determine whether the western burrowing owl is present at the site. The surveys shall

consist of three site visits and shall be conducted in areas dominated by field crops, disturbed habitat, grasslands, and along levee locations, or if such habitats occur within 500 feet of a construction zone. If located, occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If the burrowing owl is detected but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95).

Unless otherwise authorized by CDFG, a 500-foot buffer, within which no activity will be permissible, will be maintained between Project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.

Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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 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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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 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.

*(This measure applies to the VCC Project without change. Note that in this document, the mountain lion is referred to as cougar in this document.)*

**RMDP/SCP-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 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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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 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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change; note that quail brush and saltbush refer to Atriplex lentiformis and A. canescens, respectively.)*

**RMDP/SCP-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 RMDP/SCP BIO-6 and RMDP/SCP BIO-7.

*(This measure applies to the VCC Project without change; note that quail brush and saltbush refer to Atriplex lentiformis and A. canescens, respectively. Note that the Potrero Canyon area referenced in the measure is not within the VCC Planning Area.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change; note that quail brush and saltbush refer to Atriplex lentiformis and A. canescens, respectively.)*

**RMDP/SCP-BIO-68:** Any common or special-status species bat day roost sites found by a qualified biologist during pre-construction surveys conducted per RMDP/SCP 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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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 (RMDP/SCP 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.
- 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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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 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 RMDP/SCP BIO-32 for dust control requirements related to spineflower preserves.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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).

*(This measure applies to the VCC Project without change. Note that the current Cal-IPC website is <https://www.cal-ipc.org/plants/inventory/>.)*

**RMDP/SCP-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.

*(As written, this mitigation measure applies to the Santa Clara River SMA, which is not within the VCC Project Site. To minimize impacts to protected vegetation communities and special-status plant and wildlife species that may be present in Hasley Canyon and Castaic Creek, the measure will also be applied to require installation of permanent fencing along trails adjacent to those areas within the VCC Project Site.)*

**RMDP/SCP-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 RMDP/SCP 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.

*(This measure applies to the VCC Project without change. Note that the previously undescribed everlasting species has since been described as white rabbit-tobacco.)*

**RMDP/SCP-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 RMDP/SCP 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 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 invasive plant



inventory (Cal-IPC 2006, 2007) will not be present on the revegetation site as of the date of completion approval.

*(This measure applies to the VCC Project without change. Note that the previously undescribed everlasting species has since been described as white rabbit-tobacco. More recent versions of the California State Agricultural List and Cal-IPC invasive plant inventory will be used.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change with respect to modified tributaries or other potential habitat for the identified species within the VCC Project Site.)*

**RMDP/SCP-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 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 CDFW and USFWS. All condor sightings in the Project area will be reported to CDFW 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 1 hour before sunset to 1 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 CDFW 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.

*(This measure applies to the VCC Project without change.)*

RMDP/SCP-BIO-83: Thirty days prior to construction activities, a qualified biologist shall conduct a preconstruction survey for ringtail. The survey areas all include suitable riparian and woodland habitat (southern coast live oak riparian forest, southern cottonwood–willow riparian forest, southern willow scrub, coast live oak woodland, valley oak woodland, and mixed oak woodland) within the construction disturbance zone and a 300 foot buffer around the construction site. Should the ringtail be observed in the breeding and rearing period of February 1 through August 31, no construction related activities shall occur within 300 feet of the occupied area for the period of February 1 through August 31 or until the ringtail has been determined by a qualified biologist (in consultation with CDFG) to no longer occupy areas within 300 feet of the construction zone and/or that construction activities would not adversely affect the successful rearing of young. If the ringtail is observed within the construction disturbance zone or in the 300 foot buffer around the construction site in the nonbreeding/rearing period of September 1 through January 31, and avoidance is not possible, denning ringtail shall be safely evicted under the direction of a qualified

biologist (as determined by a Memorandum of Understanding with CDFG). All activities that involve the ringtail shall be documented and reported to CDFG.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the VCC Project without change.)*

**RMDP/SCP-SW-4:** All areas where temporary construction impacts affect Corps or CDFG jurisdictional areas (generally, these are areas where impacts would occur due to the construction of Project facilities, but that are outside the permanent footprint of the actual facility), shall be revegetated with appropriate native vegetation after completion of construction in the area. A revegetation plan shall be prepared and implemented in accordance with the terms set forth in mitigation measures SP-4.6-1 through SP-4.6-15 and SP-4.6-63.

*(This measure applies to the VCC Project without change. Note that the process for verifying that revegetation plans comply with the terms set forth in Mitigation Measures SP-4.6-1 through SP-4.6-15 and SP-4.6-63 is implemented through Mitigation Measures RMDP/SCP-BIO-1, RMDP/SCP-BIO-3, and RMDP/SCP-BIO-12.)*

RMDP/SCP-SW-6: To the extent that on-site mitigation for impacts to jurisdictional tributary drainages is insufficient to meet the mitigation ratios required by revised Mitigation Measure BIO-2, then the remaining mitigation obligation shall be met at off-site properties within the Santa Clara River watershed, via use of one or more of the following mitigation approaches (at applicant's option): (a) creation of additional jurisdictional acreage in tributaries to the Santa Clara River occurring off site such that the mitigation site has an equal or greater value than the impacted site; (b) preservation of property containing jurisdictional tributaries to the Santa Clara River having an equal or greater value than the impacted site via a conservation easement or analogous method; or (c) habitat enhancement activities in jurisdictional tributaries for the necessary acreage (e.g., exotic species removal under the terms and conditions specified in Mitigation Measures BIO-9 and BIO-10).

*(This measure applies to the VCC Project without change.)*

## D.4 Unarmored Threespine Stickleback Mitigation Measures Incorporated in the 2017 State-Certified EIR

The following measures are included in the Errata to the Mitigation Monitoring and Reporting Plan for the RMDP/SCP that CDFW adopted in conjunction with its 2017 Newhall Ranch RMDP/SCP Project Final Additional Environmental Analysis or, in the case of RMDP/SCP-AEA-PDF-3-8, are proposed to extend the PDFs and mitigation measures from the Final Additional Environmental Analysis to Castaic Creek within the VCC Project site. Note that some of the measures, as written, apply only to the Santa Clara River, which does not exist within the VCC Project Site. However, they are applied to Castaic Creek within the VCC Project Site to avoid potential impacts to sensitive aquatic species that could be present within Castaic Creek under certain conditions when aquatic habitat occurs there. These measures are not applied to Hasley Canyon within the VCC Project Site because Hasley Canyon does not contain aquatic habitat suitable for such species.

RMDP/SCP-AEA-3-1: The project applicant, or its designated general contractor, shall implement the following measures to avoid contact with the wetted channel, which would avoid affecting unarmored threespine stickleback.

*(As written, this mitigation measure applies to the wetted channel of the Santa Clara River, which does not exist within the VCC Project Site. To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Project Site.)*

RMDP/SCP-AEA-3-1a: The project applicant, or its designated general contractor, shall implement the PDFs and regulatory measures as incorporated into the project's bridge and bank stabilization designs.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to VCC Project bank stabilization features.)*

*The VCC Project will not include any permanent bridge across the Santa Clara River or Castaic Creek.)*

**RMDP/SCP-AEA-3-1b:** The mandated Worker Environmental Awareness Program (Mitigation Measure BIO-52 from the 2010 Final EIR) shall include a discussion regarding restriction of access to the wetted channel of the Santa Clara River and repercussions if encroachment occurs.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Project Site.)*

**RMDP/SCP-AEA-3-1c:** Prior to the commencement of construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river and that no work takes place where fish may be affected.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Project Site.)*

**RMDP/SCP-AEA-3-1e:** A clear weather window, defined for this project as a 40 percent chance or less of 0.10 inches or greater of precipitation in the next 48 hours as forecasted by NOAA, shall be required for the scheduling of any bridge or bank stabilization-related concrete pours. If a bridge or bank stabilization-related concrete pour is in progress, and an un-forecasted rain event occurs, bridge or bank stabilization-related concrete pours shall be suspended.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to VCC Project activities within Castaic Creek.)*

**RMDP/SCP-AEA-3-1f:** During all storm events (including summer rains), a monitor shall inspect work sites to make sure that site is secure and that flooding does not cause tarps to break or diversion drains to become plugged, potentially allowing construction materials and debris to flow into the river.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Project Site.)*

**RMDP/SCP-AEA-3-1k:** To ascertain that water quality is not being affected by bridge and bank stabilization-related concrete pouring activities, the project applicant or its designee shall monitor the water quality at points, upstream, downstream, and immediately adjacent to the construction work zone daily during concrete pouring operations and report the results monthly, or as directed, to CDFW. Key parameters to be monitored include pH and turbidity.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to VCC Project bank stabilization features within Castaic Creek. The VCC Project will not include any permanent bridge across the Santa Clara River or Castaic Creek.)*



RMDP/SCP-AEA-3-2: The project applicant, or its designated general contractor, shall implement the following measures to avoid unarmored threespine stickleback.

*(As written, this mitigation measure applies to activities within the wetted channel of the Santa Clara River, which does not exist within the VCC Project Site. To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Project temporary haul route within Castaic Creek.)*

RMDP/SCP-AEA-3-2a: Implement Mitigation Measures 3-1a, 3-1b, and 3-1f.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Project temporary haul route within Castaic Creek.)*

RMDP/SCP-AEA-3-2b: Prior to the commencement of construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river, that the proposed vibratory pile installation locations are at least 10 feet away from the wetted channel, and that no work takes place where unarmored threespine stickleback may be affected.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Project temporary haul route within Castaic Creek.)*

RMDP/SCP-AEA-3-2c: Vibratory piles for the temporary haul route bridges shall be installed no closer than 10 feet to the wetted channel of the Santa Clara River, as determined by survey at the time piles are to be installed, and shall only be removed by vibratory methods if the wetted channel is at least 10 feet away.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Project temporary haul route within Castaic Creek.)*

RMDP/SCP-AEA-3-2d: No construction activities or personnel shall occur near the edge of the wetted channel that would have potential to destabilize low flow channel bank. A set-back from the edge of the top of bank for a horizontal distance that is twice the bank height (2 horizontal: 1 vertical) shall be maintained to prevent collapsing the bank of the low flow channel.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Project temporary haul route within Castaic Creek.)*

RMDP/SCP-AEA-3-2e: During temporary haul route bridge construction and demobilization, a qualified biologist shall monitor all activities that are a threat to adjacent natural habitats or nearby species and prevent equipment, personnel, or debris from entering or making contact with the wetted channel of the river.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Project temporary haul route within Castaic Creek.)*

RMDP/SCP-AEA-3-3: The project applicant or its designated contractor shall implement the following measures:

*(As written, this mitigation measure applies to the wetted channel of the Santa Clara River, which does not exist within the VCC Project Site. To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Project bank stabilization activities within Castaic Creek, except as noted below.)*

RMDP/SCP-AEA-3-3a: Implement Mitigation Measures 3-1a, 3-1b, 3-1e, 3-1f, and 3-1k.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Project bank stabilization activities within Castaic Creek.)*

RMDP/SCP-AEA-3-3b: Prior to the commencement of bank stabilization construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river, that construction BMPs are installed prior to construction, and that no work takes place where fish may be affected.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Project Site.)*

RMDP/SCP-AEA-3-3d: Bank stabilization construction locations susceptible to winter flood flows shall be conducted from May 1 through November 30, when winter flood flows do not occur on the Santa Clara River. Other bank stabilization areas not at risk of flood flows shall be constructed year-round.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to VCC Project bank stabilization activities within Castaic Creek. However, timing of construction in areas susceptible to winter flood flows may be adjusted with CDFW and/or USFWS concurrence.)*

RMDP/SCP-AEA-3-3e: Although a late-spring or early fall flood event is not expected to occur, the project applicant or its designated contractor shall implement Perimeter Best Management Practices, as required under the Environmental Protection Agency's Construction National Pollutant Discharge Elimination System permit, which would deflect minor flows (less than 12 inches deep, and less than 8 fps velocities) from entering bank protection construction work zones.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to VCC Project bank stabilization activities within Castaic Creek.)*

RMDP/SCP-AEA-3-3f: The project applicant or its designee shall develop a Construction Groundwater Dewatering Plan for those areas (i.e., bank stabilization areas) in close proximity to stream flow and submit to

CDFW for approval. The plan shall include the following measures and be conducted during construction groundwater dewatering activities:

- Operational restriction on dewatering addressed in the 2010 Final EIR require that any dewatering be conducted in a manner that does not affect river flow, and these same restrictions shall be observed going forward. Bank stabilization dewatering shall be implemented in a manner that (1) does not create temporary wetted channel habitat suitable for stickleback; (2) does not diminish existing river flow, and therefore does not result in stranding of unarmored threespine stickleback or other fish; and (3) does not introduce pollutants to surface waters.
- Dewatering activities shall not involve direct removal of surface water from, or discharge to the Santa Clara River. Nor shall such activities result in any draw-down of the river's flow such that fish may become stranded. Any groundwater discharges shall be directed to an appropriate and legal disposal site in an upland area that will not affect the surface elevation of the wetted channel of the Santa Clara River.
- The project applicant or its designee shall assess local stream and groundwater conditions, including flow depths, groundwater elevations, and anticipated dewatering cone of influence (radius of draw down).
- The project applicant or its designee shall monitor daily surface water elevations upstream, adjacent to, and downstream of the extraction points, to assess any critical flow regimes susceptible to excessive draw down before, during, and after groundwater dewatering activities. The designated monitor shall have the authority to halt dewatering activities if water levels decrease in the wetted portion of the Santa Clara River where unarmored threespine stickleback are present. In the event the designated monitor observes an effect on the wetted channel that necessitates halting of dewatering operations, the applicant will be required to consult with CDFW, revise the Construction Groundwater Dewatering Plan as appropriate, and implement whatever additional restrictions may be necessary to preclude impact to the wetted channel (such as limiting the extent of excavation dewatering, implementing other construction methods acceptable to the Los Angeles County Department of Public Works such as launch stone, or suspending construction until such time as regional groundwater conditions are more favorable for the construction to proceed).
- The project applicant or its designee shall monitor surface water elevations downstream of the project location to assess any flow regimes and overbank areas that may be susceptible to flooding.
- The project applicant or its designee shall monitor upland discharge locations for potential channel erosion from dewatering discharge, and appropriate BMPs must be implemented to prevent excessive erosion or turbidity in the discharge.
- Monitoring reports shall be summarized and provided to CDFW upon completion of construction activities that required dewatering.

*(To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to VCC Project bank stabilization activities within Castaic Creek.)*

## D.5 Additional Biology Mitigation Measures Specific to the VCC Project

ES/VCC-MM-BIO-1: Prior to construction, the Applicant shall develop a relocation plan for California glossy snake, to be incorporated into the relocation plan developed for other special-status reptile species, according to requirements in RMDP/SCP BIO-54.

ES/VCC-MM-BIO-2: Should Project ground-disturbing activities be scheduled to occur during the Crotch's bumble bee colony active period, a qualified biologist shall conduct a habitat assessment to identify areas containing suitable habitat for Crotch's bumble bee. The qualified biologist shall conduct pre-construction surveys for Crotch's bumble bee in the areas identified, using a methodology (including number and timing of surveys) accepted by the California Department of Fish and Wildlife (CDFW).

If Crotch's bumble bee are not detected, no further measures are required. A qualified biologist shall be present during ground-disturbing Project activities that occur during the Crotch's bumble bee colony active period.

If Crotch's bumble bee are detected:

1. Ground-disturbing activities shall be prohibited within 100 feet of any known, occupied Crotch's bumble bee nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The prohibition will continue for the duration of the Crotch's bumble bee colony active period, unless the nest is determined to be inactive by a qualified biologist or is relocated or removed with CDFW authorization.
2. The Project proponent shall prepare a Crotch's Bumble Bee Avoidance and Minimization Plan for review and approval by CDFW, which shall include additional, site-specific measures to avoid take of Crotch's bumble bee during Project ground-disturbing activities during the colony active period.
3. If the Crotch's bumble bee remains a candidate for listing, or has been listed, as endangered or threatened under the California Endangered Species Act ("CESA"), and Project activities will cause "take" of Crotch's bumble bee, as that term is defined for purposes of the CESA, the Project proponent shall obtain authorization for such take pursuant to Fish and Game Code Section 2081 or any other applicable provision of law providing such authorization.

VCC-SW-2: The Castaic Creek channel will follow the existing bank contours of the creek and will minimize encroachment into the riparian vegetation community, so that there is no net loss of riparian habitat of acreage of Castaic Creek. In order to minimize potential effects on downstream populations of UTS, the channel will be designed so that the pre and post project flow will be approximately the same in volume and velocity.

VCC-SW-3: Soft bottom channels will be incorporated into the project design to allow for the retention of existing riparian vegetation.

VCC-SW-4: A vegetation restoration plan will be used to revegetate areas temporarily disturbed by construction in the Creek.

VCC-4.a-2: Approximately 375 acres of native coastal sage scrub vegetation will be retained.

*(This measure applies to the Modified Project with the following clarification: the measure requires retention of 375 acres of coastal scrub vegetation within the overall VCC development area approved by the County under the 1990 EIR, including portions that are not part of the Modified Project.)*

VCC-4.b-2: The Castaic Creek channel will follow the existing bank countours of the creek and will minimize encroachment into the riparian vegetation community, so that there is no net loss of acreage of Castaic Creek. A detailed revegetation and restoration plan will be provided for review prior to construction.

VCC-4.b-3: Soft bottom channels will be incorporated into the project design to allow for the retention of existing riparian vegetation.

VCC-4.b-4: Castaic Creek will be lined with a bank protection that allows for growth of native herbaceous vegetation. The Army Corps of Engineers has stated a preference for an articulating, concrete, open-cell tile (i.e., Armorflex). The use of Armorflex may not be approved by the Department of Public Works; therefore, the type of lining actually used may change as a potential issue of safety.

*(This measure applies to the Modified Project with the following qualification: the reference to Armorflex refers to USACE guidance provided in connection with a 1990 USACE permit that has expired and no longer applies to the Modified Project. The type of bank protection used will be consistent with any requirements imposed under any USACE permit obtained for Modified Project activities within the VCC Planning Area.)*

VCC-4.c-1: Channelization will be conducted under the supervision of a qualified biologist to ensure that construction is carried out with minimal siltation and debris flow into the channel; minimal disturbance to the UTS; and avoidance of preserved riparian habitat.

VCC-4.c-2: Industrial users which may use toxic substances will be required to provide on-site containment systems to protect downstream habitat.

VCC-4.c-3: Parking lots shall have a drainage system to divert non-storm flows to an oil and grease trap.



INTENTIONALLY LEFT BLANK

---

## **Appendix E**

Significant Ecological Area Program Consistency  
Analysis for the Valencia Commerce Center Project  
(Submitted under Separate Cover)



## **Appendix 5.2c**

---

### Entrada South Waters Report





# Entrada South Development Project

## Jurisdictional Waters Technical Report

*prepared for*

**The Newhall Land and Farming Company**

25124 Springfield Court, Suite 300

Valencia, California 91355

Contact: Sam Rojas, Director of Environmental Resources

*prepared by*

**Rincon Consultants, Inc.**

180 North Ashwood Avenue

Ventura, California 93003

**October 2023**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)





# Table of Contents

---

1	Introduction and Project Background .....	1
1.1	Site Location and Description .....	2
1.2	Project Footprint .....	2
2	Jurisdictional Delineation Methods .....	7
3	Results of the Updated Jurisdictional Delineation .....	8
4	Effects of the Modified Project .....	16
4.1	Direct Impacts to Jurisdictional Waters .....	16
4.2	Indirect Impacts to Jurisdictional Waters .....	24
4.3	Summary of Impacts .....	25
5	Thresholds of Significance .....	26
5.1	Significance Criterion 1 .....	26
5.2	Significance Criterion 2 .....	27
5.3	Cumulative Impacts .....	28
6	References .....	30

## Tables

Table 1	Comparison of Jurisdictional Waters within the Entrada South Project Site .....	9
Table 2	Direct Impacts to Waters of the U.S. ....	21
Table 3	Direct Impacts to CDFW-Jurisdictional Streambeds .....	21

## Figures

Figure 1	Project Vicinity and Regional Location .....	4
Figure 2	Project Location .....	5
Figure 3	Project Footprint Comparison .....	6
Figure 4	Jurisdictional Delineation Overview – 2019 Update .....	10
Figure 5	Jurisdictional Delineation Overview – State-Certified EIR .....	11
Figure 6	Modified Project – Impacts to Waters of the U.S. ....	17
Figure 7	Modified Project – Impacts to CDFW-Jurisdictional Streambeds .....	18
Figure 8	2017 Approved Project – Impacts to Waters of the U.S. ....	19
Figure 9	2017 Approved Project – Impacts to CDFW-Jurisdictional Streambeds .....	20

## **Appendices**

Appendix A    Applicable Mitigation Measures

Appendix B    Approved Jurisdictional Delineation SPL-2015-00630-GLH (6/15/2020) and  
                    Subsequent Corps Coordination

# 1 Introduction and Project Background

---

The California Department of Fish and Wildlife (CDFW) conducted California Environmental Quality Act (CEQA) review of development within the Entrada South planning area as part of its review for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RDMP/SCP). CDFW and the U.S. Army Corps of Engineers (Corps) prepared a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR; Corps and CDFW 2010) for the RDMP/SCP in 2010. In June 2017, after publishing additional environmental analysis of certain impacts (Additional Environmental Analysis; CDFW 2017), CDFW recertified the EIR for the RDMP/SCP (the State-Certified EIR, SCH No. 2000011025) and adopted findings affirming its approval of the RDMP and SCP and related State permits. The State-Certified EIR evaluated development within the Entrada South planning area as an indirect impact of the approval of the SCP. Estimated impacts to Corps and CDFW jurisdictional waters and streambeds were quantified, and a map in the State Certified EIR (EIR Figure 4.5-33-D2) illustrates the locations of anticipated impacts.

The resource management and development activities within the Entrada South planning area analyzed in the State-Certified EIR and facilitated by CDFW's approval of the SCP are referred to in this Report as the "2017 Approved Project."<sup>1</sup> Subsequent to preparation of the State-Certified EIR, the project proponent proposed minor changes and refinements to the 2017 Approved Project in order to provide increased environmental protections to jurisdictional waters and related biological resources. The resulting project is referred to in this Report as the "Modified Project." The proposed Modified Project will reduce permanent impacts to waters of the United States (U.S.) compared to the 2017 Approved Project and will slightly increase temporary impacts. The Modified Project will result in increased permanent impacts to CDFW-jurisdictional streambeds and limited increases in temporary impacts to CDFW-jurisdictional streambeds compared to the 2017 Approved Project, because some of those streambeds have increased in size since the State-Certified EIR was prepared. As envisioned in the State-Certified EIR, all impacts will be offset by the mitigation requirements outlined in this Report and in the State-Certified EIR and will be subject to permitting and oversight by the Corps and CDFW.

Rincon Consultants, Inc. (Rincon) has prepared this Jurisdictional Waters Technical Report ("Report") to assess the potential impacts to jurisdictional waters and streambeds resulting from the Modified Project, in support of the preparation of a Supplemental Environmental Impact Report (SEIR) by Los Angeles County. This Report evaluates the potential for the Modified Project to result in new significant effects not analyzed in the State-Certified EIR, or to substantially increase the severity of any significant effect previously considered, as a result of the changes reflected in the Modified Project and/or changes in site conditions.

---

<sup>1</sup> The 2017 Approved Project described in this Report is defined as that portion of the Approved Project described in CDFW's California Environmental Quality Act (CEQA) Findings of Fact and Statement of Overriding Considerations for the Master Streambed Alteration Agreement and Incidental Take Permits Associated with the RDMP and SCP, dated December 3, 2010 (CEQA Findings), that is located within the Entrada South Project Site (as defined in Section 1.2 of this Report). The Approved Project is further described in the Final RDMP and SCP and is depicted in Figure 8 of the Final RDMP. As explained in the CEQA Findings, the 2017 Approved Project is a modified version of Alternative 3 from the RDMP/SCP Draft EIS/EIR, with additional refinements to further reduce environmental impacts, which resulted from the Corps' efforts to identify the least environmentally damaging practicable alternative (LEDPA) for the RDMP. With respect to the Entrada South Project Site, the Approved Project is substantially identical to the Draft LEDPA alternative analyzed in the State-Certified EIR.

## 1.1 Site Location and Description

Both the 2017 Approved Project and the Modified Project involve development within the Entrada South tract map and small areas adjacent to the tract map where project-related grading and infrastructure construction may occur (Figure 1, Project Vicinity and Regional Location). The project area, referred to herein as the “Entrada South Project Site,” is located in northwestern Los Angeles County, approximately 30 miles northwest of downtown Los Angeles (Figure 1, Project Vicinity and Regional Location) and is located within the Newhall, CA 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2015; Figure 2, Project Location). The Entrada South Project Site lies just west of Interstate (I) 5 and south of the Santa Clara River, and immediately east of the Newhall Ranch Specific Plan (Specific Plan) site. The City of Santa Clarita is immediately east of the Entrada South Project Site on the east side of I-5.

There is significant development influence within the vicinity of the Entrada South Project Site, including I-5, State Route (SR) 126, and secondary road infrastructure to the south, east, and north; medium-density residential housing and an integrated golf course to the south and southeast; and major commercial land use adjacent to the north and east, including the Six Flags Magic Mountain theme park. The Entrada South Project Site is disturbed from historic and ongoing oil and natural gas operations, including associated dirt road and oil pad ground clearance, and soil scraping adjacent to the theme park for fire suppression. Magic Mountain Parkway, a major paved road leading into the Newhall Ranch Specific Plan site, has been recently constructed through the Entrada South Project Site consistent with previously granted approvals for the Newhall Ranch Specific Plan and the RMDP/SCP. Additionally, Southern California Edison and Southern California Gas Company have transmission corridors within easements along the southern portion of the Entrada South Project Site. The easements/transmission lines and access roads are actively maintained. The site boundaries and topography are illustrated on Figure 2.

Three unnamed drainages that flow northward are present on the Entrada South Project Site. Consistent with nomenclature in the State-Certified EIR and accompanying technical studies, these jurisdictional drainages are discussed herein as (from west to east) Unnamed Drainage 1, Unnamed Drainage 2, and Unnamed Drainage 3.

An additional drainage, identified as Magic Mountain Canyon in the State-Certified EIR, previously existed along the boundary between the Entrada South Project Site and the Newhall Ranch Specific Plan site. The entirety of this drainage was included in the RMDP area and permanent impacts to all jurisdictional waters in this drainage were authorized under the RMDP permits (Figure 3). Because these impacts have already occurred as part of the development of the Mission Village portion of the RMDP area, no jurisdictional waters remain in Magic Mountain Canyon and therefore development of the Entrada South Project Site will not have additional impacts to jurisdictional waters in that area.

## 1.2 Project Footprint

The Modified Project would incorporate minor revisions and enhancements to the land use plan of the 2017 Approved Project to provide increased environmental protections to jurisdictional waters and related biological resources within the Entrada South planning area. These revisions include recontouring and restoring the majority of Unnamed Drainage 2, a significant portion of which would have been permanently impacted under the 2017 Approved Project, thereby reducing permanent impacts to waters of the U.S. and retaining additional on-site open space. Within the



Tournament Players Club (TPC) golf course portion of the adjacent Westridge community, the Modified Project also includes a 0.6-acre temporary disturbance area, located within the channel of Unnamed Drainage 2 immediately south of the Entrada South Project Site, to accommodate a necessary storm drain connection. The 0.6-acre area would be revegetated and restored as a portion of the golf course following completion of the storm drain connection. The disturbance footprints of the Modified Project and the 2017 Approved Project are shown in Figure 3, Project Footprint Comparison.

The State-Certified EIR for the 2017 Approved Project evaluated the environmental impacts of 1,725 dwelling units, 450,000 square feet of non-residential development, and a potential school site within the Entrada South planning area. The Modified Project includes 1,574 dwelling units, 730,000 square feet of non-residential development, and a potential school site within the Entrada South planning area. The development footprints of the two projects are substantially similar, but the Modified Project has been refined to achieve greater avoidance in biologically valuable areas.

Figure 1 Project Vicinity and Regional Location




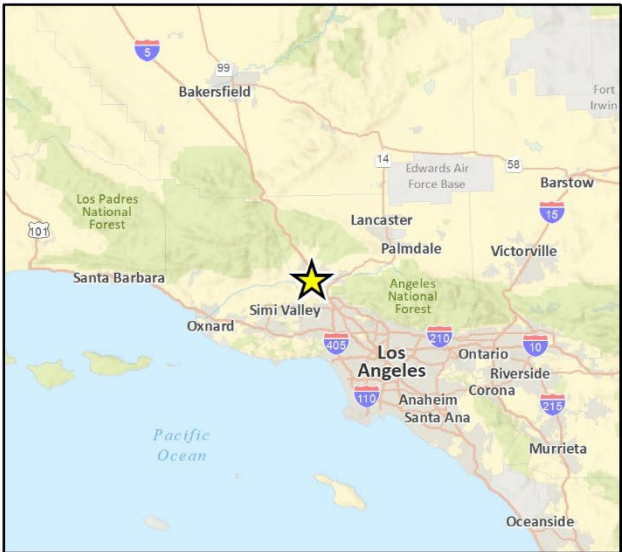
Imagery provided by ESRI and their licensors © 2022.

 Project Location

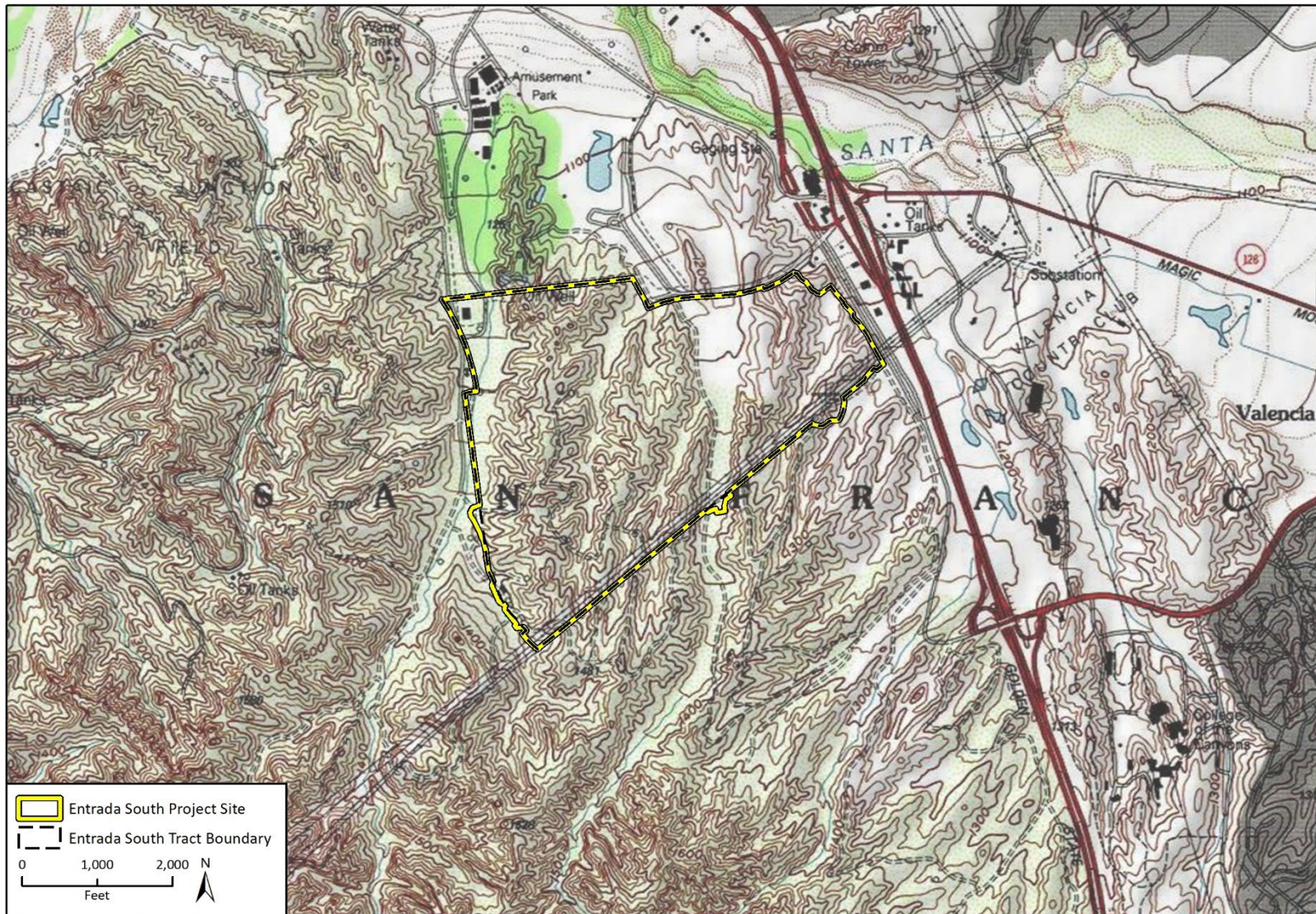


Fig 1 Project Vicinity and Regional Location 2022 Update

**Figure A-1: Project Vicinity and Regional Location**  
 Rincon Consultants, Inc.





**Figure 2 Project Location**

Imagery provided by National Geographic Society, Esri, and their licensors © 2022. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

ES Fig X Project Location Topo



Figure 3 Project Footprint Comparison



Imagery provided by Microsoft Bing and its licensors © 2022.

ES Fig 3 JD Impacts Comparison

## 2 Jurisdictional Delineation Methods

---

Since preparation of the initial analysis for the State-Certified EIR, the jurisdictional delineation for the Entrada South Project Site has been updated, initially in 2015 by URS Corporation (URS 2015) and more recently by Rincon Consultants (Rincon 2019). The purpose of these jurisdictional delineation updates was to confirm the limits of U.S. Army Corps of Engineers (Corps) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA) and CDFW jurisdiction pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFGC).

The URS delineation assessed drainages within the Entrada South Project site *de novo*, with boundaries of all features mapped in the field using GPS technology. The subsequent delineation by Rincon in 2019 was based on a review of the data collected by URS, and the Rincon delineation personnel confirmed the previously delineated boundaries in the field by making adjustments or re-mapping specific areas as warranted by observed channel bank erosion, change in vegetation or cover, or other streambed changes. Rincon's review was limited to aquatic resources and potential jurisdictional waters within the boundary of the Entrada South Project Site, excluding the Magic Mountain Canyon drainage and areas in the vicinity of Magic Mountain Parkway where jurisdictional waters have been filled as part of RMDP activities, as described in Section 1.21. Jurisdictional boundaries, where they varied from previously delineated boundaries, were identified in the field and recorded using GPS and high-resolution aerial photographs. Previously collected data were combined with the updated data collected in the field to create a complete data set of jurisdictional features within the Project site. For a detailed description of the methodology used in the most recent update, please see Rincon's 2019 Jurisdictional Delineation Report. An Approved Jurisdictional Determination ("AJD") letter was issued by the Corps on June 15, 2020, confirming Corps jurisdiction as outlined in Rincon's 2019 Jurisdictional Delineation Report (SPL-2015-00630-GLH and subsequent coordination; See Appendix B).

Using Geographic Information System (GIS) mapping, Rincon calculated impacts of the Modified Project to the updated jurisdictional waters data set. Rincon then compared the updated jurisdictional impacts for the Modified Project to the jurisdictional impacts for the 2017 Approved Project as reported in the State-Certified EIR.



### 3 Results of the Updated Jurisdictional Delineation

---

Overall, the results of the updated jurisdictional delineation are similar to those reported in the State-Certified EIR. The types of resources present on the site, the general locations of those resources, and the overall extent of jurisdictional waters have not changed substantially and are described below.

The total acreages of jurisdictional waters within the Entrada South Project Site identified in the updated jurisdictional delineation are 3.81 acres of Corps-jurisdictional waters, also referred to as “waters of the U.S.,” and 11.66 acres of CDFW-jurisdictional streambeds; this represents an increase of 0.86 acres and 4.77 acres, respectively, in comparison to the State-Certified EIR<sup>2</sup>. The difference in the acreage of waters of the U.S. is due mainly to the slight widening of the active channel throughout Unnamed Drainage 2, as further described below, and at the downstream end of Unnamed Drainage 3.<sup>3</sup> Compared to the extent of jurisdictional waters reported in the State-Certified EIR, the acreage of Unnamed Drainage 2 has increased due to hydromodification effects of upstream development in the watershed, and the updated jurisdictional delineation reflects the results of a recent CDFW field visit to update the jurisdictional boundary of this drainage (CDFW 2017). A comparison of jurisdictional acreages by agency and by source is summarized in Table 1. The updated jurisdictional delineation is illustrated in Figure 4 and the jurisdictional delineation as presented in the State-Certified EIR is illustrated in Figure 5 for comparison.

---

<sup>2</sup> For consistency, the acreages of jurisdictional waters presented herein for the State-Certified EIR exclude waters associated with Magic Mountain Parkway and Magic Mountain Canyon that were authorized to be impacted under the RMDP.

<sup>3</sup> As discussed in Section 2, the extent of waters of the U.S. discussed throughout this Report reflects the AJD issued by the Corps.

---

**Table 1 Comparison of Jurisdictional Waters within the Entrada South Project Site**

Source	Waters of the U.S. (acres) <sup>4</sup>	CDFW-Jurisdictional Streambeds (acres)
<b>State-Certified EIR/2017 Approved Project</b>		
Unnamed Drainage 1	0.27	0.27
Unnamed Drainage 2	1.88	4.69
Unnamed Drainage 3	0.80	1.93
<b>Total</b>	<b>2.95</b>	<b>6.89</b>
<b>Updated Jurisdictional Delineation (2019)/Modified Project</b>		
Unnamed Drainage 1	0.22	1.12
Unnamed Drainage 2	2.26	8.78
Unnamed Drainage 2 (Westridge Storm Drain Facility)	0.19	0.2
Unnamed Drainage 3	0.95	1.56
Unnamed Drainage 3 Wetland	0.21	0 <sup>5</sup>
<b>Total</b>	<b>3.81</b>	<b>11.66</b>
<b>Difference in Total Acreage</b>	<b>+0.86</b>	<b>+4.77</b>
Note: The total acreage and acreage by drainage presented for the 2017 Approved Project were calculated using GIS for this Report and exclude jurisdictional waters in the Magic Mountain Parkway grading areas and Magic Mountain Canyon, as explained in Section 1.21. Small discrepancies within the table are due to rounding.		

<sup>4</sup> As approved in the attached AJD (See Appendix B).<sup>5</sup> Acreage for vegetated CDFW jurisdictional streambed within Unnamed Drainage 3 is represented in the “Unnamed Drainage 3” acreage.

Figure 4 Jurisdictional Delineation Overview – Modified Project





**Figure 5 Jurisdictional Delineation Overview – State-Certified EIR**



Imagery provided by Microsoft and its licensors © 2020.

ES TR Fig X.10 Overview State-Certified EIR

The subsections below provide additional details regarding each jurisdictional feature identified within the Project site.

## **Magic Mountain Canyon**

As described in the State-Certified EIR, Magic Mountain Canyon was located along the western boundary of the Entrada planning area, and conveyed flows from open space and residential developments south of the property northward through the Magic Mountain amusement park and to the Santa Clara River. Although portions of the drainage were within the Entrada South Project Site, the entirety of the drainage was included in the federal and state permits issued for the RMDP. The jurisdictional delineation fieldwork conducted by Rincon in 2019 confirmed that grading for the Mission Village portion of the Newhall Ranch Specific Plan, which is underway, has completely filled the Magic Mountain Canyon drainage as authorized by the RMDP permits. The drainage is no longer present and is not addressed further in this report.

## **Unnamed Drainage 1**

As described in the 2019 updated jurisdictional delineation, Unnamed Drainage 1 is comprised of a stream channel with several small channels branching off of the main channel within the project area. This feature originates near the southern border of the Entrada South Project Site and carries flow northward through the Entrada South Project Site, including graded areas associated with the RMDP, under Magic Mountain Parkway in storm pipe, through off-site developed areas contained within an engineered concrete trapezoidal storm drain channel, and eventually into the Santa Clara River. Flows originate both on-site and to the south of the project site, and the drainage receives surface flow via two concrete channels from the residential area to the south of the project boundary. Sinuosity is mild throughout the downstream half of this feature, as the channel is relatively straight, but increases through the upstream half of this feature. Aside from one unpaved road that intersects the southern tip of this drainage feature, the remaining portion of Unnamed Drainage 1 is uninterrupted through the Entrada South Project Site. Channel widths range from one to three feet in most areas, with a maximum of ten feet. The channel bottom is heavily vegetated, though evidence of flow is still apparent throughout this feature. Upland plant species are present on the banks. The drainage supports a variety of vegetation primarily comprised of big sagebrush, California sagebrush, California buckwheat, and short-podded mustard with scattered to densely clumped tree tobacco, holly-leaf cherry, and scrub oak trees present within the southern half (downstream portion) of the channel. The northern half (upstream portion) of the channel is primarily comprised of chamise and scrub oak. The substrate within the channel bottom is loose/compact, unconsolidated/consolidated, and composed mostly of sand, although gravel and cobbles are also present. The hydrology of these channels has not been formally assessed.

Unnamed Drainage 1 supports 0.22 acres of waters of the U.S. (as approved in the AJD; see Appendix B) and 1.12 acres of CDFW-jurisdictional streambeds, whereas at the time of the State-Certified EIR the creek supported 0.27 acres of waters of the U.S. and 0.27 acres of CDFW-jurisdictional streambeds. The slight differences are largely due to natural vegetation changes along the banks of the drainage over time. Waters of the U.S. have decreased overall, and the extent of vegetation associated with CDFW-jurisdictional streambeds has increased.<sup>6</sup>

---

<sup>6</sup> These acreages do not include portions of Unnamed Drainage 1 that were permanently impacted and eliminated by RMDP infrastructure development.



## Unnamed Drainage 2

As described in the 2019 updated jurisdictional delineation, Unnamed Drainage 2 is the largest drainage within the Entrada South Project Site. The mainstem of this feature flows in a south-north direction, with a tributary branch contributing flow from the southwest. The mainstem of this feature originates south of the project area, entering the site through a concrete channel from the Westridge Golf Course located immediately south of the Entrada South Project Site boundary. The outflow structure associated with this channel is constructed of rip-rap and contains hydrophytic vegetation including cattails (*Typha* spp.) supported by irrigation runoff from upstream development areas and the golf course. Downstream of the concrete outlet, Unnamed Drainage 2 flows through a large, earthen channel with moderate sinuosity. Upon reaching the northern boundary of the Entrada South Project Site, flow is carried into the Santa Clara River via an engineered concrete trapezoidal storm drain channel. Within the Entrada South Project Site, the main stem of Unnamed Drainage 2 has steep banks and is deeply incised along most of its length. Bank heights average 20 feet in most areas, and there is visible evidence that channel-forming events are continuing to deepen the channel with regularity. Jurisdictional channel widths average 8 to 20 feet in most areas, with a minimum of approximately 3 feet along the main channel. The channel bottom is primarily comprised of sand with cobble present in the western branch and boulders present within the main channel. The substrate within the channel bottom is highly variable, but generally sandy. Within the smaller branch to the west of the main channel, the channel bottoms vary from vegetated to unvegetated exhibiting surface soil cracks. Near the confluence with the main branch this feature, considered a remnant terrace floodplain of the mainstem, transitions into a braided, shallow system and then into a swale feature exhibiting drainage patterns as it moves downstream to eventually meet the mainstem. Bank heights within this branch measure 0.5 to 6 feet in most areas, with a maximum of 10 feet, and channel widths are generally 1 to 3 feet. The hydrology of these channels has not been formally assessed.

Comparison of 2019 conditions in Unnamed Drainage 2 to conditions documented in the past, based on aerial photographs, and descriptions of drainage characteristics presented in the State-Certified EIR, indicates that substantial changes to the channel's characteristics have occurred in recent years. While there is no indication that land uses on the Entrada site have changed or that human intrusion into the watercourse has occurred, the depth, width, and general channel definition in this drainage have increased substantially. Specifically, channel width increased from approximately ten feet in 2002 to over 60 feet in 2005. Development of the Westridge residential community and golf course in the upper watershed (located upstream of the Entrada site, to the south) in the early 2000s, combined with extreme weather during the 2004–2005 storm season, appear to have resulted in substantial erosion in the portion of the channel within the Entrada South Project Site. Functional assessments of this channel indicate that the channel remains in a state of disequilibrium and that erosional processes continue to dominate the sediment dynamics. Additionally, the area near the confluence of the mainstem and the western branch, which included only two narrow jurisdictional channels as described in the State-Certified EIR, has been expanded to include the broader terrace floodplain area which has developed braided channels and is covered with big sagebrush scrub. This area is now subject to CDFW jurisdiction based on results of a recent CDFW field visit to update the jurisdictional boundary of this drainage (CDFW 2017).

Unnamed Drainage 2 supports 2.26 acres of waters of the U.S. within the natural channel and 0.19 acres in the Westridge Storm Drain Facility (as approved in the AJD; see Appendix B). Furthermore, Unnamed Drainage 2 supports 8.87 acres of CDFW-jurisdictional streambeds within the natural channel and 0.20 acres in the Westridge Storm Drain Facility, whereas at the time of the State-

Certified EIR the creek (including the Westridge Storm Drain Facility) supported 1.88 acres of waters of the U.S. and 4.69 acres of CDFW-jurisdictional streambeds. Compared to the extent of jurisdictional waters reported in the State-Certified EIR, the acreage of Unnamed Drainage 2 has increased due to upstream development in the watershed, and the updated jurisdictional delineation reflects the results of the CDFW field visit.<sup>7</sup>

### **Unnamed Drainage 3**

As described in the 2019 updated jurisdictional delineation, Unnamed Drainage 3 is the easternmost of the drainages within the Entrada South Project Site and conveys flow from the golf course property located south of the project boundary northward through the Entrada South Project Site, to engineered underground storm drain systems associated with developed areas outside the Entrada South Project Site and eventually to the Santa Clara River. Within the Entrada South Project Site, Unnamed Drainage 3 is comprised of one main channel exhibiting moderate sinuosity. The hydrology of these channels has not been formally assessed. Channel widths average 2.5 feet throughout the drainage feature. The majority of the banks are heavily incised and very steep, with heights ranging from 3 to 10 feet in most locations. Maximum bank height is approximately 15 to 20 feet. The length of Unnamed Drainage 3 within the Entrada project site is approximately 2,612 linear feet. The channel bottom is heavily vegetated, though hydrological features are still evident. The drainage supports wild oat species, short-podded mustard and scattered valley oak and tree tobacco. The substrate within the channel bottom is loose, unconsolidated, and composed mostly of sand, with varying particle size from sand to cobble.

Unnamed Drainage 3 supports 1.14 acres of waters of the U.S. (as approved in the AJD; see Appendix B) and 1.56 acres of CDFW-jurisdictional streambeds, whereas at the time of the State-Certified EIR the creek supported 0.80 acres of waters of the U.S. and 1.93 acres of CDFW-jurisdictional streambeds. The difference in the acreage of waters of the U.S. is due mainly to the slight widening of the downstream end of Unnamed Drainage 3. The increase in CDFW-jurisdictional streambed acreage within Unnamed Drainage 3 is largely due to natural fluctuations in the drainage over time. The majority of Unnamed Drainage 3 within the Entrada South Project Site is subject to the conservation instrument covering the Entrada South spineflower preserve and thus is permanently protected from development.

### **Unnamed Drainage 3 Wetland**

A wetland was identified during the 2019 site investigations of Unnamed Drainage 3. This feature is located at the far downstream portion of Unnamed Drainage 3 near the northeastern boundary of the Entrada South Project Site. The wetland is located within a constructed debris basin and has been designed such that water pools in this area during periods of normal flow to allow suspended particulates and bed material to settle prior to entering the engineered underground storm drain system. During periods of high flow, water leaves the basin and enters the storm drain system through a vertical corrugated metal standpipe. This wetland location receives flow from the adjacent, developed upland areas including concrete erosion control channels located on hillsides abutting the feature to the northwest and southeast. Flow is also received from Unnamed Drainage 3, described above. Field investigations of the Unnamed Drainage 3 debris basin, combined with review of historical aerial photographs and discussions with landowners, indicate that this feature is

---

<sup>7</sup> These acreages do not include portions of Unnamed Drainage 2 that were permanently impacted and eliminated by RMDP infrastructure development.

subjected to intense degrees of regular disturbance to maintain suitability as a flood control facility. Maintenance activities in the basin are conducted routinely by the Los Angeles County Flood Control District, and include grading/recontouring of the basin bottom, removal of all vegetation, and removal of accumulated sediment and debris as necessary. These practices have resulted in chronic disruption of the basin's wetland functions. For additional information please refer to the Jurisdictional Delineation Report for the project (Rincon 2019).

The Unnamed Drainage 3 wetland supports 0.21 acres of wetland waters of the U.S. (as approved in the AJD; see Appendix B). The Unnamed Drainage 3 wetland was not identified as a wetland at the time the State-Certified EIR was prepared.

## 4 Effects of the Modified Project

---

This section presents the impacts of the Modified Project on jurisdictional waters and evaluates whether there would be any new significant environmental impacts to these resources that were not evaluated in the State-Certified EIR, or whether the Modified Project would substantially increase the severity of any significant impact identified in the State-Certified EIR. The analysis considers changes in impacts resulting from both changes in the boundaries of jurisdictional waters that have occurred since the State-Certified EIR was prepared and refinements to the design of the Modified Project.

To determine the acreage of impacts to jurisdictional waters, Rincon used GIS software to identify the locations where the Modified Project's permanent and temporary ground disturbance would overlap jurisdictional waters and to calculate the acreage of those locations. This approach is consistent with the methodology used to address this resource topic in the State-Certified EIR. The analysis considers the areal extent of those impacts, as well as the resource types affected and the types of stream/wetland functions and services those resources provide.

As secondary means of evaluating the Modified Project's potential to cause new or substantially increased significant impacts to jurisdictional waters, and to provide context, the analysis also (i) illustrates impacts of the 2017 Approved Project that would be avoided under the Modified Project, due to changes in the Project design and/or changes in the extent of jurisdictional waters; and (ii) compares the overall impacts on jurisdictional waters of the 2017 Approved Project to those of the Modified Project.

### 4.1 Direct Impacts to Jurisdictional Waters

As calculated based on the delineation of waters within the Entrada South Project Site completed in 2019 and described above, the Modified Project will permanently impact 2.26 acres of waters of the U.S. and 7.52 acres of CDFW-jurisdictional streambeds. The Modified Project will also temporarily impact 1.36 acres of waters of the U.S. and 3.6 acres of CDFW-jurisdictional streambeds. These impacts are outlined in Table 2 and Table 3 below and displayed on Figure 6, and Figure 7. For comparison, the direct impacts to jurisdictional waters by drainage as a result of the 2017 Approved Project are outlined in Table 2 and Table 3 and illustrated on Figure 8 and Figure 9.

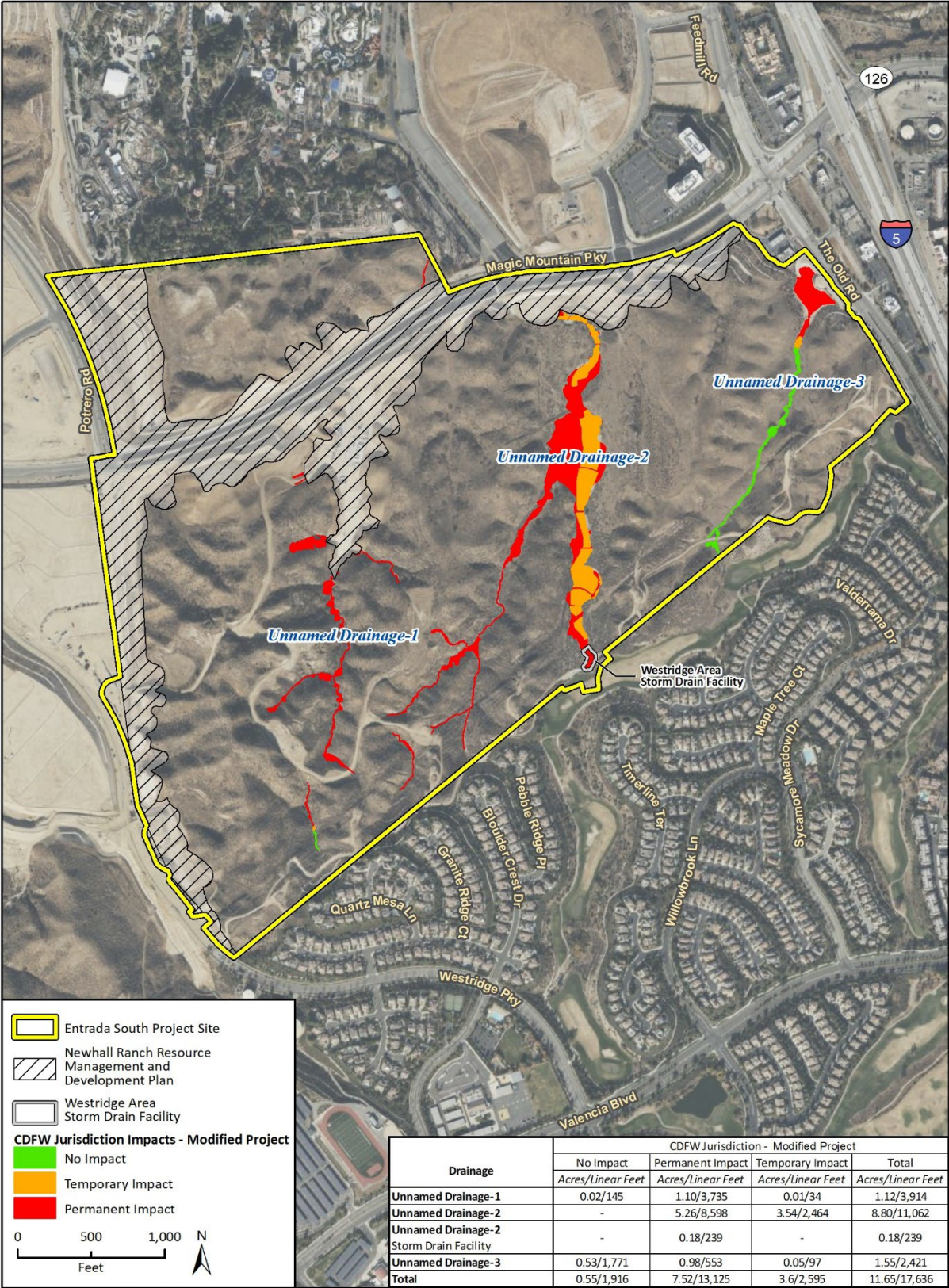
Overall, the Modified Project will reduce permanent impacts to waters of the U.S. compared to the 2017 Approved Project. This is largely due to changes in the proposed design for Unnamed Drainage 2, the largest drainage on the site. Whereas the 2017 Approved Project would have permanently eliminated a majority of this drainage, the Modified Project would restore the majority of the drainage mainstem and promote channel stability through installation of grade controls and channel bank erosion protection, minimizing permanent impacts. Bank stabilization would occur outside Corps jurisdiction (waters of the U.S.). The acreage of temporary impacts to waters of the U.S. would increase under the Modified Project, largely due to temporary impacts associated with installation of grade controls and erosion protection under the revised design within Unnamed Drainage 2. Under Project Design Feature (PDF) ES-PDF-BIO-1, streambeds and riparian habitat subject to CDFW jurisdiction within Unnamed Drainage 2 would be permanently conserved following completion of Entrada South Project development by placing conservation easements over these areas. Waters of the U.S. are a subset of the waters that would be protected.



**Figure 6 Modified Project – Impacts to Waters of the U.S.**



Figure 7 Modified Project – Impacts to CDFW-Jurisdictional Streambeds



Imagery provided by Microsoft Bing and its licensors © 2022.

ES TR Fig X-10 Impacts CDFW 2021 Update



**Figure 8 2017 Approved Project – Impacts to Waters of the U.S.**



Figure 9 2017 Approved Project – Impacts to CDFW-Jurisdictional Streambeds



Imagery provided by Microsoft and its licensors © 2020.

ES-TR-Fig X-ID Impacts CDFW State-Certified EIR

**Table 2 Direct Impacts to Waters of the U.S.**

Feature	Corps Jurisdiction Type	2017 Approved Project	Modified Project		Difference in Impact	
		Permanent Impacts (acres)	Permanent Impacts (acres/linear feet)	Temporary Impacts (acres/linear feet)	Permanent Impacts (acres)	Temporary Impacts (acres)
Unnamed Drainage 1	Non-wetland waters of the U.S.	0.23	0.21/3,493	<0.01/34	-0.02	+<0.01
Unnamed Drainage 2	Non-wetland waters of the U.S.	1.55	0.92/5,269	1.35/2,412	-0.63	+1.35
Unnamed Drainage 2 (Storm Drain Facility)	Non-wetland waters of the U.S.	N/A	0.18/239	0/0	+0.18	0
Unnamed Drainage 3	Non-wetland waters of the U.S.	0.61	0.74/508	0.01/86	+0.13	+<0.01
	Wetland waters of the U.S.	0	0.21/0	0/0	+0.21	0
<b>Total</b>		<b>2.39</b>	<b>2.26/9,529</b>	<b>1.36/2,532</b>	<b>-0.13</b>	<b>+1.36</b>

Note: The total acreage and acreage by drainage presented for the 2017 Approved Project were calculated using GIS for this Report and do not include impacts permitted under the RMDP, as explained in Section 1.2. Small discrepancies within the table are due to rounding.

**Table 3 Direct Impacts to CDFW-Jurisdictional Streambeds**

Feature	2017 Approved Project	Modified Project		Difference in Impact	
	Permanent Impacts (acres)	Permanent Impacts (acres/linear feet)	Temporary Impacts (acres/linear feet)	Permanent Impacts (acres)	Temporary Impacts (acres)
Unnamed Drainage 1	0.23	1.1/3,735	0.01/34	+0.87	+<0.01
Unnamed Drainage 2	3.74	5.26/8,598	3.54/2,464	+1.52	+3.54
Unnamed Drainage 2 (Storm Drain Facility)	N/A	0.18/239	0/0	+0.18	0
Unnamed Drainage 3	1.58	0.98/553	0.05/97	-0.6	+0.05
<b>Total</b>		<b>5.55</b>	<b>7.52/13,125</b>	<b>+1.97</b>	<b>+3.6</b>

Note: The total acreage and acreage by drainage presented for the 2017 Approved Project were calculated using GIS for this Report and do not include impacts permitted under the RMDP, as explained in Section 1.2. Small discrepancies within the table are due to rounding.

Compared to the 2017 Approved Project, the Modified project would result in a greater acreage of impact to CDFW-jurisdictional streambeds. This is due primarily to changes in the site conditions – an area within Unnamed Drainage 2, near the confluence between the western tributary and the mainstem, had begun to show floodplain characteristics and was treated as a CDFW-jurisdictional streambed in the 2019 analysis, at CDFW’s request. However, overall, the types of resources impacted, the general locations of those resources, and the types of functions and services they provide are all consistent with the impacts to jurisdictional waters described in the State-Certified EIR. A comparison of impacts to jurisdictional waters by agency and by source is summarized in Table 2 and Table 3.

The subsections below provide additional details regarding impacts of the Modified Project within each drainage on the Project site.

### **Unnamed Drainage 1**

Unnamed Drainage 1 is located on the west side of the Entrada South Project Site containing 0.22 acres of non-wetland waters of the U.S. (as approved in the AJD; see Appendix B) and 1.12 acres of CDFW-jurisdictional streambeds. The majority of this drainage (0.21 acres of waters of the U.S. and 1.1 acres of CDFW jurisdiction) will be permanently impacted by the Modified Project. Temporary impacts are minor at <0.01 acre for waters of the U.S. and CDFW-jurisdictional streambeds. Impacts to Unnamed Drainage 1 include converting the drainage to an underground storm drain. Functions and values associated with this drainage will be lost when converted to an underground storm drain.

Permanent impacts to waters of the U.S. in Unnamed Drainage 1 have decreased from 0.23 acres for the 2017 Approved Project to 0.21 acres for the Modified Project, due to the decrease in waters of the U.S. as a result of slight natural fluctuations in the drainage over time. Permanent impacts to CDFW-jurisdictional streambeds in Unnamed Drainage 1 have increased from 0.23 acres for the 2017 Approved Project to 1.1 acres for the Modified Project due to an increase in CDFW-jurisdictional streambeds waters as a result of adjacent vegetation growth that increased the area subject to CDFW jurisdiction and natural fluctuations in the drainage over time. Overall, impacts within this drainage have not changed sustainably from the 2017 Approved Project and will be subject to applicable mitigation measures, including compensatory mitigation requirements, adopted under the State-Certified EIR, as described in Appendix A.

### **Unnamed Drainage 2**

Unnamed Drainage 2 is located in the middle portion of the Entrada South Project Site, and it is the largest on the Entrada South Project Site. The Modified Project has been designed to minimize permanent impacts within Unnamed Drainage 2, which contains 2.26 acres of non-wetland waters of the U.S. in the natural drainage and 0.19 acres in the Westridge Storm Drain Facility (as approved in the AJD; see Appendix B) and 8.78 acres of CDFW-jurisdictional streambed in the natural drainage and 0.20 acres in the Westridge Storm Drain Facility. Within the natural drainage, the Modified Project will permanently impact 0.92 acres of non-wetlands waters of the U.S. and 5.26 acres of CDFW-jurisdictional streambeds. The Modified Project will also temporarily impact 1.35 acres of non-wetlands waters of the U.S. and 3.54 acres of CDFW-jurisdictional streambeds. These temporary impacts are the result of drainage restoration activities included as part of the Modified Project, which will enhance existing habitat and functions within Unnamed Drainage 2. These restoration activities include revegetation, removal of exotic plant species, and correction of existing incised banks and channels. Additional compensatory mitigation, including mitigation for impacts



associated with the Entrada South Project, may occur in the portions of Unnamed Drainage 2 conserved pursuant to ES-PDF-BIO-1, consistent with Mitigation Measures BIO-1 through BIO-10 and BIO-12 through BIO-16. Additionally, within the Westridge Storm Drain Facility, 0.18 acres of waters of the U.S. and 0.18 acres of CDFW-jurisdictional streambeds within an in-line water quality basin will be permanently impacted. This area was impacted previously when the basin was constructed during development of the adjacent golf course, but mature vegetation has since become established within the basin. Waters considered permanently impacted include those that will be subject to routine post-construction maintenance activities as authorized by the Corps and/or CDFW.

Permanent impacts to waters of the U.S. in Unnamed Drainage 2 have decreased from 1.55 acres for the 2017 Approved Project to 0.92 acres for the Modified Project (1.1 acres including the Westridge Storm Drain Facility), largely due to a change in the project design in Unnamed Drainage 2 from permanent elimination to temporary impacts with restoration and grade controls installed. Permanent impacts to CDFW-jurisdictional streambeds in Unnamed Drainage 2 have increased from 3.74 acres for the 2017 Approved Project to 5.26 acres for the Modified Project (5.44 acres including the Westridge Storm Drain Facility) due to an expanded jurisdiction that includes vegetation associated with a braided floodplain/remnant terrace at the confluence of the mainstem with the western tributary and an increase in the size of the mainstem drainage from bank erosion, as well as changes in the project design. However, portions of the mainstem of the drainage, which would have been permanently impacted under the 2017 Approved Project, will be temporarily impacted and restored under the Modified Project. These areas will be permanently conserved following completion of Modified Project development under ES-PDF-BIO-1. While the acreage of impacts to CDFW jurisdiction within Unnamed Drainage 2 would increase compared to the 2017 Approved Project, the final condition of the drainage after the project would be significantly improved compared to the final condition as proposed in the State-Certified EIR due to the restoration that would occur under the Modified Project and the permanent conservation of restored and avoided waters under ES-PDF-BIO-1. In particular, impact acreages would increase in the area near the confluence between the mainstem and western tributary, but this reflects an increase in jurisdictional acreage rather than a change in the development activities planned for this area as part of the 2017 Approved Project. The State-Certified EIR includes mitigation measures to compensate for loss of streambeds, as outlined in Appendix A, which will offset these impacts and reduce them to a less than significant level.

### **Unnamed Drainage 3**

Unnamed Drainage 3 is located on the east side of the Entrada South Project site containing 1.14 acres of waters of the U.S. (comprised of 0.93 acres of non-wetland waters of the U.S. and 0.21 acres of wetland waters of the U.S., as approved in the AJD; see Appendix B) and 1.56 acres of CDFW-jurisdictional streambeds. The downstream and northern portion of this drainage contains wetland waters of the U.S., which will be permanently impacted by the Modified Project.

Permanent impacts of the Modified Project to Corps jurisdiction within this drainage total 0.95 acres, including 0.21 acres of impact to wetland waters of the U.S., and permanent impacts to CDFW jurisdiction total 0.98 acres. Temporary impacts of the Modified Project to Unnamed Drainage 3 are minor at <0.01 acre for waters of the U.S. and 0.05 acres for CDFW-jurisdictional streambeds. All of the impacted waters are located at the downstream (northern) end of the drainage, outside the boundary of the Entrada South spineflower preserve, which is protected by a perpetual conservation instrument.

Permanent impacts to non-wetland waters of the U.S. in Unnamed Drainage 3 have increased from 0.61 acres for the 2017 Approved Project to 0.74 acres for the Modified Project, largely due to the slight widening of the jurisdictional areas within the downstream end of Unnamed Drainage 3. Permanent impacts to wetland waters of the U.S. in Unnamed Drainage 3 have increased from 0 acres for the 2017 Approved Project to 0.21 acres for the Modified Project, due to the presence of a newly identified wetland at the downstream end of the drainage. Permanent impacts to CDFW-jurisdictional streambeds in Unnamed Drainage 3 have decreased from 1.58 acres for the 2017 Approved Project to 0.98 acres for the Modified Project largely due to the decrease in CDFW-jurisdictional streambeds within the downstream end of Unnamed Drainage 3. Overall, impacts within this drainage have not changed substantially from the 2017 Approved Project and will be subject to applicable mitigation measures adopted under the State-Certified EIR, as outlined in Appendix A.

## 4.2 Indirect Impacts to Jurisdictional Waters

As described in the State-Certified EIR, the development of the Entrada South Project Site would have indirect impacts to jurisdictional waters from altered hydrology and water quality (including pesticide runoff), invasive plant species, altered fire regime (which may directly remove riparian and wetland vegetation), and increased trash and debris. These impacts would be minimized and mitigated to the extent feasible by project design features and mitigation measures, including those listed in Appendix A. The State-Certified EIR found that these indirect impacts to jurisdictional waters would be less than significant with application of these mitigation measures.

The analysis and conclusions of the State-Certified EIR remain valid for the Modified Project. The development footprint and proposed land uses associated with the Modified Project are substantially the same as those for the 2017 Approved Project from the State-Certified EIR. As to construction, mitigation measures, including measure RMDP/SCP BIO-49 (contaminated water shall not enter a stream) and RMDP/SCP BIO-70 (construction best management practices to protect sensitive habitats during construction), would minimize potential effects to onsite and offsite water quality from construction activities. Mitigation measure RMDP/SCP BIO-70 specifies minimum requirements that must be incorporated into the Project's Stormwater Pollution Prevention Plan (SWPPP), which will be prepared per the Construction Stormwater General Permit from the State Water Resources Control Board (SWRCB), to protect adjacent habitats and wildlife species, including aquatic habitats and species, during construction (SWRCB 2022). These minimum requirements include implementation of proper stormwater management, construction management methods, and erosion and sediment control measures that will minimize unintended impacts to water quality within onsite and offsite jurisdictional features, including the largely concrete and channelized systems downstream of the onsite drainages.

In the post-construction, built condition, all development on the Entrada South Project Site would comply with the County's Low Impact Development (LID) standards (County Code Chapter 22.122), which were developed to fulfill the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Sewer System (MS4) Permit for the area encompassing the Entrada South Project Site. The LID standards are a stormwater management approach focused on mimicking natural site hydrology by retaining the maximum practicable amount of runoff. The Entrada South Project qualifies as a Designated Project under the LID standards, which require retention of the runoff from the 85<sup>th</sup> percentile, 24-hour rain event (known as the Stormwater Quality Design Volume, or SWQDv). Where retention onsite of the SWQDv is technically infeasible, a Designated Project must biofilter 1.5 times the portion of the SWQDv that is not reliably retained

onsite. By ensuring that site runoff is largely retained on-site, the LID standards will minimize hydrologic changes to adjacent and downstream aquatic resources caused by the Entrada South Project and protect existing channel characteristics and resource functions in those areas, while also protecting downstream water quality from pollutants potentially present in stormwater runoff from the Entrada South Project Site. Effectiveness of stormwater quality control measures depends on on-going inspection and maintenance, and the LID standards require the development and implementation of a project-specific maintenance plan. Similarly, mitigation measure SP-4.6-58 specifies that impacts to water quality be minimized in conformance with state and federal law.

Considering the construction and post-construction design measures, the project would not result in significant impacts to water quality or hydrology and would not have significant adverse effects to adjacent or downstream resources. Because the overall project disturbance footprint, types of construction activities and post-construction land uses associated with the Modified Project have not changed materially from what was described in the State-Certified EIR, and relevant mitigation measures will continue to apply, there is no indication that indirect impacts to jurisdictional waters from the Project will differ from those described in the State-Certified EIR.

## 4.3 Summary of Impacts

Based on the analysis above, the Modified Project would result in a reduction in permanent loss of waters of the U.S. (reduction of 0.13 acre) and an increase in permanent loss of CDFW-jurisdictional streambeds (increase of 1.97 acres) compared to the 2017 Approved Project. Temporary impacts would increase for both federal and state waters, but temporarily impacted areas would be restored following construction and would not have a lasting effect on channel form, function, or vegetation. These areas within Unnamed Drainage 2 will be permanently conserved following Modified Project development under ES-PDF-BIO-1. Compensatory mitigation will be provided for impacts to jurisdictional waters resulting from the Modified Project in the same manner as described in the State-Certified EIR for jurisdictional waters impacted by the 2017 Approved Project. Project design features and mitigation measures will also minimize indirect impacts to jurisdictional waters associated with the project changes and ensure that indirect impacts remain consistent with, or less than, those described in the State-Certified EIR. Overall, the incremental modifications associated with the Modified Project, combined with the changes in jurisdictional waters present on the Entrada South Project Site, are not expected to result in any new significant effects or to substantially increase the severity of any significant effect identified in the State-Certified EIR, when taking into account the mitigation measures applicable to the Project.

## 5 Thresholds of Significance

---

The State-Certified EIR evaluated the significance of the 2017 Approved Project's effects to jurisdictional waters using the applicable significance criteria adopted by the CDFW, the lead agency for that document. This section uses the significance criteria adopted by the County of Los Angeles, the current lead agency, which are based on those outlined in Section 4 of the current California Environmental Quality Act (CEQA) Appendix G Checklist (14 California Code of Regulations Division 6, Chapter 3 Appendix G) and are similar to those used in the State-Certified EIR. Those significance criteria are:

- **Significance Criterion 1.** Would the Project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?
- **Significance Criterion 2.** Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) or waters of the United States or California, as defined by § 404 of the federal Clean Water Act and its implementing regulations, California Fish and Game code § 1600, et seq., or the State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, through direct removal, filling, hydrological interruption, or other means?

Using these significance thresholds, this section evaluates whether the Modified Project would have any new significant effect not considered in the State-certified EIR or would substantially increase the severity of any significant effect identified in the State-certified EIR as a result of incremental project changes, new information, or changed circumstances evaluated in this Report.<sup>8</sup>

### 5.1 Significance Criterion 1

*Would the Project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?*

The State-certified EIR determined that the 2017 Approved Project would not result in a net loss of CDFW-jurisdictional streambeds or waters of the U.S. when taking into account the project design features, avoidance measures, and mitigation measures imposed on the project. Based on the information evaluated in this Report, including the incremental changes to the Modified Project and changed circumstances regarding the nature and extent of jurisdictional waters within the Project site, the Modified Project will decrease permanent impacts to waters of the U.S. by 0.13 acres and increase permanent impacts to CDFW-jurisdictional streambeds by 1.97 acres compared to the 2017 Approved Project. However, all permanent impacts to CDFW-jurisdictional streams and waters of the U.S. will be subject to the compensatory mitigation requirements as outlined in the State-certified EIR, which will ensure that the impacts do not result in a permanent net loss of CDFW-jurisdictional streams or waters of the U.S. and that the permanent removal of state-protected

---

<sup>8</sup> Since the State-Certified EIR did not identify any significant effect to jurisdictional waters, the focus of this section is on whether the Modified Project would have any new significant effect not considered in the State-certified EIR.

streambeds will be replaced by creating riparian habitats of similar functions and values at various ratios based on the biological value of the lands impacted.

The Modified Project proposes to replace permanent impacts within Unnamed Drainage 2 with restoration that includes revegetation, removal of exotic plant species, and correction of existing incised banks and channels. While the incorporation of additional restoration will increase temporary impacts, these areas will be enhanced to provide greater functions and services once restoration is complete. The newly created riparian habitat will increase the overall acreage of riparian habitat in the project vicinity, as well as will improve the biological value of the lands by increasing native plant diversity and abundance, expanding the riparian corridor, and providing important food and shelter sources for wildlife. Under new Project Design Feature (PDF) ES-PDF-BIO-1, streambeds and riparian areas subject to CDFW jurisdiction within Drainage 2, and elsewhere within the Project Site, would be permanently conserved following completion of Entrada South Project development by granting conservation easements over those areas.

The State-certified EIR determined that the 2017 Approved Project would not result in substantial adverse construction impacts within Corps or CDFW jurisdictional areas through temporary removal, filling, hydrologic interruption, loss of functions or services, or other means when taking into account the project design features, avoidance measures, and mitigation measures imposed on the project. Furthermore, the State-certified EIR includes mitigation measures that require the restoration and revegetation of all temporarily impacted areas, including measures to ensure that functions and services are restored.

Mitigation measures applicable to impacts to jurisdictional waters include SP 4.2-2, SP 4.2-3, SP 4.6-1, SP 4.6-2, SP 4.6-3, SP 4.6-4, SP 4.6-5, SP 4.6-6, SP 4.6-7, SP 4.6-8, SP 4.6-9, SP 4.6-10, SP 4.6-11, SP 4.6-13, SP 4.6-14, SP 4.6-15, SP 4.6-16, SP 4.6-26a, SP 4.6-28, SP 4.6-43, SP 4.6-47a, SP 4.6-55, SP 4.6-58, SP 4.6-63, RMDP/SCP BIO-1 through RMDP/SCP BIO-10, RMDP/SCP BIO-12, RMDP/SCP BIO-13, RMDP/SCP BIO-15, RMDP/SCP BIO-16, RMDP/SCP BIO-49, RMDP/SCP BIO-52, RMDP/SCP BIO-70, RMDP/SCP SW-4, RMDP/SCP SW-6, and ES-PDF-BIO-1, which are described in Appendix A. Taking into account these mitigation measures, the Modified Project would not have a substantial adverse effect on state- or federally- protected waters that was not already evaluated in the State-Certified EIR, and thus would not have any new significant effect not analyzed in that document.

## 5.2 Significance Criterion 2

*Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) or waters of the United States or California, as defined by § 404 of the federal Clean Water Act and its implementing regulations, California Fish and Game code § 1600, et seq., or the State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, through direct removal, filling, hydrological interruption, or other means?*

The State-Certified EIR determined that the 2017 Approved Project would not impact wetland waters of the U.S. as none were present at the time. Permanent impacts to wetland waters of the U.S. have increased from 0 acres for the 2017 Approved Project to 0.21 acres for the Modified Project, due to the presence of a new manmade wetland in the debris basin at the downstream end of Unnamed Drainage 3. Applicable mitigation measures included in the State-Certified EIR would apply to these impacts; therefore, the permanent removal of federally protected wetlands will be replaced by creating riparian habitats of similar functions and values at various ratios based on the biological value of the lands impacted.



Mitigation measures applicable to impacts to jurisdictional wetlands include SP 4.2-2, SP 4.2-3, SP 4.6-1, SP 4.6-2, SP 4.6-3, SP 4.6-4, SP 4.6-5, SP 4.6-6, SP 4.6-7, SP 4.6-8, SP 4.6-9, SP 4.6-10, SP 4.6-11, SP 4.6-13, SP 4.6-14, SP 4.6-15, SP 4.6-16, SP 4.6-26a, SP 4.6-28, SP 4.6-43, SP 4.6-47a, SP 4.6-55, SP 4.6-58, SP 4.6-63, RMDP/SCP BIO-1 through RMDP/SCP BIO-10, RMDP/SCP BIO-12, RMDP/SCP BIO-13, RMDP/SCP BIO-15, RMDP/SCP BIO-16, RMDP/SCP BIO-52, RMDP/SCP BIO-70, RMDP/SCP SW-4, and ES-PDF-BIO-1, which are described in Appendix A. Taking into account these mitigation measures, the Modified Project would not have a substantial adverse effect on state- or federally-protected wetlands that was not already evaluated in the State-Certified EIR, and thus would not have any new significant effect not analyzed in that document. Since the State-Certified EIR did not identify any significant impacts to such resources after mitigation, the Modified Project also would not substantially increase the severity of any previously identified significant effect to such resources.

### 5.3 Cumulative Impacts

The State-Certified EIR evaluated cumulative impacts resulting from the 2017 Approved Project in its assessment of cumulative impacts of the RMDP. The analysis included a review of agency permitting trends, including impact and mitigation acreages, over an 18-year period that establishes an expected level of permitting activity in the Santa Clara River watershed that would occur with or without development of the Entrada South Project Site. The information provided in the permits and related documents included: (1) acreages of temporary and permanent impacts to jurisdictional wetlands and waters of the state and/or U.S.; (2) mitigation measures; (3) net loss or gain of jurisdictional waters/wetlands; and (4) special-status species impacted by the permits. In addition, the analysis looked at the effects of the 2017 Approved Project in detail, assessing whether the project would contribute considerably to a significant impact on jurisdictional waters. The analysis concluded that no cumulatively significant impacts to waters and streambeds would result from the 2017 Approved Project. As the Modified Project is substantially similar to the 2017 Approved Project, this conclusion holds for the Modified Project as well.

As discussed in the State-Certified EIR, the Corps and CDFW oversee well established and documented regulatory programs that limit and offset damages to aquatic resources caused by development activity. Since publication of the State-Certified EIR, the State Water Resources Control Board (SWRCB) has also revised its Porter-Cologne Water Quality Control Act regulatory program to address impacts caused by fill and excavation (SWRCB 2021). These programs ensure that jurisdictional waters are not filled or modified without proper authorization, require impacts to be avoided and minimized to the maximum extent feasible, and require compensatory mitigation for losses of aquatic resource acreage or function that cannot be avoided. These principles are codified in federal regulations including the U.S. EPA's Clean Water Act Section 404(b)(1) Guidelines (40 CFR 230) and the Corps' Compensatory Mitigation Rule (33 CFR 332), which govern the issuance and conditioning of Section 404 Permits, and in the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2021).

The cumulative impacts analysis in the State-Certified EIR notes that during the period from 1988 to 2006, the agencies issued hundreds of permits for projects in the Santa Clara River Watershed. As illustrated on charts in the State-Certified EIR, mitigation acreages substantially exceeded impact acreages in all years, ensuring that there was no net loss of aquatic resources. This outcome reflects the regulatory agencies' missions and statutory responsibilities, and is consistent with the regulations described above. It is expected that future development activity in the Santa Clara River watershed will continue to occur, and some development projects will continue to affect aquatic

resources. However, it is also expected that the Corps, CDFW, and SWRCB will continue to exercise their statutory authorities to ensure that impacts are avoided, minimized, and mitigated. Accordingly, future projects in the watershed will be conditioned to provide mitigation at appropriate ratios and net losses of resource functions or acreage will not occur.

Further, because the Entrada South project includes a Compensatory Mitigation Plan that offsets proposed resource losses at a greater than 1:1 ratio, resulting in a net gain of resource acreage and functions and services as required by mitigation measures adopted under the State-Certified EIR, the project would not contribute to or exacerbate any regional loss of aquatic resources. Project-specific mitigation measures also require that temporary impact zones be restored following construction and revegetated with native plant species.

Thus, the Entrada South project would not contribute considerably to a cumulatively significant impact on waters and streambeds.

## 6 References

---

California Department of Fish and Wildlife (CDFW). 2017. Entrada South Unnamed Drainage 2 – Revised JDR per CDFW Field Meeting Map. Prepared by Dudek.

Rincon Consultants, Inc. (Rincon). 2019. Wetland Delineation and Jurisdictional Determination Report for the Entrada Project. Los Angeles County, California.

State Water Resources Control Board (SWRCB). 2021. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019 and Revised April 6, 2021.

2022. National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities. Effective September 1, 2023.

United States Army Corps of Engineers and California Department of Fish and Game (Corps and CDFG). 2010. Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan Final Joint Environmental Impact Statement and Environmental Impact Report SCH No. 2000011025.

United States Geological Survey (USGS). 2015. Newhall, California 7.5-minute topographic quadrangle, accessed via the National Map. September 2019.

URS Corporation (URS). 2015. Wetland Delineation and Jurisdictional Determination Report for the Entrada Project. Los Angeles County, California.

# Appendix A

---

Applicable Mitigation Measures





## Applicable Mitigation Measures from the State-Certified EIR

The State-Certified EIR included mitigation measures already adopted under the Newhall Ranch Specific Plan Program EIR as revised (March 1999), as well as a set of additional mitigation measures to minimize impacts to waters and streambeds. The following mitigation measures are those measures relating to waters and streambeds from the Specific Plan EIR and the State-Certified EIR that apply to the Entrada South Project. The Specific Plan measures use the format “SP-4.6-XX,” whereas the State-Certified EIR measures use the format “RMDP/SCP BIO-XX.” Tables have been included in the mitigation measures where present, and numbering has been retained.

**SP 4.2-2:** All necessary permits or letters of exemption from the United States Army Corps of Engineers, United States Fish and Wildlife Service, California Department of Fish and Game, and the Regional Water Quality Control Board for Specific Plan-related development are to be obtained prior to construction of drainage improvements. The performance criteria to be used in conjunction with 1603 agreements and/or 404 permits are described in Section 4.6, Biological Resources, Mitigation Measures 4.6-1 through 4.6-10 (restoration) and 4.6-11 through 4.6-16 (enhancement).

*(This measure applies to the Entrada South Project with the following qualifications: The reference to Specific Plan-related development does not apply. The performance criteria described in Mitigation Measures 4.6-1 through 4.6-16 apply to permits obtained for the Entrada South Project to the extent those measures apply to the Entrada South Project.)*

**SP 4.2-3:** All necessary streambed agreement(s) are to be obtained from the California Department of Fish and Game wherever grading activities alter the flow of streams under CDFG jurisdiction. The performance criteria to be used in conjunction with 1603 agreements and/or 404 permits are described in Section 4.6, Biological Resources, Mitigation Measures 4.6-1 through 4.6-10 (restoration) and 4.6-11 through 4.6-16 (enhancement).

*(This measure applies to the Entrada South Project with the following qualification: The performance criteria described in Mitigation Measures 4.6-1 through 4.6-16 apply to permits obtained for the Entrada South Project to the extent those measures apply to the Entrada South Project.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**SP 4.6-3:** Revegetation Plans may be prepared as part of a California Department of Fish and Game 1603 Streambed Alteration Agreement and/or an United States 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 RMDP 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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**SP 4.6-9:** Monitoring reports for the mitigation site shall be reviewed by the permitting State and/or Federal agency.

*(This measure applies to the Entrada South Project without change.)*

**SP 4.6-10:** Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan.

*(This measure applies to the Entrada South Project without change.)*

**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.)

*(This measure applies to the Entrada South Project without change.)*

**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).

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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 MM SP-4.6-1 through MM SP-4.6-11 and MM SP-4.6-13 through MM SP-4.6-16, above.
- Mitigation requirements for oak tree replacement are set forth in MM SP-4.6-48, below.

*(This measure applies to the Entrada South Project without change.)*

**SP 4.6-28:** Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources, shall be conducted pursuant to the Oak Resource Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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.

*(This measure applies to the Entrada South Project without change.)*

**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 with 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.

*(This measure applies to the Entrada South Project without change except that the requirement for the Specific Plan to conform does not apply.)*

**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.

*(This mitigation measure applies to the Entrada South Project without change, except that the reference to the Specific Plan does not apply.)*

**SP 4.6-63:** Riparian resources that are impacted by build-out of the Newhall Ranch Specific Plan shall be restored with similar habitat at the rate of one acre replaced for each acre lost.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP BIO-1:** Mitigation Measures SP-4.6-1 through SP-4.6-16<sup>9</sup> 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 RMDP/SCP 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.<sup>10</sup>

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 subnotification 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 RMDP/SCP BIO-2 and RMDP/SCP BIO-10. The detailed wetlands mitigation plans shall provide for the 3:1 replacement of any southern California black walnut to be removed from the riparian corridor for individual projects. The plan shall be subject to the approval of CDFG and the Corps and approved prior to the impact to riparian resources. RMDP/SCP BIO-4 describes that the functions and values will be assessed for the riparian areas that will be removed, and RMDP/SCP BIO-2 and RMDP/SCP BIO-10 describe the replacement ratios for the habitats that will be impacted.

---

<sup>9</sup> SP-4.6 mitigation measures were previously adopted by the Newhall Ranch Specific Plan Program EIR (1999, 2003) and the State-Certified EIR.

<sup>10</sup> 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 State-Certified EIR.



*(This measure applies to the Entrada South Project with the following exceptions and/or changes: approval of mitigation plans will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*

**RMDP/SCP 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 RMDP/SCP BIO-4 and MM SW-3 of Section 4.6 of the Final EIS/EIR) on the Project Site, or as allowed under RMDP/SCP 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 RMDP/SCP BIO-2b.
- b. For permanent and temporary impacts to CDFG jurisdiction, consistent with the subnotification, quantities of mitigation acreage required shall be calculated in accordance with the criteria below:
  - If suitable mitigation sites have met success criteria (RMDP/SCP 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 13. 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 13 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 13 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 subnotification 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 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 one 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 13. CDFG Jurisdictional Permanent Impacts Mitigation Ratios**

Ratios Listed by Vegetation Types & Quality				
		(Mit. Ratio)	(Mit. Ratio)	(Mit. Ratio)
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
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 using the HARC methods described in Section 4.2, Geomorphology and Riparian Resources, of the State-Certified 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 using the HARC methods described in Section 4.2 of the State-Certified EIR.
- \*\*\* LOW reach value indicates a portion of the Santa Clara River or main tributary that scored below 0.4 Total Score using the HARC methods described in Section 4.2 of the State-Certified EIR.

*(This measure applies to the Entrada South Project with the following exceptions and/or changes: mitigation ratios will be applied when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. Mitigation sites may be located within the Entrada South Project Site and/or within the larger RMDP/SCP area, subject to the site approval process described in Mitigation Measure BIO-3.)*

**RMDP/SCP 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 creek bed or other disturbance shall

receive the highest level of priority for vegetation community restoration. Restoration sites may 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 RMDP/SCP BIO-12). Sites will be approved when the detailed wetlands mitigation plans are submitted to the Corps and CDFG as part of the subnotification letters submitted for individual projects. Status of the sites will be addressed through agency review of the annual mitigation status report and mitigation accounting form 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.

*(This measure applies to the Entrada South Project with the following exceptions and/or changes: mitigation site approval will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. The mitigation accounting form referenced in the measure is not required.)*

**RMDP/SCP 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 14 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 14. Potential Plant Species for Vegetation Community Restoration in the River Corridor SMA and Tributaries**

<b>Trees</b>	
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>
<b>Shrubs</b>	
mulefat	<i>Baccharis salicifolia</i>
sandbar willow	<i>Salix exigua</i>
arrow weed	<i>Pluchea sericea</i>
<b>Herbs</b>	
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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP 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 subnotification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation status report and mitigation accounting form.

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: restoration plans will be reviewed and approved when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*

**RMDP/SCP BIO-6:** The revegetation site will be considered “complete” upon meeting all of the following success criteria. In a subnotification letter, the applicant may request modification of success criteria on a project by project basis. Acceptance of such request will be at the discretion of CDFG and the Corps.

1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion.



2. The percent cover and species richness of native vegetation shall be evaluated based on local reference sites established by CDFG and the Corps for the plant communities in the impacted areas.
3. Native shrubs and trees shall have at least 80% 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 Plan<sup>11</sup> for Waters of the United States.

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: modification of success criteria may occur when the Applicant obtain permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. In addition, the HARC assessment may be replaced by another agency-approved method.)*

**RMDP/SCP 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 provided for in RMDP/SCP 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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP 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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP BIO-9:** In areas where invasive exotic plant species control is authorized by CDFG in lieu of other riparian habitat mitigation (RMDP/SCP 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.

*(This mitigation measure applies to the Entrada South Project without change.)*

---

<sup>11</sup> 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 State-Certified EIR.

**RMDP/SCP 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 Environmental Impact Report, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval. 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.

*(This mitigation measure applies to the Entrada South Project without change.)*

**RMDP/SCP BIO-12:** An annual monitoring report shall be submitted to the Corps and CDFG by April 1 of each year until satisfaction of success criteria identified in RMDP/SCP BIO-6, and consistent with the requirements of RMDP/SCP BIO-12. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed “in-lieu fees,” restoration methods, and vegetation community restoration performance standards. For active vegetation community creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; an accounting of colonization by native plants; and photographs. The report shall also include the mitigation account form (see RMDP/SCP BIO-11), which outlines account 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.

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: The functional assessment of the compensatory mitigation site may use a method other than the HARC assessment methodology, subject to the approval of the Corps and CDFW. The mitigation accounting form required by measure BIO-11 is not required because the Entrada South Project will not utilize the RMDP or the permits issued for the RMDP.)*

**RMDP/SCP 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP 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, containerized 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 RMDP/SCP BIO-2. The growth and survival of the replacement trees shall meet the performance standards specified in RMDP/SCP 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 RMDP/SCP BIO-6, RMDP/SCP BIO-11, and RMDP/SCP BIO-12.

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: Mitigation accounting in accordance with measure BIO-11 is not required because the Entrada South Project will not utilize the RMDP or the permits issued for the RMDP.)*

**RMDP/SCP BIO-16:** Vegetation communities temporarily impacted by the proposed Project shall be revegetated as described in RMDP/SCP 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 on 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 RMDP/SCP BIO-1, RMDP/SCP BIO-2, and RMDP/SCP BIO-6. Annual monitoring reports on the status of the recovery or temporarily impacted areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (RMDP/SCP BIO-11 and RMDP/SCP BIO-12).

*(This mitigation measure applies to the Entrada South Project with the following exceptions and/or changes: Mitigation accounting in accordance with measure BIO-11 is not required because the Entrada South Project will not utilize the RMDP or the permits issued for the RMDP.)*

**RMDP/SCP 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP 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 in the field for more than five days without participating in the WEAP. Night work and use of lights on equipment shall not be allowed unless CDFG approves of the night work and use of lights. Lighting shall not be used where threatened or endangered species occur. Lights shall be directed from natural areas and remain 200 feet away from natural areas unless otherwise approved by CDFG. The qualified biologist shall provide ongoing

guidance to construction personnel and contractors to ensure compliance with environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following:

- Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements.
- A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of non-compliance with these acts;
- Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts);
- Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction limitations (e.g., limitations on nighttime work) will be provided to the environmental monitors and construction crews prior to ground disturbance. This applies to preconstruction activities, such as site surveying and staking, natural resources surveying or reconnaissance, establishment of water quality BMPs, and geotechnical or hydrological investigations;
- Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife;
- Review/designate the construction area in the field with the contractor in accordance with the final grading plan;
- Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected);
- Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity;
- Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas;
- Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented;
- To reduce the potential for the spread of 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP 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 (RMDP/SCP 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.
- 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.

*(This measure applies to the Entrada South Project without change.)*

**RMDP/SCP SW-4:** All areas where temporary construction impacts affect Corps or CDFG jurisdictional areas (generally, these are areas where impacts would occur due to the construction of Project facilities, but that are outside the permanent footprint of the actual facility), shall be revegetated with appropriate native vegetation after completion of construction in the area. A revegetation plan shall be prepared and implemented in accordance with the terms set forth in mitigation measures SP-4.6-1 through SP-4.6-15 and SP-4.6-63.

*(This measure applies to the Entrada South Project without change. Note that the process for verifying that revegetation plans comply with the terms set forth in measures SP-4.6-1 through SP-4.6-15 and SP-4.6-63 is implemented through measures BIO-1, BIO-3 and BIO-12.)*

**RMDP/SCP SW-6:** To the extent that on-site mitigation for impacts to jurisdictional tributary drainages is insufficient to meet the mitigation ratios required by revised Mitigation Measure BIO-2, then the remaining mitigation obligation shall be met at off-site properties within the Santa Clara River watershed, via use of one or more of the following mitigation approaches (at applicant's option): (a) creation of additional jurisdictional acreage in tributaries to the Santa Clara River occurring off site such that the mitigation site has an equal or greater value than the impacted site; (b) preservation of property containing jurisdictional tributaries to the Santa Clara River having an equal or greater value than the impacted site via a conservation easement or analogous method; or (c) habitat enhancement activities in jurisdictional tributaries for the necessary acreage (e.g., exotic

species removal under the terms and conditions specified in Mitigation Measures BIO-9 and BIO-10).

*(This measure applies to the Entrada South Project without change.)*

**ES-PDF-BIO-1:** Within six months following completion of development within the Entrada South Project Site, the Applicant shall offer a conservation easement (as defined in Civil Code Section 815.1) over preserved streambeds and riparian areas within Unnamed Canyon 2 that are subject to CDFW's jurisdiction under Fish and Game Code Sections 1602 et seq. to ensure those areas are maintained in an undeveloped, open space condition in perpetuity. The conservation easement shall be offered to a qualified natural lands management organization or other entity qualified to hold conservation easements under Civil Code Section 815.3.

*(This measure applies to the Entrada South Project as written.)*

## Appendix B

---

Approved Jurisdictional Delineation SPL-2015-00630-GLH (6/15/2020) and Subsequent  
Corps Coordination



# CDFW Jurisdiction

---

Section 1602 of CFGC requires an entity to notify the CDFW before conducting any activity that would divert obstruct, or substantially alter a streambed. Once notified, the CDFW may require that a Streambed Alteration Agreement be executed before the activity may proceed. The CDFW has not defined the term “stream” for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. Considering this, four sources of information were reviewed and considered in determining the appropriate limits of CDFW jurisdiction within the site, as discussed below. The principles presented in these materials were used to guide the delineation of on-site streams, with consideration given to the relevance (i.e., jurisdiction, applicability) of each source to the project and resources at hand.

- **The plain language of Section 1602 of CFGC** establishes the following general concepts:
  - References “river,” “stream,” and “lake”
  - References “natural flow”
  - References “bed,” “bank,” and “channel”
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987)), which interpreted Section 1602’s use of “stream” to be as defined in common law. The Court indicated that a “stream” is commonly understood to:
  - Have a source and a terminus
  - Have banks and a channel
  - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
  - Represent the depression between the banks worn by the regular and usual flow of the water
  - Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
  - Include the land that is covered by the water in its ordinary low stage
  - Include lands below the OHWM
- **CDFW regulations** defining “stream” for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
  - Flows at least periodically or intermittently
  - Flows through a bed or channel having banks
  - Supports fish or aquatic life
  - Can be dry for a period of time
  - Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation



- **Guidance documents**, including *A Field Guide to Lake and Streambed Alteration Agreements* (CDFG 1994) and *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (Brady and Vyverberg 2013), which suggest the following:
  - A stream may flow perennially or episodically
  - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
  - Width of a stream course can reasonably be identified by physical or biological indicators
  - A stream may have one or more channels (single-thread vs. compound form)
  - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
  - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
  - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
  - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, were applied within the project site in an attempt to determine the limits of on-site streams.

# Federal Clean Water Act Jurisdiction

---

Pursuant to Section 404 of the Clean Water Act (CWA), the Corps regulates the discharge of dredge and/or fill material into waters of the United States. Section 404 requires that any person proposing an activity that would discharge these materials must first obtain a permit from the Corps. For regulated activities in the project region, Section 404 Permits are issued by the Corps' Los Angeles District. The CWA stipulates that the Corps may not issue a Section 404 Permit if the proposed activity would be contrary to the public interest or would cause substantial degradation of the nation's waters, or if a less environmentally damaging practicable alternative exists, among other restrictions.

Waters of the U.S. generally include navigable waterways and wetlands adjacent to navigable waterways, non-navigable tributaries to navigable waterways, and wetlands adjacent to non-navigable waters that are contiguous with navigable waterways.

Under Section 401 of the CWA, every applicant for a federal permit or license for an activity which may result in a discharge of dredge or fill material to a water body must obtain a state-issued Water Quality Certification that the proposed activity will comply with state water quality standards (i.e., beneficial uses, water quality objectives, and anti-degradation policy). In California, the State Water Resources Control Board (SWRCB) has delegated the responsibility for issuing Section 401 Certifications to the nine Regional Water Quality Control Boards (RWQCB) throughout the state. The Los Angeles RWQCB issues Section 401 Certifications for projects in the portion of Los Angeles County where the Entrada site is located. A CWA Section 404 Permit is a federal permit subject to the terms of Section 401 as described above, and the Corps therefore cannot issue a Section 404 permit in the project region until the permit applicant also receives a Section 401 Certification from the Los Angeles RWQCB. Because Section 401 of the CWA is restricted to activities requiring a federal license or permit, this section does not apply to activities affecting waters outside federal jurisdiction, such as isolated, intrastate waters or those excluded from federal jurisdiction based on significant nexus standards.



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT**  
**60 SOUTH CALIFORNIA STREET, SUITE 201**  
**VENTURA, CALIFORNIA 93001-2598**

June 15, 2020

SUBJECT: Approved Jurisdictional Determination

Matt Carpenter  
Vice President, Environmental Resources  
FivePoint  
25124 Springfield Court, Suite 300  
Valencia, California 91355

Dear Mr. Carpenter:

I am responding to your request (File No. SPL-2015-00630-GLH) dated June 10, 2022, for an approved Department of the Army jurisdictional determination (JD) for the Entrada South Project site (lat. 34.416195°N, long. -118.591973°W) located near the city of Santa Clarita, Los Angeles County, California.

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether or not the proposed project is located within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act. This evaluation pertains only to geographic jurisdiction.

Based on available information, I have determined there are waters of the United States on the project site in the locations depicted on the enclosed drawing. The basis for our determination can be found in the enclosed Approved Jurisdictional Determination (JD) form.

This letter includes an approved jurisdictional determination for the Entrada South Project site. If you wish to submit new information regarding this jurisdictional determination, please do so within 60 days. We will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. If you object to this or any revised or reissued jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) and Request for Appeal (RFA) form. If you wish to appeal this decision, you must submit a completed RFA form within 60 days of the date on the NAP to the Corps South Pacific Division Office at the following address:

Tom Cavanaugh  
Administrative Appeal Review Officer  
U.S. Army Corps of Engineers  
South Pacific Division, CESPD-PDO  
450 Golden Gate Ave.  
San Francisco, CA 94102

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5 (see below), and that it has been received by the Division Office by **August 14, 2020**.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular project site identified in your request, and is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact Jerry Hidalgo at (805) 585-2145 or via e-mail at [Gerardo.L.Hidalgo@usace.army.mil](mailto:Gerardo.L.Hidalgo@usace.army.mil). Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey).

Sincerely,

Aaron O. Allen, Ph.D.  
Chief, North Coast Branch  
Regulatory Division

Enclosures

## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: FivePoint		File Number: SPL-2015-00630-GLH	Date: JUNE 15, 2020
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
X	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at [http://www.usace.army.mil/cecw/pages/reg\\_materials.aspx](http://www.usace.army.mil/cecw/pages/reg_materials.aspx) or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.



- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

## **SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

### **POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Gerardo Hidalgo  
U.S. Army Corps of Engineers  
Los Angeles District  
60 South California Street, Suite 201  
Ventura, California 93001-2598  
Phone: (805) 585-2145  
Email: Gerardo.L.Hidalgo@usace.army.mil

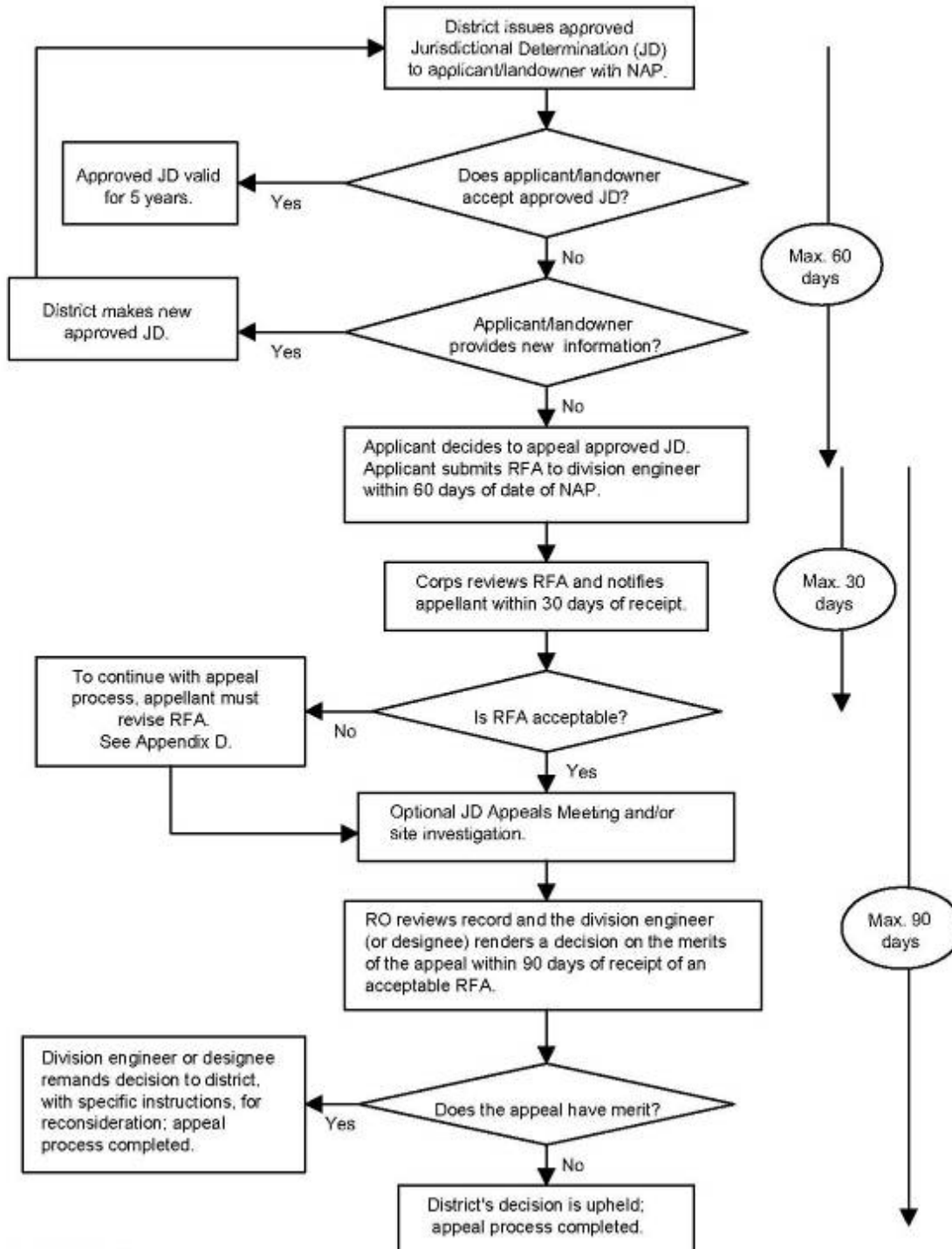
If you only have questions regarding the appeal process you may also contact:

Thomas J. Cavanaugh  
Administrative Appeal Review Officer  
U.S. Army Corps of Engineers  
South Pacific Division  
450 Golden Gate Ave.  
San Francisco, CA 94102  
Phone: (415) 503-6574 Fax: (415) 503-6646  
Email: thomas.j.cavanaugh@usace.army.mil

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

<p>_____</p> <p>Signature of appellant or agent.</p>	<p>Date:</p>	<p>Telephone number:</p>
--	--------------	--------------------------

## Administrative Appeal Process for Approved Jurisdictional Determinations



## § 331.5 Criteria.

(a) *Criteria for appeal* —(1) *Submission of RFA*. The appellant must submit a completed RFA (as defined at §331.2) to the appropriate division office in order to appeal an approved JD, a permit denial, or a declined permit. An individual permit that has been signed by the applicant, and subsequently unilaterally modified by the district engineer pursuant to 33 CFR 325.7, may be appealed under this process, provided that the applicant has not started work in waters of the United States authorized by the permit. The RFA must be received by the division engineer within 60 days of the date of the NAP.

(2) *Reasons for appeal*. The reason(s) for requesting an appeal of an approved JD, a permit denial, or a declined permit must be specifically stated in the RFA and must be more than a simple request for appeal because the affected party did not like the approved JD, permit decision, or the permit conditions. Examples of reasons for appeals include, but are not limited to, the following: A procedural error; an incorrect application of law, regulation or officially promulgated policy; omission of material fact; incorrect application of the current regulatory criteria and associated guidance for identifying and delineating wetlands; incorrect application of the Section 404(b)(1) Guidelines (see 40 CFR Part 230); or use of incorrect data. The reasons for appealing a permit denial or a declined permit may include jurisdiction issues, whether or not a previous approved JD was appealed.

(b) *Actions not appealable*. An action or decision is not subject to an administrative appeal under this part if it falls into one or more of the following categories:

- (1) An individual permit decision (including a letter of permission or a standard permit with special conditions), where the permit has been accepted and signed by the permittee. By signing the permit, the applicant waives all rights to appeal the terms and conditions of the permit, unless the authorized work has not started in waters of the United States and that issued permit is subsequently modified by the district engineer pursuant to 33 CFR 325.7;
- (2) Any site-specific matter that has been the subject of a final decision of the Federal courts;
- (3) A final Corps decision that has resulted from additional analysis and evaluation, as directed by a final appeal decision;
- (4) A permit denial without prejudice or a declined permit, where the controlling factor cannot be changed by the Corps decision maker (e.g., the requirements of a binding statute, regulation, state Section 401 water quality certification, state coastal zone management disapproval, etc. (See 33 CFR 320.4(j)));
- (5) A permit denial case where the applicant has subsequently modified the proposed project, because this would constitute an amended application that would require a new public interest review, rather than an appeal of the existing record and decision;
- (6) Any request for the appeal of an approved JD, a denied permit, or a declined permit where the RFA has not been received by the division engineer within 60 days of the date of the NAP;
- (7) A previously approved JD that has been superseded by another approved JD based on new information or data submitted by the applicant. The new approved JD is an appealable action;
- (8) An approved JD associated with an individual permit where the permit has been accepted and signed by the permittee;
- (9) A preliminary JD; or
- (10) A JD associated with unauthorized activities except as provided in §331.11.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 11, 2020**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: CA County/parish/borough: Los Angeles City: Santa Clarita  
Center coordinates of site (lat/long in degree decimal format): Lat. 34.415959° **N**, Long. -118.589080° **W**.  
Universal Transverse Mercator:

Name of nearest waterbody: Santa Clara River

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Pacific Ocean

Name of watershed or Hydrologic Unit Code (HUC): Upper Santa Clara River HUC 10: 1807010204

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☒ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

☒ Office (Desk) Determination. Date: June 4, 2020

☒ Field Determination. Date(s): February 1, 2018

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

☐ Waters subject to the ebb and flow of the tide.

☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: .

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

- ☐ TNWs, including territorial seas
- ☐ Wetlands adjacent to TNWs
- ☐ Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
- ☒ Non-RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- ☒ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- ☐ Impoundments of jurisdictional waters
- ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Non-wetland waters: linear feet: width (ft) and/or 4.75 acres.

Wetlands: 0.21 acres.

**c. Limits (boundaries) of jurisdiction based on: Established by OHWM.**

Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>**

☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: .

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup> Supporting documentation is presented in Section III.F.

### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**

Identify TNW: .

Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: .

#### B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

(i) **General Area Conditions:**

Watershed size: 1,600 **square miles**

Drainage area: 4.75 **acres**

Average annual rainfall: 17 inches

Average annual snowfall: 0 inches

(ii) **Physical Characteristics:**

(a) **Relationship with TNW:**

☐ Tributary flows directly into TNW.

☒ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **30 (or more)** river miles from TNW.

Project waters are **1 (or less)** river miles from RPW.

Project waters are **30 (or more)** aerial (straight) miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: Project waters do not cross or serve as state boundaries.

Identify flow route to TNW<sup>5</sup>: During storm events, the four ephemeral drainages within the Entrada project area convey storm flows northward into the Santa Clara River, which flows to the north of site boundary. The Santa Clara River is a

<sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.



relatively permanent tributary to the Pacific Ocean, and is therefore subject to the Corps' permitting authority. The river flows west from its headwaters in the San Gabriel Mountains, entering the ocean near the City of Ventura. The river is approximately 116 miles long, collecting groundwater from its approximately 1,600-squaremile watershed (CSCC 2012). Although the Santa Clara River is perennial in the reach adjacent to the Entrada project area, other reaches upstream and downstream of this area are intermittent.

Tributary stream order, if known: 1 and 2. The ephemeral channels within the review area are comprised of an ephemeral channel with small ephemeral channels branching off on the main channels.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural  
☐ Artificial (man-made). Explain: .  
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):

Average width: 6 feet  
Average depth: 10 feet  
Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

<input type="checkbox"/> Silts	<input checked="" type="checkbox"/> Sands	<input type="checkbox"/> Concrete
<input checked="" type="checkbox"/> Cobbles	<input checked="" type="checkbox"/> Gravel	<input type="checkbox"/> Muck
<input type="checkbox"/> Bedrock	<input type="checkbox"/> Vegetation. Type/% cover:	
<input type="checkbox"/> Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The drainage's channel stability of Magic Mountain Canyon, Unnamed Creek 1, Unnamed Creek 2, and Unnamed Creek 3 is characterized by equilibrium conditions, with no evidence of excessive aggradation or degradation dominating the channel morphology.

Presence of run/riffle/pool complexes. Explain: No.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): Main stem gradient is approximately 2 %

(c) Flow:

Tributary provides for: **Ephemeral flow**

Estimate average number of flow events in review area/year: **2-5**

Describe flow regime: During storm events, the four ephemeral drainages within the Entrada project area convey storm flows northward into the Santa Clara River, which flows to the north of site boundary.

Other information on duration and volume: .

Surface flow is: **Discrete and confined**. Characteristics: The ephemeral channels are discrete and flows are confined by the hillside and terraces .

Subsurface flow: **Unknown**. Explain findings: .

☐ Dye (or other) test performed: .

Tributary has (check all that apply):

<input checked="" type="checkbox"/> Bed and banks	
<input checked="" type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply):	
<input checked="" type="checkbox"/> clear, natural line impressed on the bank	<input type="checkbox"/> the presence of litter and debris
<input checked="" type="checkbox"/> changes in the character of soil	<input type="checkbox"/> destruction of terrestrial vegetation
<input checked="" type="checkbox"/> shelving	<input checked="" type="checkbox"/> the presence of wrack line
<input checked="" type="checkbox"/> vegetation matted down, bent, or absent	<input type="checkbox"/> sediment sorting
<input type="checkbox"/> leaf litter disturbed or washed away	<input checked="" type="checkbox"/> scour
<input checked="" type="checkbox"/> sediment deposition	<input type="checkbox"/> multiple observed or predicted flow events
<input type="checkbox"/> water staining	<input checked="" type="checkbox"/> abrupt change in plant community
<input type="checkbox"/> other (list):	
<input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: .	

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

<input checked="" type="checkbox"/> High Tide Line indicated by:	<input checked="" type="checkbox"/> Mean High Water Mark indicated by:
<input type="checkbox"/> oil or scum line along shore objects	<input type="checkbox"/> survey to available datum;
<input type="checkbox"/> fine shell or debris deposits (foreshore)	<input type="checkbox"/> physical markings;

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

- ☐ physical markings/characteristics
- ☐ tidal gauges
- ☐ other (list):

- ☐ vegetation lines/changes in vegetation types.

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: No water present during site visit.

Identify specific pollutants, if known: Pollutants are unknown. Unnamed Creek 2 receives flows from and upstream golf course. It is likely that during flows Unnamed Creek 2 is a carrier to fertilizers and/or other chemicals found in landscaping.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- ☒ Riparian corridor. Characteristics (type, average width): The Magic Mountain Canyon Drainage features intact healthy buffers and adequate continuity in the riparian corridor. The other three drainage features do not have a riparian corridor.
- ☒ Wetland fringe. Characteristics: Within the project area, only one area was found to exhibit the three parameters required to constitute a wetland as defined by the Corps' regulations. The wetland reach is located in the downstream-most portion of Unnamed Creek-3 within the study area, immediately upstream of an on-site developed area.
- ☒ Habitat for:
- ☒ Federally Listed species. Explain findings: The ephemeral drainage features do not provide direct habitat for federally listed species but their buffers provide suitable habitat for California gnatcatcher and California condor.
  - ☒ Fish/spawn areas. Explain findings: Six fish species are known to occur in the reach of the Santa Clara River these ephemeral drainages drain into, including four native species and two non-native species.
  - ☒ Other environmentally-sensitive species. Explain findings: The project site supports habitat for a diverse number of upland, woodland, and riparian wildlife species.
  - ☒ Aquatic/wildlife diversity. Explain findings: Magic Mountain Canyon Drainage is identified in wildlife linkage studies as one of several "tributary corridors" that connects undeveloped uplands with the Santa Clara River, which is a critical regional wildlife corridor and habitat linkage.

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 0.21 acres

Wetland type. Explain: Flooded depressional wetland. The wetland reach is located in the downstream-most portion of Unnamed Creek-3 within the study area, immediately upstream of an on-site developed area.

Wetland quality. Explain: The sole wetland within the project area is located within manmade temporarily flooded depressional basin at the downstream most portion of Unnamed Creek-3. As such, the quality of this wetland is low. This feature is subjected to intense degrees of regular disturbance to maintain suitability as a flood control facility. Maintenance activities in the basin are conducted routinely by the Los Angeles County Flood Control District, and include grading/recontouring of the basin bottom, removal of all vegetation, and removal of accumulated sediment and debris as necessary..

Project wetlands cross or serve as state boundaries. Explain: The wetland does not cross or serve as state boundaries.

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: During periods of high flow, water leaves the basin and enters the storm drain system through a vertical corrugated metal standpipe. This wetland location receives flow from the adjacent, developed upland areas including concrete erosion control channels located on hillsides abutting the feature to the northwest and southeast (Figure 4). Flow is also received from Unnamed Creek-3, described in Section 4.2.4 above.

Surface flow is: **Discrete and confined**

Characteristics: The wetland is a manmade depression at the end of Unnamed Creek 3. Flows and saturation are discrete and in response to periods of high flow. As a constructed feature for flood protection, the wetland is confined to the constructed debris basin boundary.

Subsurface flow: **Unknown**. Explain findings: Subsurface flows are not known.

☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

☒ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain:

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **30 (or more)** river miles from TNW.

Project waters are **30 (or more)** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **100 - 500-year** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: No water present during site visit.

Identify specific pollutants, if known: Pollutants are unknown. The wetland received flows from Unnamed Creek 3 including concrete erosion control channels located on hillsides abutting the feature to the northwest and southeast. It is likely that during flows fertilizers and/or other chemicals found in landscaping and residential.

**(iii) Biological Characteristics. Wetland supports (check all that apply):**

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☒ Vegetation type/percent cover. Explain: 10 percent. Vegetation consists of FAC, FACW, and UPL species .
- ☒ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☒ Other environmentally-sensitive species. Explain findings: Adjacent to the wetland is a San Fernando Valley

spineflower preserve.

☒ Aquatic/wildlife diversity. Explain findings: During times of high flows, when standing water is ponded at the debris basin, the wetland provides habitat for macro inveterbrates and supports wildlife moving throughout the project area.

**3. Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **1**

Approximately ( 0.21 ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Y	0.21		

Summarize overall biological, chemical and physical functions being performed: The wetland feature is located at the far downstream portion of Unnamed Creek-3 near the northeastern boundary of the study area. The wetland is located within a constructed debris basin, and has been designed such that water pools in this area during periods of normal flow to allow suspended particulates and bed material to settle prior to entering the storm drain system. During periods of high flow, water leaves the basin and enters the storm drain system through a vertical corrugated metal standpipe. This wetland location receives flow from the adjacent, developed upland areas including concrete erosion control channels located on hillsides abutting the feature to the northwest and southeast. Flow is also received from Unnamed Creek-3. Field investigations of the Unnamed Creek-3 debris basin, combined with review of historical aerial photographs and discussions with landowners, indicate that this feature is subjected to intense degrees of regular disturbance to maintain suitability as a flood control facility. Maintenance activities in the basin are conducted routinely by the Los Angeles County Flood Control District, and include grading/recontouring of the basin bottom, removal of all vegetation, and removal of accumulated sediment and debris as necessary. These practices have resulted in chronic disruption of the basin's wetland functions.

### C. SIGNIFICANT NEXUS DETERMINATION

**A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.**

**Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:**

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

**Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:**

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The four drainages and the adjacent wetland within the project area (Magic Mountain Canyon, Unnamed Creek-1, Unnamed Creek-2, Unnamed Creek-3, and Unnamed Creek-3 Wetland) are tributaries to the Santa Clara River; this river is a non-navigable but relatively permanent tributary to the Pacific Ocean, which is navigable-in-fact..
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

### D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):



1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

☐ TNWs: linear feet width (ft), Or, acres.  
☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .  
☐ Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

☐ Tributary waters: linear feet width (ft).  
☐ Other non-wetland waters: acres.  
Identify type(s) of waters: .

3. **Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.**

☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

☒ Tributary waters: **19,060** linear feet **average 6** width (ft).  
☒ Other non-wetland waters: **4.75** acres.  
Identify type(s) of waters: **Ephemeral.**

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .  
☐ Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

☒ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: **0.21** acres.

7. **Impoundments of jurisdictional waters.<sup>9</sup>**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

☐ Demonstrate that impoundment was created from “waters of the U.S.,” or  
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

<sup>8</sup>See Footnote # 3.

<sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>**

- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☐ which are or could be used for industrial purposes by industries in interstate commerce.
- ☐ Interstate isolated waters. Explain: .
- ☐ Other factors. Explain: .

**Identify water body and summarize rationale supporting determination:** .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
- ☐ Other non-wetland waters: acres.  
Identify type(s) of waters: .
- ☐ Wetlands: acres.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - ☐ Prior to the Jan 2001 Supreme Court decision in “*SWANCC*,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- ☐ Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: .
- ☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland Delineation and Jurisdictional Determination Report for the Entrada Project, Los Angeles County, California, August 2015.
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☒ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters’ study: .
- ☐ U.S. Geological Survey Hydrologic Atlas: .
  - ☐ USGS NHD data.
  - ☐ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: .
- ☐ USDA Natural Resources Conservation Service Soil Survey. Citation: Newhall, CA 7.5 Minute Scale.
- ☒ National wetlands inventory map(s). Cite name: USFWS NWI.

<sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following *Rapanos*.

- ☐ State/Local wetland inventory map(s): .
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date):Wetland Delineation and Jurisdictional Determination Report for the Entrada Project, Los Angeles County, California, August 2015/ Google Earth 2020.
- or ☒ Other (Name & Date):Wetland Delineation and Jurisdictional Determination Report for the Entrada Project, Los Angeles County, California, August 2015 Appendix A.
- ☒ Previous determination(s). File no. and date of response letter: SPL-2003-01264-AOA, SPL-98-0554-AOA.
- ☐ Applicable/supporting case law: .
- ☐ Applicable/supporting scientific literature: .
- ☐ Other information (please specify): .

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** .



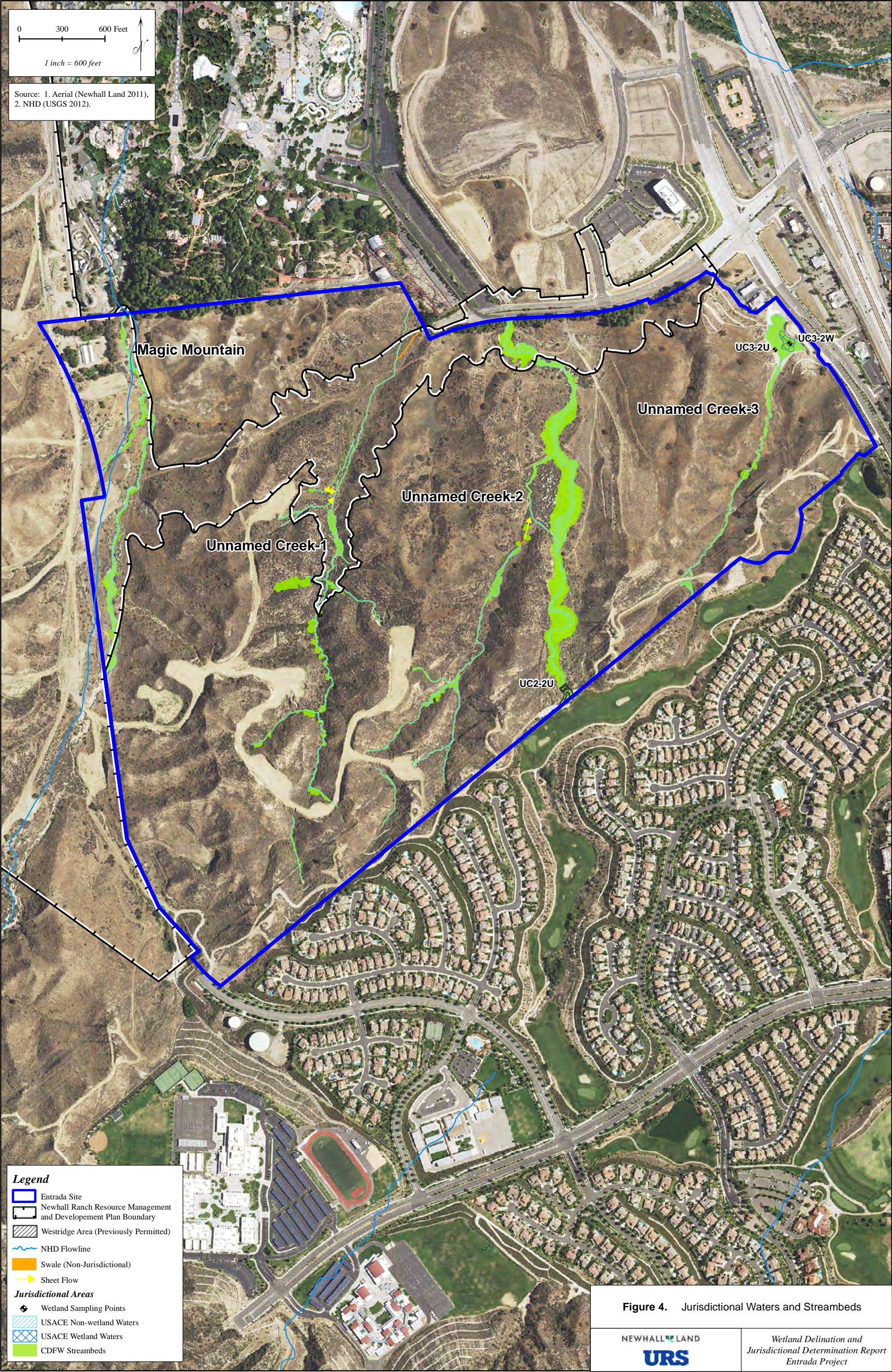


Figure 4. Jurisdictional Waters and Streambeds



**From:** [Sam Rojas](#)  
**To:** [James Rusk](#)  
**Subject:** Fwd: Updated JD for Entrada South Project (UNCLASSIFIED)  
**Date:** Wednesday, June 17, 2020 3:26:20 PM

---

Sam Rojas

---

**From:** Hidalgo, Gerardo L CIV USARMY CESPL (USA) <Gerardo.L.Hidalgo@usace.army.mil>  
**Sent:** Wednesday, June 17, 2020 3:23:58 PM  
**To:** Christopher Julian <cjulian@rinconconsultants.com>  
**Cc:** Sam Rojas <Sam.Rojas@fivepoint.com>; James Rusk - Sheppard Mullin (jrusk@sheppardmullin.com) <jrusk@sheppardmullin.com>  
**Subject:** RE: Updated JD for Entrada South Project (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Thank you Chris.

I've reviewed the updated delineation report and, as discussed with Sam, because the jurisdictional area and the significant nexus determination remains the same for the waters within the Entrada permit review under Corps File SPL-2015-00630-GLH a new AJD won't be prepared. Alternatively, I will prepare an internal memo for the file noting receipt of the updated report and tracking the 2020 JD report as an update to the Newhall JD.

Let me know if you have any questions.

Best,

Jerry Hidalgo  
Project Manager  
Regulatory Division, North Coast Branch  
Los Angeles District, U.S. Army Corps of Engineers

Office: 805-585-2145  
Government Mobile: 213-320-8992

\*During the Coronavirus Health Emergency, Regulatory Program staff are teleworking. Please do not mail hard copy documents to any Regulatory staff or office. For further details on corresponding with us, please view our COVID-19 special public notice at: [https://urldefense.com/v3/\\_https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19\\*20Regulatory\\_SPN.pdf?ver=2020-03-19-134532-833\\_.JQ!!IOVCJddHkmk!6PEnC8FIDMYPrKTdOZW4buqXwS2FywYU2Wg-7cfNn\\_cRhCLN\\_nfOdapKx4Cs7WJDDSU\\$](https://urldefense.com/v3/_https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19*20Regulatory_SPN.pdf?ver=2020-03-19-134532-833_.JQ!!IOVCJddHkmk!6PEnC8FIDMYPrKTdOZW4buqXwS2FywYU2Wg-7cfNn_cRhCLN_nfOdapKx4Cs7WJDDSU$)

-----Original Message-----

From: Christopher Julian [<mailto:cjulian@rinconconsultants.com>]  
Sent: June 16, 2020 11:48 AM  
To: Hidalgo, Gerardo L CIV USARMY CESPL (USA) <Gerardo.L.Hidalgo@usace.army.mil>  
Cc: Sam Rojas <Sam.Rojas@fivepoint.com>; James Rusk - Sheppard Mullin (jrusk@sheppardmullin.com) <jrusk@sheppardmullin.com>  
Subject: [Non-DoD Source] Updated JD for Entrada South Project

Hi Jerry,

As Sam discussed with you, I've attached the updated delineation report for the Entrada South site. Please let me know if I can answer any questions.

Thanks, and I hope all's well,

Chris



Christopher Julian

Principal, Senior Regulatory Specialist

Rincon Consultants, Inc.

Environmental Scientists | Planners | Engineers

805.319.4092 x425

805.453.5794 Mobile (preferred)

805.387.3099 Direct

[https://urldefense.com/v3/\\_http://rinconconsultants.com\\_!!IOVCJddHkmk!6PEnC8FIDMYPrKTdOZW4buqXwS2FywYU2Wg-7cfNn\\_cRhCLN\\_nfOdapKx4CsDNgt4kc\\$](https://urldefense.com/v3/_http://rinconconsultants.com_!!IOVCJddHkmk!6PEnC8FIDMYPrKTdOZW4buqXwS2FywYU2Wg-7cfNn_cRhCLN_nfOdapKx4CsDNgt4kc$) <Blockedhttp://www.rinconconsultants.com/>

Note on COVID-19: I'm available and working remotely to employ social distancing. Additionally, our work systems remain operational and we continue to perform work for our clients. Feel free to e-mail me or reach me directly at (805-453-5794).

<Blockedhttps://www.rinconconsultants.com/>

Ranked 2019 "Hot Firm" and "Best Firm to Work For" by Zweig Group

CLASSIFICATION: UNCLASSIFIED

This email contains information that may be confidential and privileged. Unless you are the addressee (or authorized to receive for the addressee), you may not examine, use, copy, disclose or distribute to anyone the email or any information contained in the email. If you received this email in error, please advise the sender by reply email and delete the original email. Thank you.

## **Appendix 5.2d**

---

### Valencia Commerce Center Waters Report





# Valencia Commerce Center Development Project

## Jurisdictional Waters Technical Report

*prepared for*

**The Newhall Land and Farming Company**

25124 Springfield Court, 3<sup>rd</sup> Floor

Valencia, California 91355

Contact: Sam Rojas, Director of Environmental Resources

*prepared by*

**Rincon Consultants, Inc.**

319 East Carillo Street, Suite 105

Santa Barbara, California 93101

**August 2024**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)



# Table of Contents

---

1	Introduction and Project Background .....	1
1.1	Site Location and Description .....	1
1.2	Project Footprint .....	2
2	Jurisdictional Delineation Methods .....	8
3	Results of the Updated Jurisdictional Delineation .....	9
3.1	Castaic Creek .....	13
3.2	Hasley Creek .....	14
3.3	Live Oak Road Detention Basin .....	15
3.4	The Old Road Agricultural Ditch .....	15
4	Effects of the Modified Project .....	17
4.1	Direct Impacts to Jurisdictional Waters .....	17
4.2	Indirect Impacts to Jurisdictional Waters .....	28
4.3	Summary of Impacts .....	29
5	Thresholds of Significance .....	30
5.1	Significance Criterion 1 .....	30
5.2	Significance Criterion 2 .....	31
5.3	Cumulative Impacts .....	31
6	References .....	33

## Tables

Table 1	Comparison of Potential Jurisdictional Waters within the Project Site .....	10
Table 2	Direct Impacts to Waters of the U.S. ....	21
Table 3	Direct Impacts to Waters of the State .....	21
Table 4	Direct Impacts to CDFW Jurisdictional Streambeds .....	22

## Figures

Figure 1	Project Vicinity and Regional Location .....	4
Figure 2	Project Location .....	5
Figure 3	Project Footprint Comparison .....	6
Figure 4	Jurisdictional Delineation Overview – 2024 Update .....	11
Figure 5	Jurisdictional Delineation Overview – State-Certified EIR .....	12
Figure 6	Modified Project – Impacts to Waters of the U.S. ....	21
Figure 7	Modified Project – Impacts to Waters of the State .....	22
Figure 8	Modified Project – Impacts to CDFW-Jurisdictional Streambeds .....	23



Figure 9 2017 Approved Project – Impacts to Waters of the U.S. ....24

Figure 10 2017 Approved Project – Impacts to CDFW-Jurisdictional Streambeds.....25

**Appendices**

Appendix A Applicable Mitigation Measures

# 1 Introduction and Project Background

---

The California Department of Fish and Wildlife (CDFW) conducted California Environmental Quality Act (CEQA) review of development within the Valencia Commerce Center (VCC) planning area as part of its review for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP). CDFW and the U.S. Army Corps of Engineers (Corps) prepared a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR; Corps and CDFW 2010) for the RMDP/SCP in 2010. In June 2017, after publishing additional environmental analysis of certain impacts (Additional Environmental Analysis; CDFW 2017), CDFW recertified the EIR for the RMDP/SCP (the State-Certified EIR, SCH No. 2000011025) and adopted findings affirming its approval of the RMDP and SCP and related State permits. The State-Certified EIR evaluated development within the VCC planning area as an indirect impact of the approval of the SCP. Estimated impacts to Corps and CDFW jurisdictional waters and streambeds were quantified, and a map in the State Certified EIR (EIR Figure 4.5-33-D1) illustrates the locations of anticipated impacts.

The resource management and development activities within the VCC planning area analyzed in the State-Certified EIR are referred to in this Report as the “2017 Approved Project.”<sup>1</sup> Subsequent to CDFW’s preparation of the State-Certified EIR, the project proponent proposed minor changes and refinements to the 2017 Approved Project in order to provide increased environmental protections to jurisdictional waters and related biological resources, referred to in this Report as the “Modified Project.” The proposed changes will reduce permanent impacts to jurisdictional waters within the Project Site. As envisioned in the State-Certified EIR, all impacts will be offset by the mitigation requirements outlined in this Report and in the State-Certified EIR and will be subject to permitting and oversight by the Corps and CDFW.

Rincon Consultants, Inc. (Rincon) has prepared this Report to assess the potential impacts to jurisdictional waters and streambeds resulting from the Modified Project, in support of the preparation of a Supplemental Environmental Impact Report (SEIR) by Los Angeles County. This Report evaluates the potential for the Modified Project to cause new significant effects not analyzed in the State-Certified EIR, or to substantially increase the severity of any significant effect previously analyzed, as a result of the changes reflected in the Modified Project and/or changes in site conditions.

## 1.1 Site Location and Description

The project area, referred to herein as the “Project Site,” is located within the Santa Clarita Valley of unincorporated Los Angeles County (Figure 1, Project Vicinity and Regional Location) and is located within the Newhall, CA 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2015; Figure 2, Project Location). The site is bounded to the south by State Route (SR) 126, to the east by Interstate-5, to the west by Commerce Center Drive, and to the north by commercial and residential

---

<sup>1</sup> The 2017 Approved Project described in this Report is defined as that portion of the Approved Project described in CDFW’s CEQA Findings of Fact and Statement of Overriding Considerations for the Master Streambed Alteration Agreement and Incidental Take Permits Associated with the RMDP and SCP, dated December 3, 2010 (CEQA Findings), that is located within the Project Site (as defined in Section 1.2 of this Report). The Approved Project is further described in the Final RMDP and SCP and is depicted in Figure 8 of the Final RMDP. As explained in the CEQA Findings, the 2017 Approved Project is a modified version of Alternative 3 from the RMDP/SCP Draft EIS/EIR, with additional refinements to further reduce environmental impacts, which resulted from the Corps’ efforts to identify the least environmentally damaging practicable alternative (LEDPA) for the RMDP. With respect to the Project Site, the Approved Project is substantially identical to the Draft LEDPA alternative analyzed in the State-Certified EIR.

development. Surrounding land uses include open space beyond Interstate-5 to the east, the Santa Clara River beyond SR-126 to the south, and commercial and residential development to the north and west.

The majority of the Project Site is undeveloped except for a paved recreational vehicle storage lot in the northern portion of the site and Live Oak Road in the northwest. An operational agricultural field is located along the southern end of the site. The site boundaries and topography are illustrated on Figure 2.

A portion of Castaic Creek within the Project Site is located within the Santa Clara River Significant Ecological Area (SEA) as expanded by the County of Los Angeles subsequent to the preparation of the State-Certified EIR. However, the Modified Project is exempt from the requirements of the County's SEA ordinance pursuant to the grandfathering provisions of Section 22.102.040 of that ordinance. In addition, a portion of Castaic Creek located at its confluence with the Santa Clara River is located within the Santa Clara River Special Management Area (SMA) designated by the County of Los Angeles, but this reach of Castaic Creek is not within the Project Site and would not be affected by the Modified Project.

Four potentially jurisdictional features are present on-site: Castaic Creek, Hasley Creek (including Storm Drain Outlet Channels), Live Oak Road Detention Basin, and Old Road Agricultural Ditch.

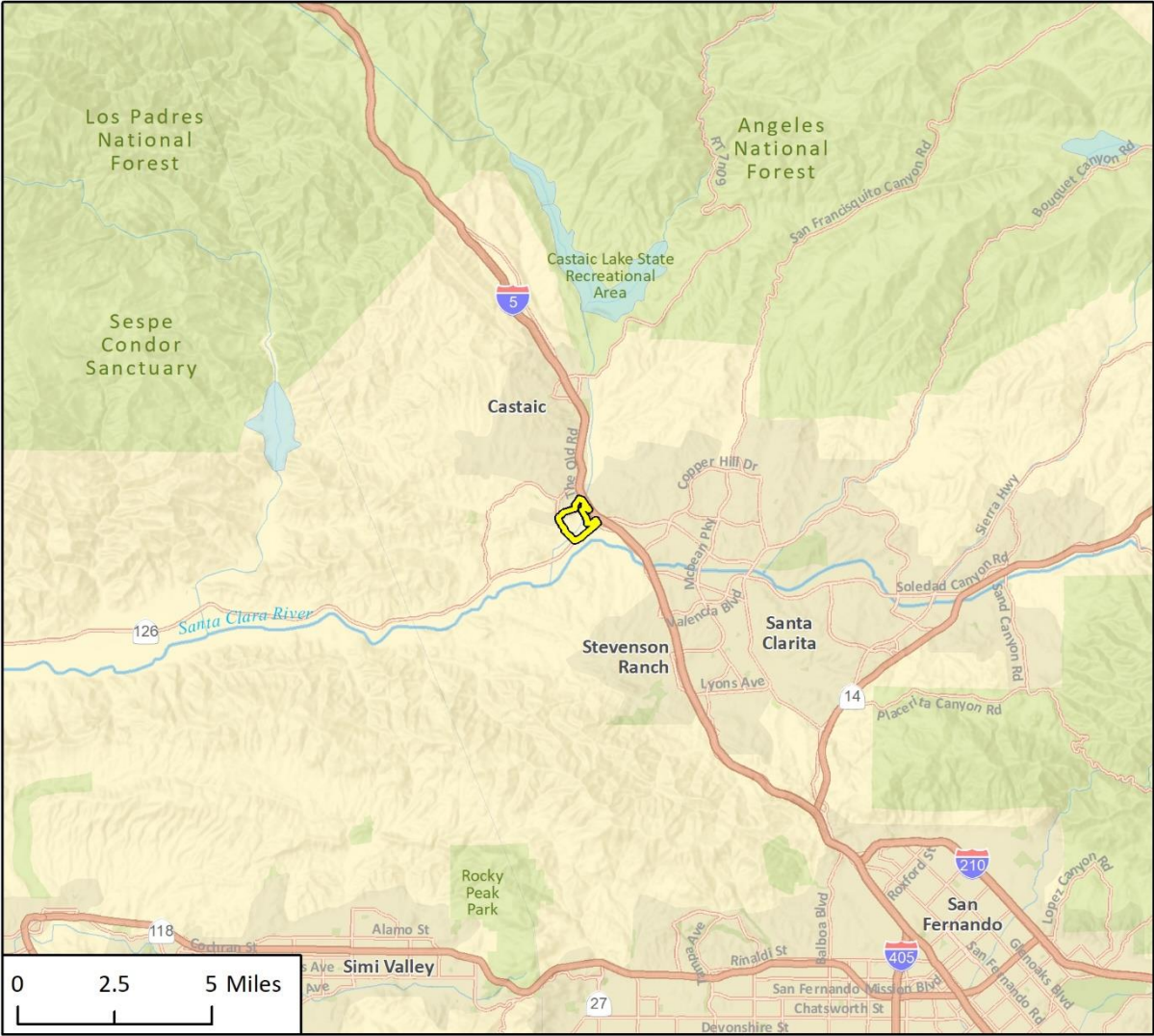
## 1.2 Project Footprint

The Modified Project would incorporate minor revisions and enhancements to the land use plan of the 2017 Approved Project to provide increased environmental protections to jurisdictional waters and related biological resources within the Project Site. These revisions include a significant overall reduction in permanent impacts within jurisdictional streams, minor adjustments to the boundaries of the Project Site itself, and the identification of portions of the Castaic Creek drainage where existing disturbed communities would be restored to riparian habitat for compensatory mitigation purposes. In particular, the Modified Project would largely replace permanent impacts to jurisdictional waters in Hasley Canyon, which traverses the Project Site, with temporary impacts, by limiting permanent fills to those necessary for bank protection, crossings, and other essential flood control and public safety purposes. Portions of Hasley Canyon and Castaic Creek temporarily impacted during construction would be revegetated after construction pursuant to the Modified Project design. Under new Project Design Feature (PDF) VCC-PDF-BIO-1, streambeds and riparian areas subject to CDFW jurisdiction within Hasley Canyon and Castaic Creek would be permanently conserved following completion of Project development by granting conservation easements over those areas. This environmentally beneficial modification would result in increased open space with restored drainage areas providing more habitat for species. Additional compensatory mitigation, including mitigation for impacts associated with the Project, may occur in the areas conserved pursuant to VCC-PDF-BIO-1, consistent with Mitigation Measures RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10 and RMDP/SCP-BIO-12 through RMDP/SCP-BIO-16. In addition to these enhancements, preparation of more detailed development plans to implement the conceptual land use plan that was analyzed in the State-Certified EIR has resulted in a more refined identification of areas within the Project Site that would be impacted or avoided by development activities, including post-construction maintenance activities within Hasley Canyon and Castaic Creek, and has identified specific areas adjacent to the Project Site where temporary impacts to existing roadways and other developed areas would occur in order to establish utility and street connections consistent with buildout of the 2017 Approved Project. These refinements result in updates to the total acreage of

permanent and temporary disturbance associated with the Project but do not reflect changes in the Project design or land use plan. The disturbance footprints of the Modified Project and the 2017 Approved Project are shown in Figure 3, Project Footprint Comparison.

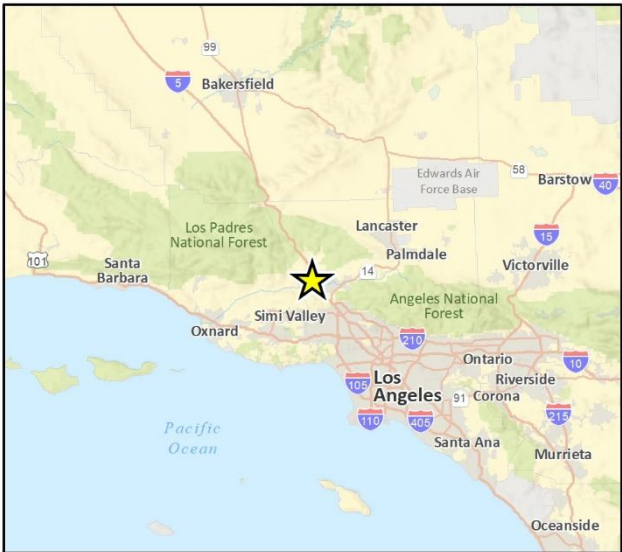
The State-Certified EIR evaluated the environmental impacts for the 2017 Approved Project of 3.4 million square feet of commercial/industrial/business park floor area on 321 acres, whereas the Modified Project has a project footprint of 334.7 acres. The development footprint of the Modified Project remains substantially similar in acreage to that of the 2017 Approved Project, but the Modified Project has been refined to achieve greater avoidance in biologically valuable areas.

**Figure 1 Project Vicinity and Regional Location**



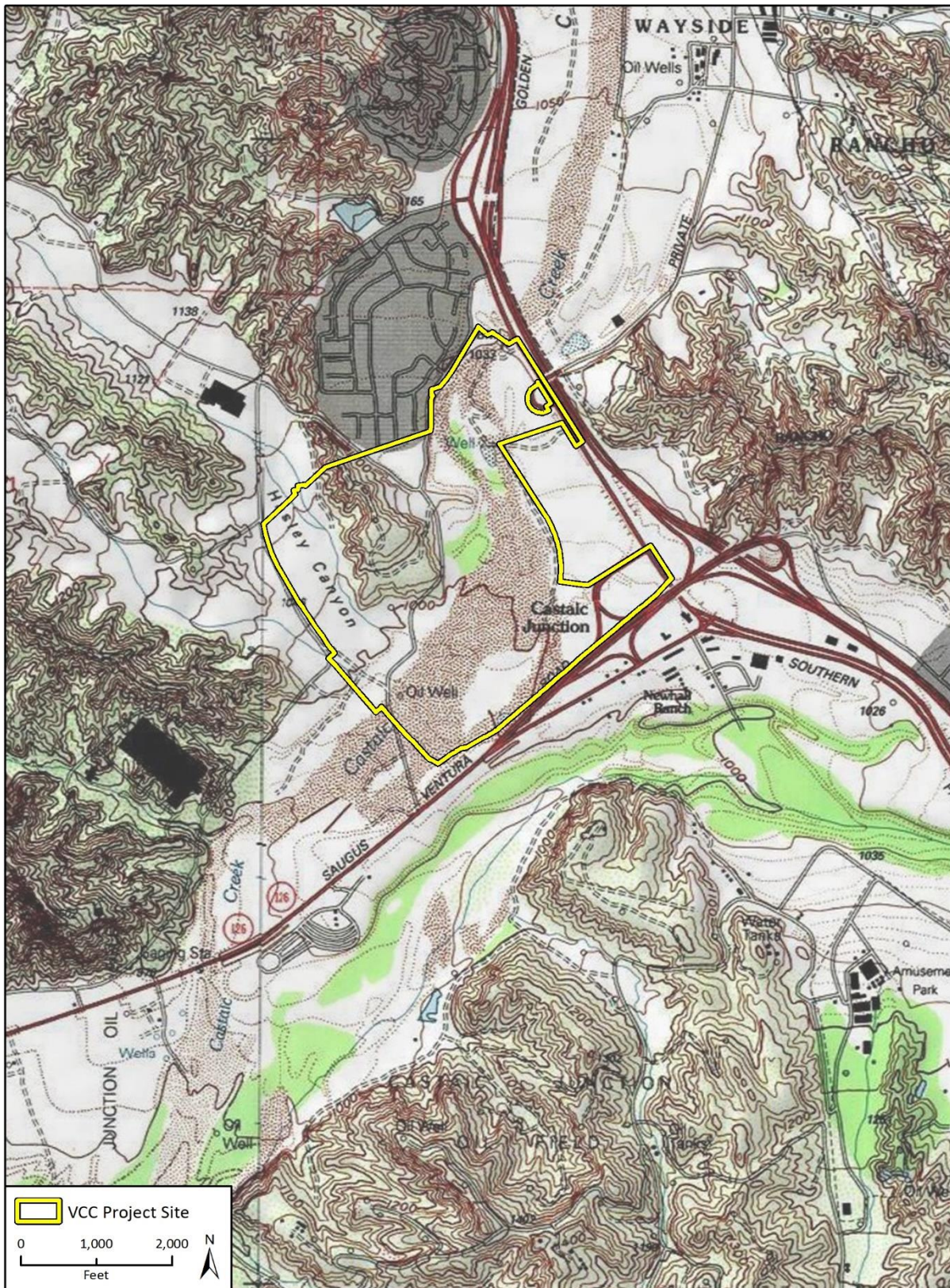
Imagery provided by Esri and its licensors © 2020.

 VCC Project Site



VCC Fig 1 Regional Location



**Figure 2 Project Location**

Imagery provided by National Geographic Society, Esri and its licensors © 2020. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



Figure 3 Project Footprint Comparison



## 2 Jurisdictional Delineation Methods

---

Since preparation of the initial analysis for the State-Certified EIR, the jurisdictional delineation for the Project Site has been updated, initially in 2014 by URS Corporation (URS 2014) and more recently by Rincon Consultants (Rincon 2024). For a detailed description of the methodology used in the most recent update, please see Rincon's 2024 Jurisdictional Delineation Report. The purpose of these jurisdictional delineation updates was to confirm the limits of U.S. Army Corps of Engineers' (Corps) potential jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), the Los Angeles Regional Water Quality Control Board (RWQCB) pursuant to the Porter-Cologne Water Quality Control Act, and CDFW jurisdiction pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFGF), as those limits may have changed with the passage of time.<sup>2</sup>

In summary, the URS delineation assessed drainages within the Project site *de novo*, with boundaries of all features mapped in the field using GPS technology. The subsequent delineation by Rincon in 2019 was based on a review of the data collected by URS, and the Rincon delineation personnel confirmed the previously delineated boundaries in the field making adjustments or re-mapping specific areas as warranted. Rincon's review was limited to aquatic resources and potential jurisdictional waters within the boundary of the Project Site as described in Section 1.2 and displayed on Figure 2. Current jurisdictional boundaries, where they varied from previously delineated boundaries, were identified in the field and recorded using GPS and high-resolution aerial photographs. Previously collected data were combined with the updated data collected in the field to create a complete data set of jurisdictional features within the Project site.

Using Geographic Information System (GIS) mapping, Rincon calculated impacts of the Modified Project to the updated jurisdictional waters data set. Rincon then compared the updated jurisdictional impacts for the Modified Project to the jurisdictional impacts for the 2017 Approved Project as reported in the State-Certified EIR. For additional detail on the updated jurisdictional delineation, refer to Rincon's 2024 delineation report for the site.

---

<sup>2</sup> The Corps has not issued an approved jurisdictional determination for the Project Site, which would constitute an official, definitive determination of the extent to which aquatic resources are waters of the United States and is the only process by which aquatic resources may be determined *not* to be waters of the United States. See 33 CFR § 331.2. Accordingly, the 2024 Rincon jurisdictional delineation, like the 2014 URS delineation, assumes that all aquatic resources (as defined according to Corps methodology) present within the Site are subject to federal jurisdiction.

### 3 Results of the Updated Jurisdictional Delineation

Overall, the results of the updated jurisdictional delineation are similar to those reported in the State-Certified EIR except within Castaic Creek. In addition, the limits of waters of the State subject to RWQCB jurisdiction, which were not described in the State-Certified EIR, have been included. The types of resources present on the site, the general locations of those resources, and the overall extent of jurisdictional waters have not changed substantially and are described below.

The total acreages of jurisdictional waters within the Project Site identified in the updated jurisdictional delineation are 6.41 acres of potential waters of the U.S., 7.38 acres of potential waters of the State, and 113.22 acres of CDFW-jurisdictional streambeds; this represents a decrease of 77.61 acres of waters of the U.S. and a slight increase of 5.06 acres of CDFW-jurisdictional streambeds, respectively, in comparison to the State-Certified EIR. As explained further below, the difference in the acreage of waters of the U.S. is due to the fact that the technical reports supporting the State-Certified EIR assumed the entire Castaic Creek floodplain to be waters of the U.S., while the updated jurisdictional delineation more accurately identifies only the active stream channel as waters of the U.S. The increase in CDFW-jurisdictional streambeds in Castaic Creek is largely due to the western expansion of the Project Site boundary at the northern end of Castaic Creek to include more of the creek (which also includes some additional waters of the U.S. and waters of the State). A comparison of jurisdictional acreages by agency and by source is summarized in Table 1. The updated jurisdictional delineation is illustrated in Figure 4 and the jurisdictional delineation as presented in the State-Certified EIR is illustrated in Figure 5 for comparison.

**Table 1 Comparison of Potential Jurisdictional Waters within the Project Site**

Source	Waters of the U.S. (acres)	Waters of the State (acres)	CDFW-Jurisdictional Streambeds (acres)
<b>State-Certified EIR/2017 Approved Project</b>			
Castaic Creek	78.96	N/A	90.74
Hasley Creek	5.06	N/A	17.42
<b>Total</b>	<b>84.02</b>	<b>N/A</b>	<b>108.16</b>
<b>Updated Jurisdictional Delineation (2024)/Modified Project</b>			
Castaic Creek	3.32	3.32	97.53
Hasley Creek	3.10	4.06	14.45
Live Oak Road Detention Basin	0.00	0.00	0.86
Old Road Agricultural Ditch	0.00	0.00	0.38
<b>Total</b>	<b>6.41</b>	<b>7.38</b>	<b>113.22</b>
<b>Difference in Total Acreage</b>	<b>-77.61</b>	<b>N/A</b>	<b>+5.06</b>

Note: The total acreage and acreage by drainage presented for the 2017 Approved Project are as stated in the State-Certified EIR. Small discrepancies within the table are due to rounding.

The subsections below provide additional details regarding each aquatic resource identified within the Project site.



Figure 4 Jurisdictional Delineation Overview – 2024 Update





Figure 5 Jurisdictional Delineation Overview – State-Certified EIR



### 3.1 Castaic Creek

Castaic Creek is the largest of the streams flowing through the Project site and drains a watershed of over 150 square miles. From its headwaters in the Sierra Pelona Mountains in the Angeles National Forest to its confluence with the Santa Clara River, the creek travels a distance of approximately 25 miles. Since 1973, flows in Castaic Creek have been impounded at Castaic Lake, approximately five miles upstream (northeast) of the Project site. The lake's presence significantly alters the downstream hydrology, serving to attenuate the effects of large storm events that would otherwise deliver channel-forming hydraulic forces to the reach of Castaic Creek within the Project site in most years. Because water levels in the reservoir have been actively managed (CDWR 2019), natural base flows have not entered the reach of Castaic Creek within the Project site for many years. As a result, the effective watershed of this reach has been significantly reduced and encompasses only local runoff in a typical water year. During extreme precipitation years such as 2022-2023, which occur infrequently, releases from Castaic Lake can inundate the project reach of Castaic Creek with extraordinary high flows (i.e., flows that inundate the floodplain well above the OHWM). The physical channel conditions reflect this dynamic, as evidenced by the ordinary high-water mark (OHWM) indicating a single, well-defined channel meandering through the floodplain during most years although the location of this channel within the floodplain may change when extraordinary events occur. Castaic Lake also affects hydrology under base flow conditions, as flows are sometimes released during otherwise dry months for management purposes.

Although the hydroperiod is unnatural, Castaic Creek within the Project site is best characterized as an intermittent stream. Within the site, Castaic Creek travels approximately 1.2 miles between its entry to the site beneath The Old Road bridge and its exit beneath Commerce Center Drive. Within the Project site the channel of Castaic Creek is confined by manmade bank stabilization along the entire eastern bank and a portion of the western bank, though the width is adequate to allow for a vegetated floodplain through which the low-flow channel meanders. Floodplain vegetation is generally comprised of sparse transitional riparian communities such as mule fat scrub and river wash within hydrologically active areas, and mature riparian communities, such as southern cottonwood/willow riparian forest, within areas beyond the active channel where scouring flows occur less frequently.

As described in the 2024 Jurisdictional Delineation Report, width of the active channel varies between approximately 10 feet and approximately 80 feet, and width of the vegetated floodplain averages approximately 500 feet. The substrate was observed to be loosely consolidated sand and cobble, with banks mostly gentle but occasionally incised up to three feet. Because Castaic Creek exhibits a defined channel and an OHWM, this stream is an aquatic resource subject to the Corps', RWQCB's, and CDFW's permitting authority. It should be noted that the delineated OHWM is substantially narrower than that presented in the State-Certified EIR, because the prior delineation was highly conservative and relied on aerial photographs, assuming that all non-vegetated portions of the floodplain were potentially Corps-jurisdictional flow channels. This approach resulted in nearly the entire Castaic Creek floodplain being identified as waters of the U.S. in the State-Certified EIR. Thus, field delineation reflecting the actual extent of the active channel resulted in a greatly reduced extent of delineated waters of the U.S. in this reach, although the physical condition of the feature and the resource types present within the drainage have not changed significantly.

As identified in the 2024 Jurisdictional Delineation Report, Castaic Creek supports 3.32 acres of waters of the U.S. (which can also be considered 3.32 acres of waters of the State and 3.32 acres of CDFW-jurisdictional streambeds) and 97.53 acres of CDFW-jurisdictional streambeds. Whereas at

the time of the State-Certified EIR the creek was characterized as supporting 79 acres of waters of the U.S. and 91.6 acres of CDFW-jurisdictional streambeds. As explained above, the technical reports supporting the State-Certified EIR assumed the entire Castaic Creek floodplain to be waters of the U.S., while the updated jurisdictional delineation more accurately identifies only the active stream channel as waters of the U.S. The increase in CDFW-jurisdictional streambeds is largely due to the western expansion of the Project boundary at the northern end of Castaic Creek to include more of the creek (which also includes some additional waters of the U.S. and waters of the State).

## 3.2 Hasley Creek

Hasley Creek is the second largest stream flowing through the Project site and flows approximately two miles from its headwaters to its confluence with Castaic Creek, which occurs within the site. Although the size of the watershed is limited, Hasley Creek exhibits significant storm flows due to high gradients and the presence of significant urban development in the watershed. For one mile upstream of the Project site, the Hasley Canyon drainage flows through a grade-controlled artificial conveyance approximately 100 feet wide, with a natural bed with concrete drop structures and sloped concrete walls. At the point where this conveyance ends and the channel becomes natural, which is also the point where the drainage enters the Project site, a substantial rip-rap energy dissipater has been constructed. Despite the presence of this feature, evidence of excessive erosion is abundant in the on-site portion of Hasley Creek. The low-flow channel is braided and poorly defined, but the outermost banks of the system are vertical and deeply incised, with heights exceeding 20 feet in some locations. Channel widths average approximately 100 feet from bank to bank, although this width includes multiple braids and intervening bars in many locations. Beyond the active channel, abundant terraces indicate that channel-forming flows have been creating ever-deeper cuts into the floodplain.

Substrate within the Hasley Canyon channel is predominately composed of well-consolidated sand, although conglomerations of cobbles and boulders are also present. The sandy substrate appears exceedingly well drained, and indicators of persistent surface water were absent. Vegetation within the channel bottom is very sparse, probably due to a combination of the changing flow regime and a high incidence of scouring flows. Hasley Canyon exhibits a defined channel and an OHWM, and the stream is subject to the Corps', RWQCB's and CDFW's permitting authority. Two storm drain outlets within the Project site convey storm flows to Hasley Canyon from an adjacent business park situated to the west of the stream, as further described in Section 3.2.1.

As identified in the 2024 Jurisdictional Delineation Report, Hasley Creek supports 3.10 acres of waters of the U.S., 4.06 acres of waters of the State, and 14.45 acres of CDFW-jurisdictional streambeds, whereas at the time of the State-Certified EIR the creek supported 5 acres of waters of the U.S. and 17.4 acres of CDFW-jurisdictional streambeds. (Waters of the State were not mapped or quantified in the State-Certified EIR). The changes are mostly due to the channel incision of Hasley Creek in its northern section; the flow path has become narrower, resulting in a reduction of CDFW-jurisdictional waters.

### **Storm Drain Outlet Channels Tributary to Hasley Creek**

On the west side of the Hasley Creek, between Commerce Center Drive and the creek, two large (60-inches in diameter) pipe culverts discharge stormwater and nuisance flows from the business park and other developed uses on the west side of Commerce Center Drive. At the downstream end of each of these pipes, storm flows have resulted in erosion and created deeply-incised drainage

features trending eastward, towards Hasley Creek. The features are between 6 and 10 feet deep at the upstream ends and become less deep and defined with distance from the culvert outlets. The banks are composed primarily of loosely consolidated sandy material, which is likely to have been deposited in the area as fill. In the deeper portions of the channel, where flows have eroded through this fill layer, a prior asphalt roadbed and native gravel and cobbles are visible. A small amount of nuisance flow was observed exiting each culvert when the sites were visited in the field, and the presence of arroyo willow thickets within each feature suggests that the culverts are likely providing a small amount of discharge on a regular basis. The volume of base flow present is very low, however, and surface flows from the erosional features do not reach the floodplain or channel of Hasley Canyon. Rather, these flows infiltrate, evaporate, or are transpired by plants within a short distance of leaving the storm drain system. Because they lack a channelized surface connection to Hasley Creek, the unnamed erosional features emanating from the storm drain system are not tributaries and therefore are not waters of the United States. However, the features exhibit defined beds, banks, and channels, and support riparian vegetation, and therefore constitute CDFW-jurisdictional streambeds and waters of the State. Acreages of these features are incorporated into the acreages for Hasley Creek. For additional information please refer to the Jurisdictional Delineation Report for this Project (Rincon 2024).

### 3.3 Live Oak Road Detention Basin

The Live Oak Road Detention Basin is located in the northeastern portion of the Project site, south of an off-site residential community and west of Castaic Creek. The feature is manmade and may have developed as a result of a roadway berm located along the periphery of the Castaic Creek floodplain. A corrugated metal pipe culvert may have allowed this feature to drain into Castaic Creek at one point; however, the culvert is now situated several feet higher than any possible water level, based on the surrounding topography, and no longer provides connectivity. The eastern end of the culvert could not be located in the field and may be buried. The Live Oak Road Detention Basin features several drainage swales, but these features do not exhibit a bed and banks or an OHWM, and no wetland hydrology was observed. Riparian hydrophytic vegetation is present, however, including mule fat (*Baccharis salicifolia*; FAC), Fremont cottonwoods (*Populus fremontii* [*P. deltoides*]; FACW, as well as non-hydrophytic blue elderberry (*Sambucus mexicana* [*S. nigra*]; FACU)). Unauthorized bicycle trails and dirt ramps have been constructed within the basin, resulting in soil compaction and localized removal of vegetation in some areas. Because no OHWM is present, the Live Oak Road Detention Basin is not a water of the United States. However, based on CDFW's expressed concern regarding manmade features which accumulate riparian vegetation if not regularly maintained, it appears likely that CDFW would regulate the basin as a jurisdictional streambed.

Live Oak Detention Basin currently supports 0.86 acres of CDFW-jurisdictional streambeds. The Live Oak Road Detention Basin was not delineated as a jurisdictional feature in the State-Certified EIR; therefore, a comparison cannot be made for its size or condition at that time.

### 3.4 The Old Road Agricultural Ditch

The Old Road Agricultural Ditch is situated in the eastern portion of the Project site, at the northern edge of an existing, active agricultural field. The feature is fed by a combination of agricultural runoff and episodic flows from daily flushing of a water well that enter the ditch through an outlet structure. The feature has no natural water source and is fed completely by these sporadic artificial



inputs. The Old Road Agricultural Ditch conveys flows in a generally east-west direction, and eventually enters Castaic Creek. A small amount of riparian vegetation is present in the ditch, and the presence of soil cracks is consistent with the understanding that the ditch receives flow at regular intervals. Flow volumes are not expected to be substantial, based on the small size of the ditch; width of the OHWM was as little as one foot in some locations. The ditch is regularly removed during routine agricultural operations but becomes re-established at the edge of the active farm field.. Because the ditch is manmade and does not support a relatively permanent flow of water, it is not a water of the U.S. The manmade ditch is assumed to be exempt from the SWRCB's (2021) State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State per section IV.D.2.c.iv, which excludes artificially irrigated areas that would revert to dry land if irrigation were to cease. However, because the feature exhibits a defined channel and supports riparian vegetation, the ditch is a CDFW-jurisdictional streambed.

The Old Road Agricultural Ditch currently supports 0.38 acres of CDFW-jurisdictional streambeds. The Old Road Agricultural Ditch was not identified as part of the delineation used for the State-Certified EIR.

## 4 Effects of the Modified Project

---

This section presents the impacts of the Modified Project on jurisdictional waters and evaluates whether there would be any new significant environmental impacts to these resources that were not evaluated in the State-Certified EIR, or whether the Modified Project would substantially increase the severity of any significant impact identified in the State-Certified EIR. The analysis considers changes in impacts resulting from both changes in the boundaries of jurisdictional waters that have occurred since the State-Certified EIR was prepared and refinements to the design of the Modified Project.

To determine the acreage of impacts to jurisdictional waters, Rincon used GIS software to identify the locations where the Modified Projects' permanent and temporary ground disturbance would overlap jurisdictional waters and to calculate the acreage of those locations. This approach is consistent with the methodology used to address this resource topic in the State-Certified EIR. The analysis considers the areal extent of those impacts, as well as the resource types affected and the types of stream/wetland functions and services those resources provide.

As secondary means of evaluating the Modified Project's potential to cause new or substantially increased significant impacts to jurisdictional waters, and to provide context, the analysis also (i) illustrates impacts of the 2017 Approved Project that would be avoided under the Modified Project, due to changes in the Project design and/or changes in the extent of jurisdictional waters; and (ii) compares the overall impacts on jurisdictional waters of the 2017 Approved Project to those of the Modified Project.

### 4.1 Direct Impacts to Jurisdictional Waters

As calculated based on the delineation of waters within the Project site completed in 2024 and described above, the Modified Project will permanently impact 0.35 acres of waters of the U.S., 1.31 acres of waters of the State, and 12.24 acres of CDFW-jurisdictional streambeds. The Modified Project will also temporarily impact 2.68 acres of waters of the U.S., 2.68 acres of waters of the State, and 12.07 acres of CDFW-jurisdictional streambeds. These impacts are outlined by drainage in Table 2, Table 3, and Table 4 and illustrated on Figure 6, Figure 7, and Figure 8. For comparison, the direct impacts to jurisdictional waters by drainage as a result of the 2017 Approved Project are outlined in Table 2 and Table 4 and illustrated on Figure 9 and Figure 10.

Overall, the Modified Project will permanently impact fewer acres of waters of the U.S. and CDFW-jurisdictional streambeds compared to the 2017 Approved Project. This is largely due to changes in the proposed design for Hasley Creek. The Modified Project includes channel stabilization and revegetation of the creek, a temporary impact, as opposed to the permanent impact to the entirety of the creek proposed in the 2017 Approved Project. The acreage of temporary impacts to waters of the U.S., waters of the State, and CDFW-jurisdictional streambeds would increase under the Modified Project, also largely due to design changes for Hasley Creek, but this largely reflects a conversion of permanent impacts to temporary impacts, and the temporarily affected areas would be restored following Project activities. Under PDF VCC-PDF-BIO-1, streambeds and riparian habitat subject to CDFW jurisdiction within Hasley Canyon and Castaic Creek would be permanently conserved following completion of Project development by placing conservation easements over these areas.

**Table 2 Direct Impacts to Waters of the U.S.**

Feature	Corps Jurisdiction Type	2017 Approved Project	Modified Project		Difference in Impact	
		Permanent Impacts (acres)	Permanent Impacts (acres/linear feet)	Temporary Impacts (acres/linear feet)	Permanent Impacts (acres)	Temporary Impacts (acres)
Castaic Creek	Non-wetland waters of the U.S.	3.98	0.09/335	0.22/1,036	-3.89	+0.22
Hasley Creek	Non-wetland waters of the U.S.	5.02	0.26/243	2.46/2,815	-4.76	+2.46
Live Oak Road Detention Basin	N/A	0/0	0/0	0/0	0	0
Old Road Agricultural Ditch	N/A	0/0	0/0	0/0	0	0
<b>Total</b>		<b>9</b>	<b>0.35/578</b>	<b>2.68/3,851</b>	<b>-8.65</b>	<b>+2.68</b>

Note: The total acreage presented for the 2017 Approved Project is as stated in the State-Certified EIR and the acreages by drainage were calculated using GIS for this Report. Small discrepancies within the table are due to rounding.

**Table 3 Direct Impacts to Waters of the State**

Feature	RWQCB Jurisdiction Type	Modified Project	
		Permanent Impacts (acres/linear feet)	Temporary Impacts (acres/linear feet)
Castaic Creek	Non-wetland waters of the State	0.09/335	0.22/1,036
Hasley Creek	Non-wetland waters of the State	1.22/243	2.46/2,815
Live Oak Road Detention Basin	N/A	0/0	0/0
Old Road Agricultural Ditch	N/A	0/0	0/0
<b>Total</b>		<b>1.31/578</b>	<b>2.68/3,851</b>

Note: Since the State Certified EIR did not quantify RWQCB jurisdiction, a comparison between the 2017 Approved Project and Modified Project is not available. Small discrepancies within the table are due to rounding.

---

**Table 4    Direct Impacts to CDFW Jurisdictional Streambeds**

Feature	2017 Approved Project	Modified Project		Difference in Impact	
	Permanent Impacts (acres)	Permanent Impacts (acres/linear feet)	Temporary Impacts (acres/linear feet)	Permanent Impacts (acres)	Temporary Impacts (acres)
Castaic Creek	6.90	7.08/335	4.01/1,036	+0.18	+4.01
Hasley Creek	17.09	4.46/243	7.86/2,815	-12.63	+7.86
Live Oak Road Detention Basin	N/A	0.32/33	0.20/7	+0.32	+0.20
Old Road Agricultural Ditch	N/A	0.38/0	0/0	+0.38	0
<b>Total</b>	<b>23.99</b>	<b>12.24/611</b>	<b>12.07/3,858</b>	<b>-11.75</b>	<b>+12.07</b>

Note: The total acreage presented for the 2017 Approved Project is as stated in the State-Certified EIR and the acreages by drainage were calculated using GIS for this Report.  
Small discrepancies within the table are due to rounding.

---

Figure 6 Modified Project – Impacts to Waters of the U.S.





Figure 7 Modified Project – Impacts to Waters of the State

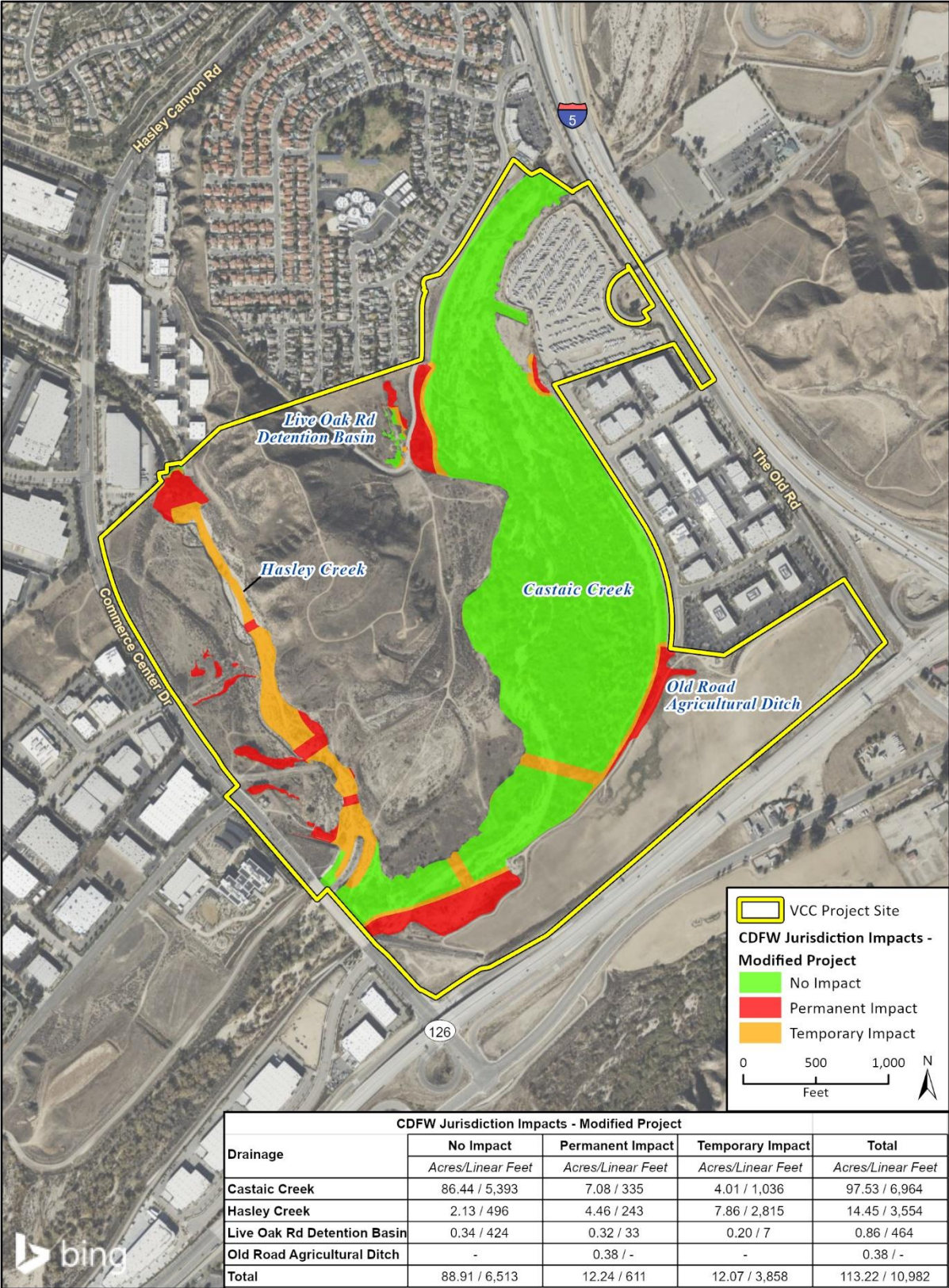


Imagery provided by Microsoft and its licensors © 2024.

22-12508 BIO



Figure 8 Modified Project – Impacts to CDFW-Jurisdictional Streambeds



Imagery provided by Microsoft and its licensors © 2024.

22-12508 BIO



Figure 9 2017 Approved Project – Impacts to Waters of the U.S.





Figure 10 2017 Approved Project – Impacts to CDFW-Jurisdictional Streambeds



Imagery provided by Microsoft and its licensors © 2020.

VCC TR Fig X JD Impacts CDFW State-Certified EIR

---

The subsections below provide additional details regarding impacts of the Modified Project within each drainage on the Project site.

### **Castaic Creek**

Within the Project site, Castaic Creek travels approximately 1.2 miles between its entry to the site beneath The Old Road bridge in the northeast corner and its exit along the site's western border to the Santa Clara River under Commerce Center Drive. Castaic Creek contains a total of 3.32 acres of waters of the U.S. (which can also be considered 3.32 acres of waters of the State and 3.32 acres of CDFW-jurisdictional streambeds) and 97.53 acres of CDFW-jurisdictional streambeds within the Project site. The majority of this creek will not be impacted by the Project, either as originally proposed or as modified. Permanent impacts include 0.09 acres of waters of the U.S., 0.09 acres of waters of the State, and 7.08 acres of CDFW-jurisdictional streambeds. These impacts occur in areas where development abuts the edges of the creek, such as the agricultural field along the creek's southern boundary and on the western bank in the area where the creek abuts the Live Oak Road Detention Basin. Bank stabilization and a road crossing are the primary project features that would impact this drainage; jurisdictional waters that would be subject to routine post-construction maintenance are also considered to be permanently impacted. Revisions to the project design along Castaic Creek were minor and impacts to this drainage would be largely consistent with those described in the State-Certified EIR. The central portion of the creek and floodplain would not be impacted, and the proposed development would not constrain the floodplain or result in the removal of significant native floodplain vegetation. The impacted areas, situated at the edges of the floodplain, would encounter flows only during high flow events and would not be in the active channel under base flow conditions. Impacts within this drainage will be subject to applicable mitigation measures, including compensatory mitigation requirements, adopted under the State-Certified EIR, as described in Appendix A. In addition, under VCC-PDF-BIO-1, streambeds, and riparian habitat subject to CDFW jurisdiction within Castaic Creek would be permanently conserved following completion of Project development by placing conservation easements over these areas. Additional compensatory mitigation, including mitigation for impacts associated with the Project, may occur in the portions of Castaic Creek conserved pursuant to VCC-PDF-BIO-1, consistent with Mitigation Measures RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10 and RMDP/SCP-BIO-12 through RMDP/SCP-BIO-16.

Permanent impacts to waters of the U.S. in Castaic Creek have decreased from 3.98 acres for the 2017 Approved Project to 0.09 acres for the Modified Project, largely due to the overall decrease in delineated waters of the U.S. along Castaic Creek. Permanent impacts to CDFW-jurisdictional streambeds in Castaic Creek have slightly increased from 6.90 acres for the 2017 Approved Project to 7.08 acres for the Modified Project due to the corresponding increase in CDFW-jurisdictional streambeds present in 2024. Permanent impacts to waters of the State in Castaic Creek are 0.9 acres for the Modified Project.

### **Hasley Creek**

Hasley Creek enters the Project site from the northwest where it flows down a large rip-rap energy dissipator and to the southeast to its confluence with Castaic Creek, just upstream of the Commerce Center Drive bridge. Several steep tributaries enter this drainage from the west, conveying flow from storm drain outlets to the Hasley Canyon channel. Hasley Creek contains a total of 3.10 acres of waters of the U.S., 4.06 acres of waters of the State, and 14.46 acres of CDFW-jurisdictional streambeds. Approximately 2.46 acres of waters of the U.S., 2.46 acres of waters of the State and



---

7.86 acres of CDFW-jurisdictional streambeds within this creek will be temporarily impacted by channel stabilization and revegetation efforts. Approximately 0.26 acres of waters of the U.S., 1.22 acres of waters of the State, and 4.46 acres of CDFW-jurisdictional streambeds within Hasley Creek will be permanently impacted where development will occur adjacent to the creek and where a bridge will cross the creek. Impacts within this drainage will be subject to applicable mitigation measures, including compensatory mitigation requirements, adopted under the State-Certified EIR, as described in Appendix A.

Compared to the 2017 Approved Project, impacts to Hasley Creek have largely been changed from permanent to temporary under the Modified Project. The Modified Project includes channel stabilization and revegetation of the creek, a temporary impact, as opposed to the permanent impact to the entirety of the creek proposed in the 2017 Approved Project. As a result of the design change, permanent impacts to waters of the U.S. and CDFW-jurisdictional streambeds in Hasley Creek have decreased from 5.02 acres for the 2017 Approved Project to 0.26 acres for the Modified Project and 17.09 acres for the 2017 Approved Project to 4.46 acres for the Modified Project, respectively. In addition, 1.22 acres of waters of the State are now included as permanent impacts. Under VCC-PDF-BIO-1, streambeds and riparian habitat subject to CDFW jurisdiction within Hasley Canyon would be permanently conserved following completion of Project development by placing conservation easements over these areas. Additional compensatory mitigation, including mitigation for impacts associated with the Project, may occur in the portions of Hasley Canyon conserved pursuant to VCC-PDF-BIO-1, consistent with Mitigation Measures RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10 and RMDP/SCP-BIO-12 through RMDP/SCP-BIO-16.

### **Live Oak Road Detention Basin**

The Live Oak Road Detention Basin is a man-made basin that contains a few drainage swales and also contains riparian vegetation that is likely subject to CDFW jurisdiction. The feature contains 0.86 acres of likely CDFW-jurisdictional streambeds. Within this feature, the Modified Project will permanently impact 0.32 acres of CDFW-jurisdictional streambeds and will temporarily impact 0.20 acres of potentially CDFW-jurisdictional streambeds due to development. These impacts will be subject to applicable mitigation measures, including compensatory mitigation requirements, adopted under the State-Certified EIR, as described in Appendix A.

The Live Oak Road Detention Basin was not delineated as a jurisdictional feature at the time of the State-Certified EIR.

### **Old Road Agricultural Ditch**

An agricultural ditch is present within the southeastern portion of the Project Site along the edge of an existing agricultural field. As described in the 2024 Jurisdictional Delineation Report, the ditch is fed by runoff from the adjacent agricultural field, as well as from the periodic flushing of a private agricultural well. Therefore, it was determined in 2024 that this drainage does not meet the Corp's definition of a "relatively permanent water" and would not be considered waters of the U.S. The agricultural ditch may qualify as a CDFW-jurisdictional streambed. The Modified Project will permanently impact the entirety of the agricultural ditch (0.38 acres) to accommodate commercial development in the area between Commerce Center Drive and the mainstem of the Hasley Canyon drainage. All impacts to the drainage will be subject to applicable mitigation measures, including compensatory mitigation requirements, adopted under the State-Certified EIR, as described in Appendix A.

The Old Road Agricultural Ditch was not present at the time of the State-Certified EIR.

---

## 4.2 Indirect Impacts to Jurisdictional Waters

As described in the State-Certified EIR, the development of the Project Site would have potential indirect impacts to jurisdictional waters from altered hydrology and water quality (including runoff from urban land uses and agricultural runoff that may contain pesticides), changes in riparian condition, invasive plant species, altered fire regime (which may directly remove riparian and wetland vegetation), and increased trash and debris. These impacts would be minimized and mitigated to the extent feasible by project design features and mitigation measures (MM), including those listed in Appendix A.<sup>3</sup> The State-Certified EIR found that these indirect impacts to jurisdictional waters would be less than significant with application of these mitigation measures.

The analysis and conclusions of the State-Certified EIR remain valid for the Modified Project. The development footprint and proposed land uses associated with the Modified Project are substantially the same as those for the 2017 Approved Project from the State-Certified EIR. As to construction, mitigation measures, including measure RMDP/SCP-BIO-45 (stream diversion bypass channels and construction dewatering requirements), RMDP/SCP-BIO-49 (protection of streams and stormwater runoff from construction-related pollutants) and RMDP/SCP-BIO-70 (construction best management practices to protect sensitive habitats during construction), would minimize potential effects to onsite and offsite water quality from construction activities. Mitigation measure RMDP/SCP-BIO-70 specifies minimum requirements that must be incorporated into the Project's Stormwater Pollution Prevention Plan (SWPPP), which will be prepared per the Construction Stormwater General Permit from the State Water Resources Control Board (SWRCB), to protect adjacent habitats and wildlife species, including aquatic habitats and species, during construction (SWRCB 2012).<sup>4</sup> These minimum requirements include implementation of proper stormwater management, construction management methods, and erosion and sediment control measures that will minimize unintended impacts to water quality within onsite and offsite jurisdictional features.

In the post-construction, built condition, all development on the Project site would comply with the County's Low Impact Development (LID) standards (County Code Chapter 22.122), which were developed to fulfill the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Sewer System (MS4) Permit for the area encompassing the Project Site. The LID standards are a stormwater management approach focused on mimicking natural site hydrology by retaining the maximum practicable amount of runoff. The Project qualifies as a Designated Project under the LID standards, which require retention of the runoff from the 85<sup>th</sup> percentile, 24-hour rain event (known as the Stormwater Quality Design Volume, or SWQDv). Where retention onsite of the SWQDv is technically infeasible, a Designated Project must biofilter 1.5 times the portion of the SWQDv that is not reliably retained onsite. By ensuring that site runoff is largely retained on-site, the LID standards will minimize hydrologic changes to adjacent and downstream aquatic resources caused by the Project and protect existing channel characteristics and resource functions in those areas, while also protecting downstream water quality from pollutants potentially present in stormwater runoff from the Project Site. Effectiveness of

---

<sup>3</sup> The State-Certified EIR classified some indirect impacts to jurisdictional waters as "secondary" impacts. In addition to Section 4.6, Jurisdictional Waters and Streams, the State-Certified EIR analyzed indirect impacts to jurisdictional waters in Section 4.1 Surface Water Hydrology and Flood Control, Section 4.2, Geomorphology and Riparian Resources, Section 4.4, Water Quality, and Section 4.5, Biological Resources.

<sup>4</sup> The SWRCB adopted a new construction general stormwater permit on September 8, 2022, which became effective on September 1, 2023, superseding the permit previously in effect.

---

stormwater quality control measures depends on on-going inspection and maintenance, and the LID standards require the development and implementation of a project-specific maintenance plan.

Minimizing hydromodification of adjacent and off-site waters is also addressed by existing applicable mitigation measures, such as VCC-SW-2 which requires that the Castaic Creek channel will be designed so that the pre and post project flow will be approximately the same in volume and velocity. Mitigation measure SP-4.6-58 specifies that impacts to water quality be minimized in conformance with state and federal law.

Considering the construction and post-construction design measures, the project would not result in significant impacts to water quality or hydrology and would not have significant adverse effects to adjacent or downstream resources. Because the overall project disturbance footprint, types of construction activities and post-construction land uses associated with the Project have not changed materially from what was described in the State-Certified EIR, and relevant mitigation measures will continue to apply, there is no indication that indirect impacts to jurisdictional waters from the Project will differ from those described in the State-Certified EIR.

## 4.3 Summary of Impacts

Based on the analysis above, overall permanent impacts to jurisdictional waters associated with the Modified Project are reduced compared to the 2017 Approved Project (a reduction of 8.65 acres for waters of the U.S. and 11.75 acres of CDFW-jurisdictional streambeds). This reflects changes in the proposed design for Hasley Creek, as well as a reduction in waters of the U.S. delineated on-site.

The Modified Project includes channel stabilization and revegetation of Hasley Creek, a temporary impact, as opposed to the permanent impact to the entirety of the creek proposed in the 2017 Approved Project. Temporary impacts would increase for both federal and state waters, largely due to design changes for Hasley Creek which convert permanent impacts to temporary impacts.

Temporarily impacted areas would be restored following construction and would not have a lasting effect on channel form, function, or vegetation. Temporarily impacted and avoided waters within Hasley Canyon and Castaic Creek would be permanently conserved following completion of Project development under VCC-PDF-BIO-1. Compensatory mitigation will be provided for impacts to jurisdictional waters resulting from the Modified Project in the same manner as described in the State-Certified EIR for jurisdictional waters impacted by the 2017 Approved Project, and may include mitigation areas within areas conserved under VCC-PDF-BIO-1, consistent with Mitigation Measures RMDP/SCP-BIO-1 through RMDP/SCP-BIO-10 and RMDP/SCP-BIO-12 through RMDP/SCP-BIO-16.

Project design features and mitigation measures will also minimize indirect impacts to jurisdictional waters associated with the project changes, including impacts to water quality and hydrology, and ensure that indirect impacts remain consistent with, or less than, those described in the State-Certified EIR. Overall, the changes associated with the Modified Project, combined with the changes in jurisdictional waters present on the Project Site, are not expected to result in any new significant effects or to substantially increase the severity of any significant effect identified in the State-Certified EIR, when taking into account the mitigation measures applicable to the Project.

---

## 5 Thresholds of Significance

---

The State-Certified EIR evaluated the significance of the 2017 Approved Project's effects to jurisdictional waters using the following significance criteria adopted by the CDFW, the lead agency for that document. This section uses the significance criteria adopted by the County of Los Angeles, the current lead agency, which are based on those outlined in Section 4 of the current CEQA Checklist (California Code of Regulations 2019) and are similar to those used in the State-Certified EIR. Those significance criteria are:

- **Significance Criterion 1:** Would the Project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or U.S. Fish and Wildlife Service (USFWS)?
- **Significance Criterion 2:** Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) or waters of the United States or California, as defined by § 404 of the federal Clean Water Act and its implementing regulations, California Fish and Game code § 1600, et seq., or the State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, through direct removal, filling, hydrological interruption, or other means?

Using these significance thresholds, this section evaluates whether the Modified Project would have any new significant effect not considered in the State-Certified EIR or would substantially increase the severity of any significant effect identified in the State-Certified EIR as a result of incremental project changes, new information, or changed circumstances evaluated in this Report.<sup>5</sup>

### 5.1 Significance Criterion 1

*Would the Project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?*

The State-Certified EIR determined that the 2017 Approved Project would have potentially significant direct impacts on federally-and state-protected streambeds, but the impacts would be reduced to less than significant when taking into account the Project design features, avoidance measures, and mitigation measures imposed on the Project. Based on the information evaluated in this Report, the Modified Project will permanently impact 8.65 acres and 11.75 acres less of federally and state-protected streambeds, respectively, when compared to the 2017 Approved Project as described in the State-Certified EIR. This is largely due to changes in the proposed design for Hasley Creek. The Modified Project includes channel stabilization and revegetation of the creek, a temporary impact, as opposed to the permanent impact to the entirety of the creek proposed in the 2017 Approved Project. The extensive restoration along Hasley Creek will improve the extent and quality of the creek's buffer of native vegetation; the channel stability will be improved, resulting in less erosional damage caused to the channel; and the hydrologic connectivity to the

---

<sup>5</sup> Since the State-Certified EIR did not identify any significant effect to jurisdictional waters, the focus of this section is on whether the Modified Project would have any new significant effect not considered in the State-Certified EIR.

---

adjacent flood plain will be improved, correcting the channelization that has been occurring over time. Under new PDF VCC-PDF-BIO-1, streambeds and riparian areas subject to CDFW jurisdiction within Hasley Canyon and Castaic Creek would be permanently conserved following completion of Project development by granting conservation easements over those areas. Preserved waters of the U.S. would be a subset of the conserved areas.

For unavoidable permanent impacts to streambed, per the Project's mitigation measures, the permanent removal of state-protected streambeds will be replaced by creating riparian habitats of similar functions and values at various ratios based on the biological value of the lands impacted (based on a functional assessment), which will ensure that the functions and services impacted by the Modified Project are replaced at a minimum 1:1 ratio. The combination of functional assessment scores and impacted acreage are used to determine mitigation ratios for each habitat type, ensuring no loss of riparian functions or acreage. The newly created riparian habitat will increase the overall acreage of riparian habitat in the Project vicinity and will improve the biological value of the lands by increasing native plant diversity and abundance, expanding the riparian corridor, and providing important food and shelter sources for wildlife.

## 5.2 Significance Criterion 2

*Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) or waters of the United States or California, as defined by § 404 of the federal Clean Water Act and its implementing regulations, California Fish and Game code § 1600, et seq., or the State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, through direct removal, filling, hydrological interruption, or other means?*

No jurisdictional wetlands have been delineated within the Project Site; therefore, no impacts to such wetlands will occur as a result of the Modified Project and the Modified Project would not have a significant adverse effect on state or federally protected wetlands that was not evaluated in the State-Certified EIR. Since the State-Certified EIR did not identify any significant impacts to such resources after mitigation, the Modified Project also would not substantially increase the severity of any previously identified significant effect to such resources.

## 5.3 Cumulative Impacts

The State-Certified EIR evaluated cumulative impacts resulting from the 2017 Approved Project in its assessment of cumulative impacts of the RMDP. The analysis included a review of agency permitting trends, including impact and mitigation acreages, over an 18-year period that establishes an expected level of permitting activity in the Santa Clara River watershed that would occur with or without the Project. The information provided in the permits and related documents included: (1) acreages of temporary and permanent impacts to jurisdictional wetlands and waters of the State and/or U.S.; (2) mitigation measures; (3) net loss or gain of jurisdictional waters/wetlands; and (4) special-status species impacted by the permits. In addition, the analysis looked at the effects of the 2017 Approved Project in detail. The analysis concluded that no cumulatively significant impacts to waters and streambeds would result from the 2017 Approved Project. As the Modified Project is substantially similar to the 2017 Approved Project in its development footprint, land uses and effects to jurisdictional waters, this conclusion holds for the Modified Project as well.



---

As discussed in the State-Certified EIR, the Corps and CDFW oversee well established and documented regulatory programs that limit and offset damages to aquatic resources caused by development activity. Since publication of the State-Certified EIR, the SWRCB has also revised its Porter-Cologne Water Quality Control Act regulatory program to address impacts caused by fill and excavation, including impacts to waters of the State that are not subject to federal jurisdiction (SWRCB 2021). These programs ensure that jurisdictional waters are not filled or modified without proper authorization, require impacts to be avoided and minimized to the maximum extent feasible, and require compensatory mitigation for losses of aquatic resource acreage or function that cannot be avoided. These principles are codified in federal regulations including the U.S. EPA's Clean Water Act Section 404(b)(1) Guidelines (40 CFR 230) and the Corps' Compensatory Mitigation Rule (33 CFR 332), which govern the issuance and conditioning of Section 404 Permits, and in the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2021).

The cumulative impacts analysis in the State-Certified EIR notes that during the period from 1988 to 2006, the agencies issued hundreds of permits for projects in the Santa Clara River Watershed. As illustrated on charts in the State-Certified EIR, mitigation acreages substantially exceeded impact acreages in all years, ensuring that there was no net loss of aquatic resources. This outcome reflects the regulatory agencies' missions and statutory responsibilities and is consistent with the regulations described above. It is expected that future development activity in the Santa Clara River watershed will continue to occur, and some development projects will continue to affect aquatic resources. However, it is also expected that the Corps, CDFW, and SWRCB will continue to exercise their statutory authorities to ensure that impacts are avoided, minimized, and mitigated. Accordingly, future projects in the watershed will be conditioned to provide mitigation at appropriate ratios and net losses of resource functions or acreage will not occur.

Further, because the Project includes a Compensatory Mitigation Plan that offsets proposed resource losses at a greater than 1:1 ratio, resulting in a net gain of resource acreage and functions and services as required by mitigation measures adopted under the State-Certified EIR, the project would not exacerbate any regional loss of aquatic resources. Project-specific mitigation measures also require that temporary impact zones be restored following construction and revegetated with native plant species.

Thus, the Project would not contribute considerably to a cumulatively significant impact on waters and streambeds.

---

## 6 References

---

- California Department of Water Resources (CDWR). 2019. Castaic Dam Modernization Program website. <https://water.ca.gov/Programs/State-Water-Project/SWP-Facilities/Southern/Castaic-Dam-Modernization>. Accessed December 2019.
- Rincon Consultants, Inc. (Rincon). 2024. Wetland Delineation and Jurisdictional Determination Report for the Valencia Commerce Center Project. Los Angeles County, California.
- State Water Resources Control Board (SWRCB). 2012. National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land-Disturbance Activities. Adopted September 2, 2009 and Revised February 14, 2011 and July 17, 2012.
- State Water Resources Control Board (SWRCB). 2021. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019 and Revised April 6, 2021.
- United States Army Corps of Engineers and California Department of Fish and Game (Corps and CDFG). 2010. Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan Final Joint Environmental Impact Statement and Environmental Impact Report SCH No. 2000011025.
- United States Geological Survey (USGS). 2015. Newhall, California 7.5-minute topographic quadrangle, accessed via the National Map. September 2019.
- URS Corporation (URS). 2014. Wetland Delineation and Jurisdictional Determination Report for the Valencia Commerce Center Project. Los Angeles County, California.



# Appendix A

---

Applicable Mitigation Measures





## Applicable Mitigation Measures

The State-Certified EIR included mitigation measures already adopted under the Newhall Ranch Specific Plan Program EIR as revised (March 1999) and the EIR previously certified by the County for the Project (April 1990), as well as a set of additional mitigation measures to minimize impacts to waters and streambeds. The following mitigation measures are those measures relating to waters and streambeds from the Specific Plan EIR, the VCC EIR and the State-Certified EIR that apply to the Project. The Specific Plan measures use the format “SP-4.6-XX,” the VCC EIR measures use the format “VCC-SW-XX,” and the RMDP/SCP EIS/EIR measures use the format “RMDP/SCP-BIO-XX.” Tables have been included in the mitigation measures where present, and numbering has been retained.

- SP-4.2-2** All necessary permits or letters of exemption from the United States Army Corps of Engineers, United States Fish and Wildlife Service, California Department of Fish and Game, and the Regional Water Quality Control Board for Specific Plan-related development are to be obtained prior to construction of drainage improvements. The performance criteria to be used in conjunction with 1603 agreements and/or 404 permits are described in Section 4.6, Biological Resources, Mitigation Measures 4.6-1 through 4.6-10 (restoration) and 4.6-11 through 4.6-16 (enhancement).
- (This measure applies to the Project with the following qualifications: The reference to Specific Plan-related development does not apply. The performance criteria described in Mitigation Measures 4.6-1 through 4.6-16 apply to permits obtained for the Project to the extent those measures apply to the Project.)*
- SP-4.2-3** All necessary streambed agreement(s) are to be obtained from the California Department of Fish and Game wherever grading activities alter the flow of streams under CDFG jurisdiction. The performance criteria to be used in conjunction with 1603 agreements and/or 404 permits are described in Section 4.6, Biological Resources, Mitigation Measures 4.6-1 through 4.6-10 (restoration) and 4.6-11 through 4.6-16 (enhancement).
- (This measure applies to the Project with the following qualification: The performance criteria described in Mitigation Measures 4.6-1 through 4.6-16 apply to permits obtained for the Project to the extent those measures apply to the Project.)*
- 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.
- (This measure applies to the Project without change.)*

- 
- 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.  
*(This measure applies to the Project without change.)*
- 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.
- (This measure applies to the Project without change.)*
- 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.  
*(This measure applies to the Project without change.)*
- 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.  
*(This measure applies to the Project without change.)*
- 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.  
*(This measure applies to the Project without change.)*
- 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.  
*(This measure applies to the Project without change.)*
-

- 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.  
*(This measure applies to the Project without change.)*
- SP-4.6-9** Monitoring reports for the mitigation site shall be reviewed by the permitting State and/or Federal agency.  
*(This measure applies to the Project without change.)*
- SP-4.6-10** Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan.  
*(This measure applies to the Project without change.)*
- 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.).  
*(This measure applies to the Project without change.)*
- 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).  
*(This measure applies to the Project without change.)*
- 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.  
*(This measure applies to the Project without change.)*
- 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.

*(This measure applies to the Project without change.)*

**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.

*(This measure applies to the Project without change.)*

**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 MM SP-4.6-1 through MM SP-4.6-11 and MM SP-4.6-13 through MM SP-4.6-16, above.
- Mitigation requirements for oak tree replacement are set forth in MM SP-4.6-48, below.

*(This measure applies to the Project without change.)*

**SP-4.6-28** Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources, shall be conducted pursuant to the Oak Resource Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.

*(This measure applies to the Project without change.)*

**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.

*(This measure applies to the Project without change.)*

**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

*(This measure applies to the Project without change.)*

**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.

*(This measure applies to the Project without change except that the requirement for the Specific Plan to conform does not apply.)*

**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.

*(This measure applies to the Project without change, except that the reference to the Specific Plan does not apply.)*

**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.

*(This measure applies to the Project without change.)*

**RMDP/SCP-BIO-1** Mitigation Measures SP-4.6-1 through SP-4.6-16<sup>6</sup> 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 RMDP/SCP-BIO-2). However, the CMIP does not identify mitigation actions specifically for impacts to waters of the United States. But since

---

<sup>6</sup> SP-4.6 mitigation measures were previously adopted by the Newhall Ranch Specific Plan Program EIR (1999, 2003) and the EIS/EIR for the RMDP/SCP (2010).



---

these waters are a subset of CDFG jurisdiction, the necessary Corps mitigation requirements would be met or exceeded.<sup>7</sup>

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 subnotification 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 RMDP/SCP-BIO-2 and RMDP/SCP-BIO-10. The detailed wetlands mitigation plans shall provide for the 3:1 replacement of any southern California black walnut to be removed from the riparian corridor for individual projects. The plan shall be subject to the approval of CDFG and the Corps and approved prior to the impact to riparian resources. RMDP/SCP-BIO-4 describes that the functions and values will be assessed for the riparian areas that will be removed, and RMDP/SCP-BIO-2 and RMDP/SCP-BIO-10 describe the replacement ratios for the habitats that will be impacted.

*(This measure applies to the Project with the following exceptions and/or changes: approval of mitigation plans will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*

**RMDP/SCP-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 RMDP/SCP-BIO-4 and MM VCC-SW-3 of Section 4.6 of the Final EIS/EIR) on the Project Site, or as allowed under RMDP/SCP-BIO-10.

---

<sup>7</sup> 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.

- 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 RMDP/SCP-BIO-2b.

- b. For permanent and temporary impacts to CDFG jurisdiction, consistent with the subnotification, quantities of mitigation acreage required shall be calculated in accordance with the criteria below:
- If suitable mitigation sites have met success criteria (RMDP/SCP-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 13. 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 13 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 13 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 subnotification 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 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 one 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 13. CDFG Jurisdictional Permanent Impacts Mitigation Ratios**

Ratios Listed by Vegetation Types & Quality				
		(Mit. Ratio)	(Mit. Ratio)	(Mit. Ratio)
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
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 using the HARC methods described in Section 4.2, Geomorphology and Riparian Resources, of the RMDP/SCP EIS/EIR.
- \*\* MEDIUM reach value indicates a portion of the Santa Clara River or main tributary that scored between 0.4 and 0.79 Total Score using the HARC methods described in Section 4.2 of the RMDP/SCP EIS/EIR.
- \*\*\* LOW reach value indicates a portion of the Santa Clara River or main tributary that scored below 0.4 Total Score using the HARC methods described in Section 4.2 of the RMDP/SCP EIS/EIR.

---

*(This measure applies to the Project with the following exceptions and/or changes: mitigation ratios will be applied when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. Mitigation sites may be located within the Project Site and/or within the larger RMDP/SCP area, subject to the site approval process described in Mitigation Measure RMDP/SCP-BIO-3.)*

**RMDP/SCP-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 creek bed or other disturbance shall receive the highest level of priority for vegetation community restoration. Restoration sites may 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 RMDP/SCP-BIO-12). Sites will be approved when the detailed wetlands mitigation plans are submitted to the Corps and CDFG as part of the subnotification letters submitted for individual projects. Status of the sites will be addressed through agency review of the annual mitigation status report and mitigation accounting form 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.

*(This measure applies to the Project with the following exceptions and/or changes: mitigation site approval will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. The mitigation accounting form referenced in the measure is not required.)*

**RMDP/SCP-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 14 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 14. 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 ssp. 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.

*(This measure applies to the Project without change.)*

**RMDP/SCP-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 subnotification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation status report and mitigation accounting form.

*(This measure applies to the Project with the following exceptions and/or changes: restoration plans will be reviewed and approved when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*

**RMDP/SCP-BIO-6** The revegetation site will be considered “complete” upon meeting all of the following success criteria. In a subnotification letter, the applicant may request modification of success criteria on a project by project basis. Acceptance of such request will be at the discretion of CDFG and the Corps.

- 
1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion.
  2. The percent cover and species richness of native vegetation shall be evaluated based on local reference sites established by CDFG and the Corps for the plant communities in the impacted areas.
  3. Native shrubs and trees shall have at least 80% 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 Plan<sup>8</sup> for Waters of the United States.

*(This measure applies to the Project with the following exceptions and/or changes: modification of success criteria may occur when the Applicant obtain permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. In addition, the HARC assessment may be replaced by another agency-approved method.)*

**RMDP/SCP-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 provided for in RMDP/SCP-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.

*(This mitigation measure applies to the Project without change.)*

**RMDP/SCP-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.

*(This mitigation measure applies to the Project without change.)*

---

<sup>8</sup> 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.

**RMDP/SCP-BIO-9** In areas where invasive exotic plant species control is authorized by CDFG in lieu of other riparian habitat mitigation (RMDP/SCP-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.

*(This mitigation measure applies to the Project without change.)*

**RMDP/SCP-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 Environmental Impact Report, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval. 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.

*(This mitigation measure applies to the Project without change.)*

**RMDP/SCP-BIO-12** An annual monitoring report shall be submitted to the Corps and CDFG by April 1 of each year until satisfaction of success criteria identified in RMDP/SCP-BIO-6, and consistent with the requirements of RMDP/SCP-BIO-12. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed “in-lieu fees,” restoration methods, and vegetation community restoration performance standards. For active vegetation community creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; an accounting of colonization by native plants; and photographs. The report shall also include the mitigation account form (see RMDP/SCP-BIO-11), which outlines account 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.

*(This mitigation measure applies to the Project with the following exceptions and/or changes: The functional assessment of the compensatory mitigation site may use a method other than the HARC assessment methodology, subject to the approval of the Corps and CDFW. The mitigation accounting form required by measure RMDP/SCP-BIO-11 is not required because the Project will not utilize the RMDP or the permits issued for the RMDP.)*

---

**RMDP/SCP-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.

*(This applies to the Project without change.)*

**RMDP/SCP-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, containerized 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 RMDP/SCP-BIO-2. The growth and survival of the replacement trees shall meet the performance standards specified in RMDP/SCP-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 RMDP/SCP-BIO-6, RMDP/SCP-BIO-11, and RMDP/SCP-BIO-12.

*(This mitigation measure applies to the Project with the following exceptions and/or changes: Reporting in accordance with RMDP/SCP-BIO-11 is not required, because the Project will not utilize the RMDP or the permits issued for the RMDP.)*

**RMDP/SCP-BIO-16** Vegetation communities temporarily impacted by the proposed Project shall be revegetated as described in RMDP/SCP-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 on 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 RMDP/SCP-BIO-1, RMDP/SCP-BIO-2, and RMDP/SCP-BIO-6. Annual monitoring reports on the status of the recovery

or temporarily impacted areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (RMDP/SCP-BIO-11 and RMDP/SCP-BIO-12).

*(This mitigation measure applies to the Project with the following exceptions and/or changes: Reporting in accordance with RMDP/SCP-BIO-11 is not required, because the Project will not utilize the RMDP or the permits issued for the RMDP.)*

**RMDP/SCP-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 MM RMDP/SCP-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 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.

*(As written, this mitigation measure applies to the Santa Clara River, which does not exist within the Project Site. To avoid potential impacts to special-status fish species that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to Castaic Creek within the Project Site. However, to the extent this measure conflicts with PDFs 3-1, 3-8, 3-11, or VCC-PDF-BIO-2 or applicable requirements of mitigation measures 3-1 through 3-3, or with requirements imposed on the Project by CDFW or any other regulatory agency with jurisdiction over the Project, the latter shall control over this measure.)*

**RMDP/SCP-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.

*(This measure applies to the Project without change.)*

**RMDP/SCP-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.

*(This measure applies to the Project without change.)*

**RMDP/SCP-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 in the field for more than five days without participating in the WEAP. Night work and use of lights on equipment shall not be allowed unless CDFG approves of the night work and use of lights. Lighting shall not be used where threatened or endangered species occur. Lights shall be directed from natural areas and remain 200 feet away from natural areas unless otherwise approved by CDFG. The qualified biologist shall provide ongoing guidance to construction personnel and contractors to ensure compliance with environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following:

- Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements.
- A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of non-compliance with these acts;
- Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts);
- Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction limitations (e.g., limitations on nighttime work) will be provided to the environmental monitors and construction crews prior to ground disturbance. This applies to preconstruction activities, such as site surveying and staking, natural resources surveying or reconnaissance, establishment of water quality BMPs, and geotechnical or hydrological investigations;

- 
- Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife;
  - Review/designate the construction area in the field with the contractor in accordance with the final grading plan;
  - Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected);
  - Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity;
  - Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas;
  - Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented;
  - To reduce the potential for the spread of 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.

*(This measure applies to the Project without change.)*

- RMDP/SCP-BIO-55** a. As a supplement to RMDP/SCP-BIO-1 through RMDP/SCP-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, in the RMDP/SCP EIS/EIR). 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 RMDP/SCP-BIO-1 through RMDP/SCP-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 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 RMDP/SCP-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.

*(This measure applies to the Project without change.)*

**RMDP/SCP-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 (RMDP/SCP-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.
  - 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.

*(This measure applies to the Project without change.)*



**RMDP/SCP-BIO-73** Permanent fencing shall be installed along all Santa Clara River SMA/SEA 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.

*(As written, this mitigation measure applies to the Santa Clara River SMA, which is not within the Project Site. To minimize impacts to protected vegetation communities and special status plant and wildlife species that may be present in Hasley Canyon and Castaic Creek, the measure will also be applied to require installation of permanent fencing along trails adjacent to those areas within the Project Site. )*

**RMDP/SCP-SW-4** All areas where temporary construction impacts affect Corps or CDFG jurisdictional areas (generally, these are areas where impacts would occur due to the construction of Project facilities, but that are outside the permanent footprint of the actual facility), shall be revegetated with appropriate native vegetation after completion of construction in the area. A revegetation plan shall be prepared and implemented in accordance with the terms set forth in mitigation measures SP-4.6-1 through SP-4.6-15 and SP-4.6-63.

*(This measure applies to the Project without change. Note that the process for verifying that revegetation plans comply with the terms set forth in measures SP-4.6-1 through SP-4.6-15 and SP-4.6-63 is implemented through measures **RMDP/SCP-BIO-1**, **RMDP/SCP-BIO-3** and **RMDP/SCP-BIO-12**.)*

**RMDP/SCP-SW-6** To the extent that on-site mitigation for impacts to jurisdictional tributary drainages is insufficient to meet the mitigation ratios required by revised Mitigation Measure **RMDP/SCP-BIO-2**, then the remaining mitigation obligation shall be met at off-site properties within the Santa Clara River watershed, via use of one or more of the following mitigation approaches (at applicant's option): (a) creation of additional jurisdictional acreage in tributaries to the Santa Clara River occurring off site such that the mitigation site has an equal or greater value than the impacted site; (b) preservation of property containing jurisdictional tributaries to the Santa Clara River having an equal or greater value than the impacted site via a conservation easement or analogous method; or (c) habitat enhancement activities in jurisdictional tributaries for the necessary acreage (*e.g.*, exotic species removal under the terms and conditions specified in Mitigation Measures **RMDP/SCP-BIO-9** and **RMDP/SCP-BIO-10**).

*(This measure applies to the Project without change.)*

**VCC-SW-2** The Castaic Creek channel will follow the existing bank contours of the creek and will minimize encroachment into the riparian vegetation community, so that there is no net loss of riparian habitat of acreage of Castaic Creek. In order to minimize potential effects on downstream populations of UTS, the channel will be designed so that the pre and post project flow will be approximately the same in volume and velocity.

*(This measure applies to the Project without change.)*

- 
- VCC-SW-3** Soft bottom channels will be incorporated into the project design to allow for the retention of existing riparian vegetation.  
*(This measure applies to the Project without change.)*
- VCC-SW-4** A vegetation restoration plan will be used to revegetate areas temporarily disturbed by construction in the Creek.  
*(This measure applies to the Project without change.)*
- VCC-4.a-2** Approximately 375 acres of native coastal sage scrub vegetation will be retained.  
  
*(This measure applies to the Modified Project with the following clarification: the measure requires retention of 375 acres of coastal scrub vegetation within the overall development area approved by the County under the 1990 EIR, including portions that are not part of the Modified Project.)*
- VCC-4.b-2** The Castaic Creek channel will follow the existing bank countours of the creek and will minimize encroachment into the riparian vegetation community, so that there is no net loss of acreage of Castaic Creek. A detailed revegetation and restoration plan will be provided for review prior to construction.
- VCC-4.b-3** Soft bottom channels will be incorporated into the project design to allow for the retention of existing riparian vegetation.
- VCC-4.b-4** Castaic Creek will be lined with a bank protection that allows for growth of native herbaceous vegetation. The Army Corps of Engineers has stated a preference for an articulating, concrete, open-cell tile (i.e., Armorflex). The use of Armorflex may not be approved by the Department of Public Works; therefore, the type of lining actually used may change as a potential issue of safety.  
  
*(This measure applies to the Modified Project with the following qualification: The reference to Armorflex refers to USACE guidance provided in connection with a 1990 USACE permit that has expired and no longer applies to the Modified Project. The type of bank protection used will be consistent with any requirements imposed under any USACE permit obtained for Modified Project activities within the VCC Planning Area.)*
- VCC-PDF-BIO-1** Within six months following completion of development within the Project Site, the Applicant shall offer a conservation easement (as defined in Civil Code Section 815.1) over preserved streambeds and riparian areas within Castaic Creek and Hasley Canyon that are subject to CDFW's jurisdiction under Fish and Game Code Sections 1602 et seq. to ensure those areas are maintained in an undeveloped, open space condition in perpetuity. The conservation easement shall be offered to a qualified natural lands management organization or other entity qualified to hold conservation easements under Civil Code Section 815.3.  
  
*(This measure applies to the Project as written.)*
-