BIOLOGICAL RESOURCES ASSESSMENT AND JURISDICTIONAL DELINEATION FOR THE PROPOSED CANYON RANCH DEVELOPMENT (TM 20403 AND TM20404) IN LOMA LINDA, CALIFORNIA

Prepared for:

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Contents

SECTION 1.0 - INTRODUCTION

Jennings Environmental, LLC (Jennings) was retained by Lilburn Corporation (Lilburn) to conduct a literature review and reconnaissance-level survey for the proposed Canyon Ranch Development (TM 20403 and TM 20404) {Project} within the City of Loma Linda, San Bernardino County, California. The survey identified vegetation communities, the potential for the occurrence of special status species, or habitats that could support special status wildlife species, and recorded all plants and animals observed or detected within the Project boundary. This biological resources assessment is designed to address potential effects of the proposed project to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the California Native Plant Society (CNPS). Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and (CDFW). Additionally, the site was surveyed for any drainage features that would meet the definition of the Waters of the US (WOUS), Waters of the State (WOS), or CDFW jurisdiction.

1.1 PROJECT LOCATION

The project is generally located in Section 32, Township 1 South, Range 3 West and is depicted on the *Redlands* U.S. Geological Survey's (USGS) 7.5-minute topographic map. More specifically the project is located within Assessor Parcel Numbers (APNs) 0293-081-09, 11, 12, 19, 0293-111-18, 19, 21 and 0293-101-08, 11, and 13 within the City of Loma Linda, San Bernardino County, California. The Project site is located west of the intersection of San Timoteo Canyon Rd. and Nevada St. The site is surrounded by developed residential parcels, agricultural fields, and flood control facilities. (Figures 1 and 2 in Appendix A).

1.2 PROJECT DESCRIPTION

The proposed Project includes subdividing parcels 0293-111-18, 19, 21 and 0293-101-08, 11, and 13, a total of 55.72 acres, into 89 single family lots with a minimum size of 20,000 sq. ft. The project also include subdividing parcels 0293-081-09, 11, 12, 19, a total of 10.96 acres, into 37 single family lots with minimum size of 7,200 sq. ft. The Project also includes the construction of roadways and necessary infrastructure (sewer, water, etc.) to develop each new lot.

2.0 – METHODOLOGY

2.1 LITERATURE REVIEW

Prior to performing the field survey, existing documentation relevant to the Project site was reviewed. The most recent records of the California Natural Diversity Database (CNDDB) managed by CDFW (CDFW 2021), the USFWS Critical Habitat Mapper (USFWS 2021) and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2021) were reviewed for the following quadrangles containing and surrounding the Project site: *Redlands* and *San Bernardino South*, USGS 7.5-minute quadrangles. The *San Bernardino South* quad was included in this search due the sites proximity to its boarder. These databases contain records of reported occurrences of

federal- or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site.

2.2 SOILS

Before conducting the surveys, soil maps for San Bernardino County were referenced online to determine the types of soil found within the Project site. Soils were determined in accordance with categories set forth by the United States Department of Agriculture (USDA) Soil Conservation Service and by referencing the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2021).

2.3 BIOLOGICAL RECONNAISSANCE-LEVEL SURVEY

Jennings biologist, Gene Jennings, conducted the general reconnaissance survey within the Project site to identify the potential for the occurrence of special status species, vegetation communities, or habitats that could support special status wildlife species. The surveys were conducted on foot, throughout the Project site between 0800 and 1000 hours on August 26, 2021 and 0800 and 1000 hours on August 27, 2021. Weather conditions during the August 26, 2021 survey included temperatures ranging from 78 to 88 degrees Fahrenheit, with clear skies, no precipitation, 2.5 to 5 mile per hour winds. Weather conditions during the August 27, 2021 survey included temperatures ranging from 78 to 90 degrees Fahrenheit, with clear skies, no precipitation, 2.2 to 5 mile per hour winds. Photographs of the Project site were taken to document existing conditions (Appendix B). A photo location map is also provided as Figure 3 in Appendix A.

2.4 JURISDICTIONAL FEATURES

A general assessment of jurisdictional waters regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW was conducted for the proposed Project area. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates the discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter- Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. The assessment was conducted by a desktop survey through the USGS National Hydrography Dataset for hydrological connectivity. Additional discussion of the regulatory framework is provided in Appendix C.

2.4.1 VEGETATION

All plant species observed within the Project site were recorded. Vegetation communities within the Project site were identified and qualitatively described. Plant communities were determined in accordance with the *Manual of California Vegetation*, *Second Edition* (Sawyer et al. 2009). Plant nomenclature follows that of *The Jepson Manual, Second Edition* (Baldwin et al. 2012). A comprehensive list of the plant species observed during the survey is provided in Appendix D.

2.4.2 WILDLIFE

All wildlife and wildlife signs observed and detected, including tracks, scat, carcasses, burrows, excavations, and vocalizations, were recorded. Additional survey time was spent in those habitats most likely to be utilized by wildlife (native vegetation, wildlife trails, etc.) or in habitats with the potential to support state- and/or federally listed or otherwise special status species. Notes were made on the general habitat types, species observed, and the conditions of the Project site. A comprehensive list of the wildlife species observed during the survey is provided in Appendix D.

SECTION 3.0 – RESULTS

3.1 LITERATURE REVIEW RESULTS

According to the CNDDB, CNPSEI, and other relevant literature and databases, 77 sensitive species, 19 of which are listed as threatened or endangered, have been documented in the *Redlands* and *San Bernardino South* quads. This list of sensitive species and habitats includes any State and/or federally listed threatened or endangered species, CDFW designated Species of Special Concern (SSC) and otherwise Special Animals. "Special Animals" is a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species." The CDFW considers the taxa on this list to be those of greatest conservation need.

An analysis of the likelihood for the occurrence of all CNDDB sensitive species documented in the *Redlands* and *San Bernardino South* quads is provided in Table 2, in Appendix D. This analysis takes into account species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions. According to the databases, no sensitive habitat, including USFWS designated critical habitat, occurs within or adjacent to the project site.

3.1.1 SOILS

After review of USDA Soil Conservation Service and by referencing the USDA NRCS Web Soil Survey (USDA 2021), it was determined that the Project site is located within the San Bernardino County Southwestern Part, California area CA677. Based on the results of the database search, five (5) soils types were observed in the area (Figure 4 in Appendix A):

Hanford coarse sandy loam. 2 to 9 percent slopes (HaC). This soil is well drained with a high capacity to transmit water. This soil consists of alluvium derived from granite, typically ranges in elevation from 150 to 900 feet amsl and is considered prime farmland if irrigated.

Metz coarse sandy loam. 2 to 9 percent slopes (MgC). This soil is somewhat excessively drained with a high capacity to transmit water. This soil consists of alluvium, typically ranges in elevation from 30 to 1,200 feet amsl and is considered prime farmland if irrigated.

San Emigdio fine sandy loam. 0 to 2 percent slopes (ScA). This soil is well drained with a high capacity to transmit water. This soil consists of alluvium derived from sedimentary rock, typically ranges in elevation from 30 to 1,190 feet amsl and is considered prime farmland if irrigated.

San Emigdio fine sandy loam. 2 to 9 percent slopes (SbC). This soil is well drained with a high capacity to transmit water. This soil consists of mixed alluvium derived from igneous, metamorphic and sedimentary rock, typically ranges in elevation from 60 to 2,180 feet amsl and is considered prime farmland if irrigated.

San Emigdio gravelly sandy loam. 2 to 9 percent slopes (SbC). This soil is well drained with a high capacity to transmit water. This soil consists of alluvium derived from sedimentary rock, typically ranges in elevation from 1,000 to 2,000 feet amsl and is considered prime farmland if irrigated.

3.1.2 SPECIAL STATUS SPECIES BACKGROUND

San Bernardino kangaroo rat – Endangered (Federal)

The federally-listed as endangered San Bernardino kangaroo rat (SBKR) is one of three recognized subspecies of Merriam's kangaroo rat (D. merriami) in California. The Merriam's kangaroo rat is a small, burrowing rodent species that can be found within inland valleys and deserts of southwest United States of America and northern Mexico. The Dulzura kangaroo rat (Dipodomys simulans), the Pacific kangaroo rat (Dipodomys agilis) and the Stephens kangaroo rat (Dipodomys stephensi) occur in areas occupied by SBKR, but these other species have a wider habitat range. The SBKR, however, has a restricted southern California distribution, confined to certain inland valley scrub communities and, more particularly, to scrub communities occurring along rivers, streams, and drainages within the San Bernardino, Menifee, and San Jacinto valleys. Most of these drainages have been historically altered due to a variety of reasons including, mining, off-road vehicle use, road and housing development, and flood control efforts. This increased use of river floodplain resources resulted in a reduction in both the amount and quality of habitat available for the SBKR.

The areas which the SBKR occupy are subjected to periodic flooding and hence, the dominant vegetation type (alluvial fan sage scrub) is described in general terms as having three successional phases: pioneer, intermediate, and mature as determined by elevation and distance from the main channel and time since previous flooding (Hanes et al. 1989, p. 187, as cited in USFWS 2009). Vegetation cover generally increases with distance from the active stream channel. The pioneer phase is subject to frequent flood disturbance (Smith 1980, p. 133; Hanes et al. 1989, p. 187, as cited in USFWS 2009). The intermediate phase, defined as the area between the active channel and mature terraces, is subject to periodic flooding at longer intervals. The vegetation on intermediate terraces is relatively open. As alluvial fan scrub vegetation ages in the absence of flooding, the suitability of this habitat for the SBKR declines (McKernan 1997, p. 58, as cited in USFWS 2009).

The USFWS listed the SBKR as endangered on September 24, 1998 and set aside 33,295 acres of critical habitat for the SBKR in 2002. The USFWS then revised that decision in 2008 after a lawsuit and cut the designation down to 7,779 acres in Riverside and San Bernardino counties. On January 10, 2011, a federal court struck down the 2008 designation. The ruling concluded that the USFWS improperly relied on "core habitat" to define critical habitat for the SBKR rather than specifying the physical and biological features essential for the kangaroo rat's conservation, as the law requires. The ruling reinstated the 2002 designation. The 2002 critical habitat rule for SBKR defined four Primary Constituent Elements (PCEs) that are essential to the conservation of SBKR. These PCEs are as follows: 1) Soil series consisting predominantly of sand, loamy sand, sandy loam, or loam; 2) Alluvial sage scrub and associated vegetation, such as coastal sage scrub and chamise chaparral, with a moderately open canopy; 3) River, creek, stream, and wash channels; alluvial fans; floodplains; floodplain benches and terraces; and historic braided

channels that are subject to dynamic geomorphological and hydrological processes typical of fluvial systems within the historical range of the San Bernardino kangaroo rat; and 4) Upland areas proximal to floodplains with suitable habitat.

Burrowing Owl – SSC

The burrowing owl (BUOW) is a state and federal Species of Special Concern (SSC). This owl is a mottled, brownish and sand-colored, dove-sized raptor, with large, yellow eyes, a rounded head lacking ear tufts, white eyebrows, and long legs compared to other owl species. It is a ground-dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather, and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows.

BUOW spends a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. BUOW frequently hunt by hovering in place above the ground and dropping on their prey from above. They feed primarily on insects such as grasshoppers, June beetles, and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31. Up to 11, but typically 7 to 9, eggs are laid in a burrow, abandoned pipe, or other subterranean hollows where incubation is complete in 28-30 days. Young BUOW fledges in 44 days. The BUOW is considered a migratory species in portions of its range, which includes western North America from Canada to Mexico, and east to Texas and Louisiana. BUOW populations in California are considered to be sedentary or locally migratory.

Throughout its range, the BUOW is vulnerable to habitat loss, predation, vehicular collisions, and destruction of burrow sites and the poisoning of ground squirrels (Grinnell and Miller 1944, Zarn 1974, Remsen 1978). BUOW has disappeared from significant portions of their range in the last 15 years and, overall, nearly 60% of the breeding groups of owls known to have existed in California during the 1980s had disappeared by the early 1990s (Burrowing Owl Consortium 1993). The BUOW is not listed under the state or federal Endangered Species Act but is considered both a federal and state Species of Special Concern. The BUOW is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code (CDFG Code #3513 & #3503.5).

Additional Species

There were also 20 additional threatened or endangered species that are found within the *Redlands* and *San Bernardino South* Quads. However, the site is either outside the know range for the species or suitable habitat does not occur within the Project area. Therefore, no further discussion or recommendations are required for the following species:

- marsh sandwort
- Nevin's barberry
- salt marsh bird's-beak

- Stephens' kangaroo rat
- slender-horned spineflower
- southwestern willow flycatcher
- Santa Ana River woollystar
- quino checkerspot butterfly
- Gambel's water cress
- steelhead - southern California DPS
- southern mountain yellow-legged frog
- Delhi Sands flower-loving fly
- tricolored blackbird
- least Bell's vireo
- Crotch bumble bee
- Swainson's hawk
- California black rail
- Santa Ana sucker
- western yellow-billed cuckoo
- coastal California gnatcatcher

3.1.3 JURISDICTIONAL WATERS

Aerial imagery of the site was examined and compared with the surrounding USGS 7.5-minute topographic quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The U.S. Fish and Wildlife Service National Wetland Inventory and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the Soil maps from the U.S. Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2021) were reviewed to identify the soil series on-site and to check if they have been identified regionally as hydric soils. Upstream and downstream connectivity of waterways (if present) was reviewed in the field, on aerial imagery, and topographic maps to determine jurisdictional status. No obvious signs of jurisdictional features were observed during the literature review.

3.1.4 HYDROLOGY AND HYDROLOGIC CONNECTIVITY

Hydrologically, the project site is located within Bunker Hill Hydrologic Sub-Area (HSA 801.52) which comprises a 124,791-acre drainage area within the larger Upper Santa Ana River Hydrologic Area (Hydrologic Unit Code [HUC10] 1807020305) (CalTrans, 2021). The Upper Santa River watershed in Loma Linda is bordered to the north by the West Fork Mojave River, Deep Creek and Bear Creek watersheds, to the east by the Headwaters Santa Ana River and Headwaters Whitewater River watersheds, to the south by the San Gorgonio River and San Timoteo Wash watersheds, and to the west by Lytle Creek and Middle Santa Ana River watersheds. (Figure 5 in Appendix A).

3.2 FIELD STUDY RESULTS

3.2.1 HABITAT

The habitat on-site consists of ruderal vegetation and is dominated by tumbleweed (*Salsola targus*). Portions of the site have been subject to human disturbances and are completely void of vegetation. Additionally, there is signs of disturbance in the form of dumping, foot traffic, and off-road vehicle traffic. A complete list of all plants observed is provided in Table 1 of Appendix D.

3.2.2 WILDLIFE

Several birds were seen or heard during the survey. Species observed or otherwise detected on or in the vicinity of the project site during the surveys included; mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), and California towhee (*Melozone crissalis*). A complete list of all species observed is provided in Table 1 of Appendix D.

The project site is located within a moderately developed area of Loma Linda. The project site has been subject to ongoing disturbance in the form of vegetation management (mowing), foot traffic, vehicle traffic, and domestic dog (*Canis lupus familiaris*) activity. There is no habitat within the proposed project footprint, as well as the immediate surrounding area, that is suitable for the sensitive species identified in the CNDDB search (Table 2 in Appendix D).

3.2.3 SPECIAL STATUS SPECIES

San Bernardino kangaroo rat – Endangered (Federal)

Per the literature review, there is a one documented occurrence with the Project area from 1989. No SBKR have been documented within the Project area since this occurrence. The site is also completely isolated from any known extant SBKR populations by development. Furthermore, it should be that since the 1989 occurrence, large portions of the surrounding land have been developed and San Timoteo Wash, directly adjacent to the Project site, was channelized in December 2003. The portion of the Wash located directly adjacent to the site is currently contains berms to retain water for the purposes of groundwater recharge. And large equipment was observed within the channel, during the site survey, actively removing vegetation and moving sediment.

Although one of the PCEs for this species are present within and/or adjacent the Project site, sandy soils (PCE 1), the natural hydrologic processes typical of the alluvial fan habitat within the area are no longer present. Due to the channelization of nearby San Timoteo Wash and development within the surrounding area, the project area is no longer subject to the normal flood regimes that are conducive to creating the open canopy structure of the pioneer and intermediate stages of RAFSS habitat that may have historically been occupied by SBKR in the project vicinity. The habitat on-site is dominated by tumbleweeds and other non-native species. Furthermore, the project site is subject to ongoing disturbances as noted above. Therefore, it is not likely that the habitat within the project area would be considered suitable to support SBKR. Given the lack of both suitable SBKR habitat and nearby recent extant SBKR occurrences, this species is considered absent from the Project area and the Project is not likely to impact this species.

Burrowing Owl – SSC

The conditions present onsite are marginally suitable for BUOW. California ground squirrels, a burrow surrogate species, were observed on-site. As such a BUOW owl survey was completed. The assessment survey was structured, in part, to detect BUOW. The survey consisted of walking transects spaced to provide 100% visual coverage of the project site. The result of the survey was that no evidence of BUOW was found in the survey area. No burrows of appropriate size, aspect, or shape were located and no BUOW pellets, feathers, or whitewash were found. No burrowing owl individuals were observed.

Although no BUOW individuals were observed, the Project site and adjacent area do contain some habitat that would be considered suitable for BUOW. Therefore, a preconstruction BUOW survey is recommended to avoid any potential project-related impacts to this species.

Designated Critical Habitat

The site is not located within or adjacent to any USFWS designated Critical Habitat. No further action is required.

Nesting Birds

The Project site and immediate surrounding area does contain habitat suitable for nesting birds. Nesting bird surveys should be conducted prior to any construction activities taking place during the nesting season to avoid potentially taking any birds or active nests. In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season (generally March 15th to September 15th), and conducting a worker awareness training. However, if all work cannot be conducted outside of the nesting season, a project-specific Nesting Bird Management Plan can be prepared to determine suitable buffers.

3.2.4 JURISDICTIONAL WATERS

Waters of the United States and Waters of the State

The USACE has the authority to permit the discharge of dredged or fill material in Waters of the U.S. under Section 404 CWA. While the Regional Water Quality Board has authority over the discharge of dredged or fill material in Waters of the State under Section 401 CWA as well as the Porter-Cologne Water Quality Control Act. The Project area was surveyed with 100 percent visual coverage and no drainage features were present on site. However, the proposed project does include a storm drain connection to San Timoteo Wash, a jurisdictional feature. As such, the proposed project would have impacts to a feature subject to Section 404 and 401. Table 1 below details the temporary impacts to San Timoteo Wash as they relate to jurisdiction under Section 404 and 401 while Table 2 below shows the permanent impacts to the wash. The Ordinary High Water Mark Data sheet is included in Appendix E.

Fish and Game Code Section 1602 - State Lake and/or Streambed

The CDFW asserts jurisdiction over any drainage feature that contains a definable bed and bank or associated riparian vegetation. The Project area was surveyed with 100 percent visual coverage and no definable bed or bank features exist on the project site. However, the proposed project does include a storm drain connection to San Timoteo Wash, a jurisdictional feature. As such, the proposed project would have impacts to a feature subject Section 1602. Table 1 below details the temporary impacts to San

Timoteo Wash as they relate to jurisdiction under Section 1602 while Table 2 below shows the permanent impacts to the wash.

Table 1 – Temporary Impacts to San Timoteo Wash

Feature	Bank-Full width (feet)	Length (feet)	Max Channel Depth (feet)	WoUS Corps jurisdiction (acres)	FGC 1600 CDFW jurisdiction (acres)
San Timoteo Wash	444	132	20	0.13	0.17

Table 2 – Permanent Impacts to San Timoteo Wash

Feature	Bank-Full width (feet)	Length (feet)	Max Channel Depth (feet)	WoUS Corps jurisdiction (acres)	FGC 1600 CDFW jurisdiction (acres)
San Timoteo Wash	444	132	20	0.04	0.06

Section 4.0 - CONCLUSIONS AND RECOMMENDATIONS

Based on the literature review and personal observations made in the immediate vicinity, no State and/or federally listed threatened or endangered species are documented/or expected to occur within the Project site. Additionally, no plant species with the California Rare Plant Rank (CRPR) of 1 or 2 were observed on-site or documented to occur on-site in the relevant databases. No other sensitive species were observed within the project area or buffer area.

Jurisdictional Features

The storm drain that is proposed to connect to San Timoteo Wash, a jurisdictional feature, will cause impacts to areas under the jurisdiction of the US Army Corps of Engineers, the Santa Ana Regional Water Quality Control Board, and the California Department Fish and Wildlife. As such this portion of the Project will need to obtain a 404 permit from the US Army Corps of Engineers, a 401 Permit from the Santa Ana Regional Water Quality Board, and a 1602 permit from the California Department of Fish and Wildlife.

Burrowing Owl

A Pre-construction Burrowing Owl Survey shall be conducted by a qualified biologist at least 30 days prior to any Project activities, at any time of year. Surveys shall be completed following the recommendations and guidelines provided within the *Staff Report on Burrowing Owl Mitigation* (CDFG, March 2012) or most recent version by a qualified biologist. If an active burrowing owl burrow is detected within any Project disturbance area, or within a 500-foot buffer of the disturbance area, a 300- foot radius buffer zone surrounding the burrow shall be flagged, and no impacts to soils or vegetation shall be permitted while the burrow remains active or occupied. Disturbance-free buffers may be modified based on site-specific conditions in consultation with CDFW. The qualified biologist shall monitor active burrows daily and will increase buffer sizes as needed if owls show signs of disturbance. If active burrowing owl burrows are located within any work area and impact cannot be avoided, a qualified biologist shall submit a burrowing

owl exclusion plan to CDFW for review and approval. The burrowing owl exclusion plan shall include permanent compensatory mitigation consistent with the recommendations in the *Staff Report on Burrowing Owl Mitigation* such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. Passive relocation shall take place outside the nesting season (February 1 to August 31).

Nesting Birds

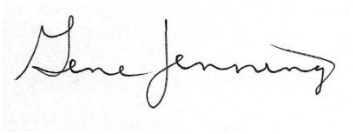
Since there is some habitat within the project site and adjacent area that is suitable for nesting birds in general, a pre-construction nesting bird survey is recommended before the commencement of any Project-related work activities within nesting season (March 15 through September 15) to avoid any potential Project-related impacts to nesting birds.

Certification

I hereby certify that the statements furnished herein, and in the attached exhibits present data and information required for this analysis to the best of my ability, and the facts, statements, and information presented are true and correct to the best of my knowledge and belief. This report was prepared in accordance with professional requirements and standards. Fieldwork conducted for this assessment was performed by me. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project proponent and that I have no financial interest in the project.

Please do not hesitate to contact me at 909-534-4547 should you have any questions or require further information.

Sincerely,



Gene Jennings
Principal/Regulatory Specialist

Appendices:

- Appendix A – Figures
- Appendix B – Site Photos
- Appendix C – Regulatory Framework
- Appendix D – Tables
- Appendix E – Ordinary High Water Mark Datasheet

Section 5 – REFERENCES

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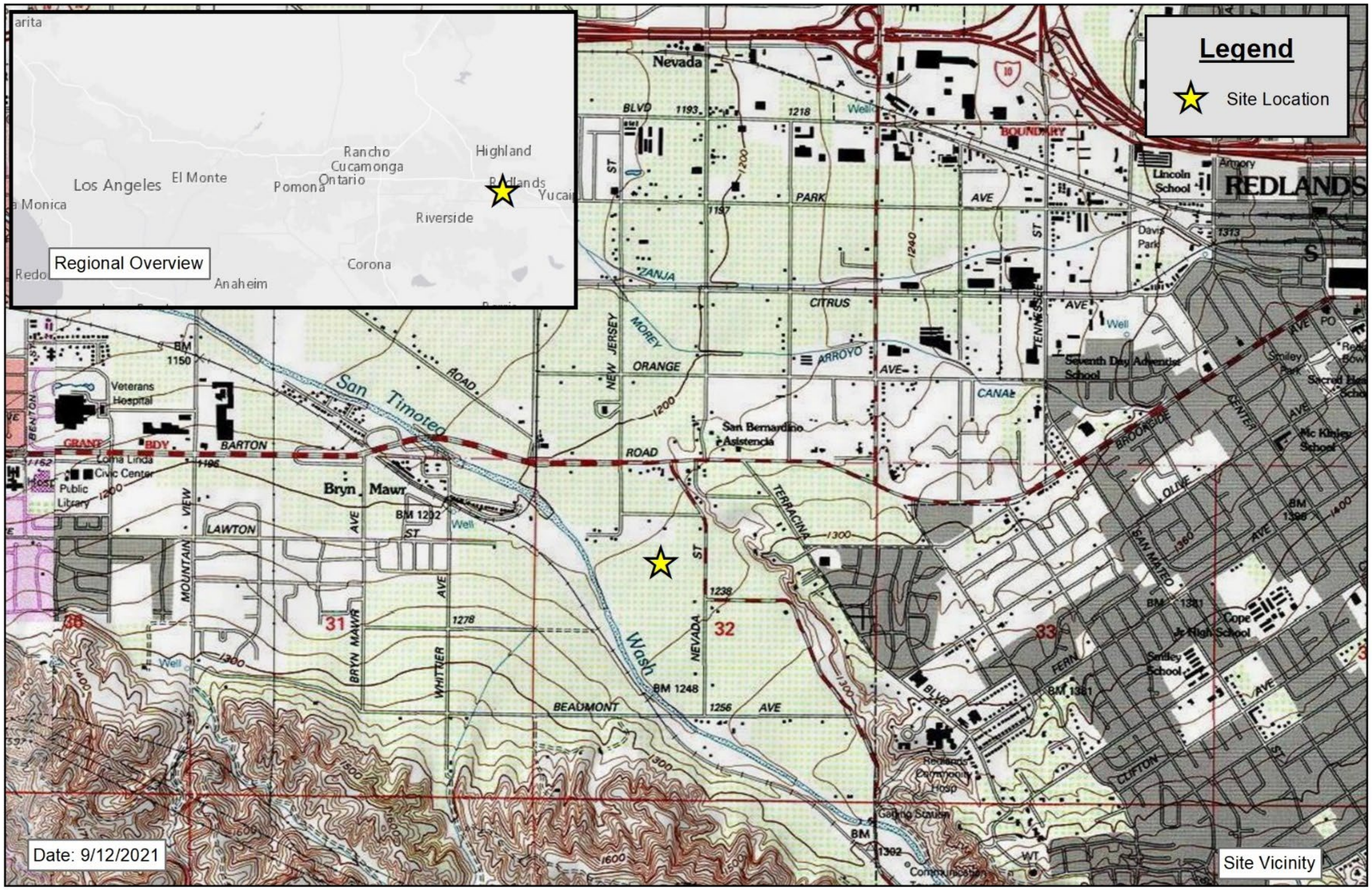
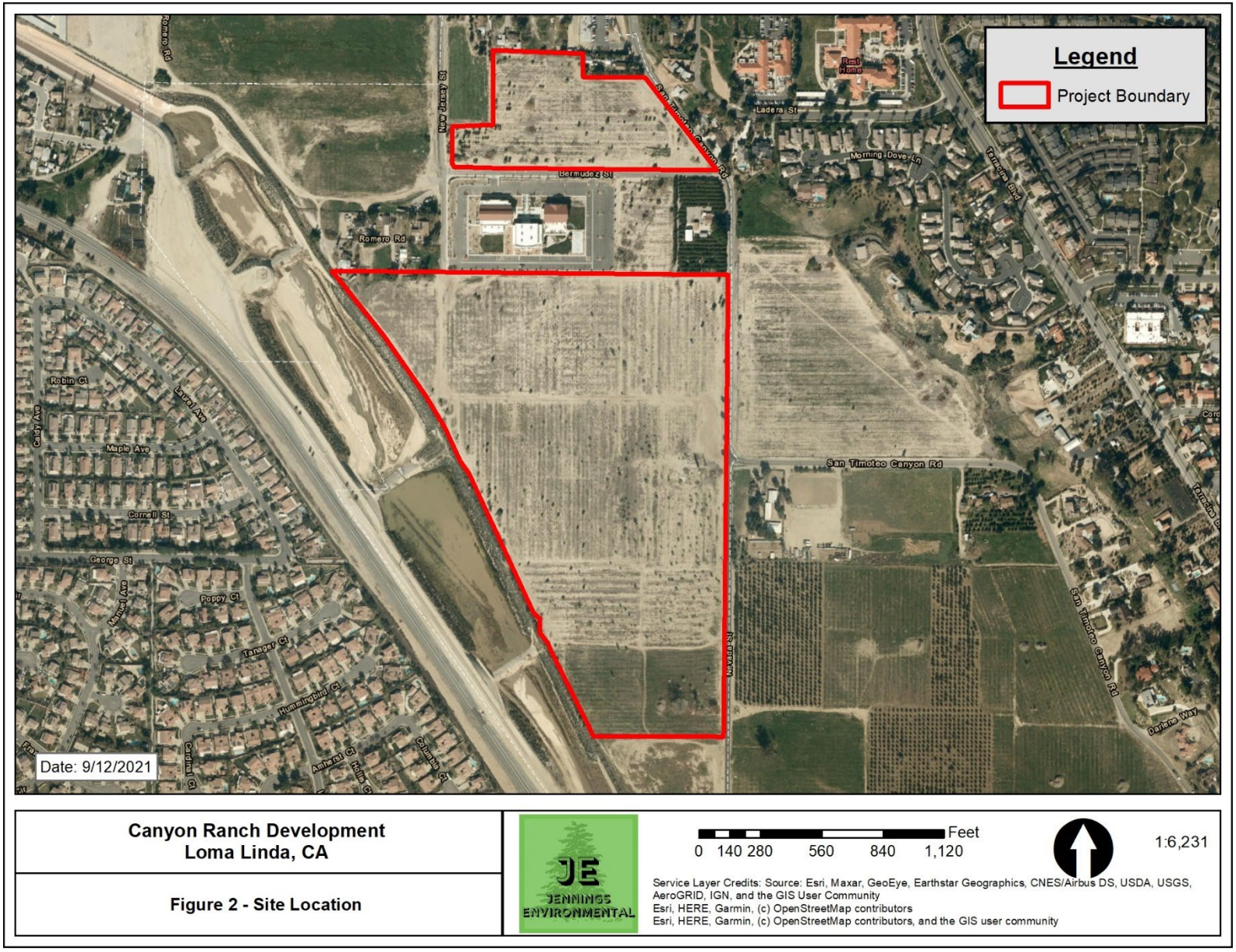
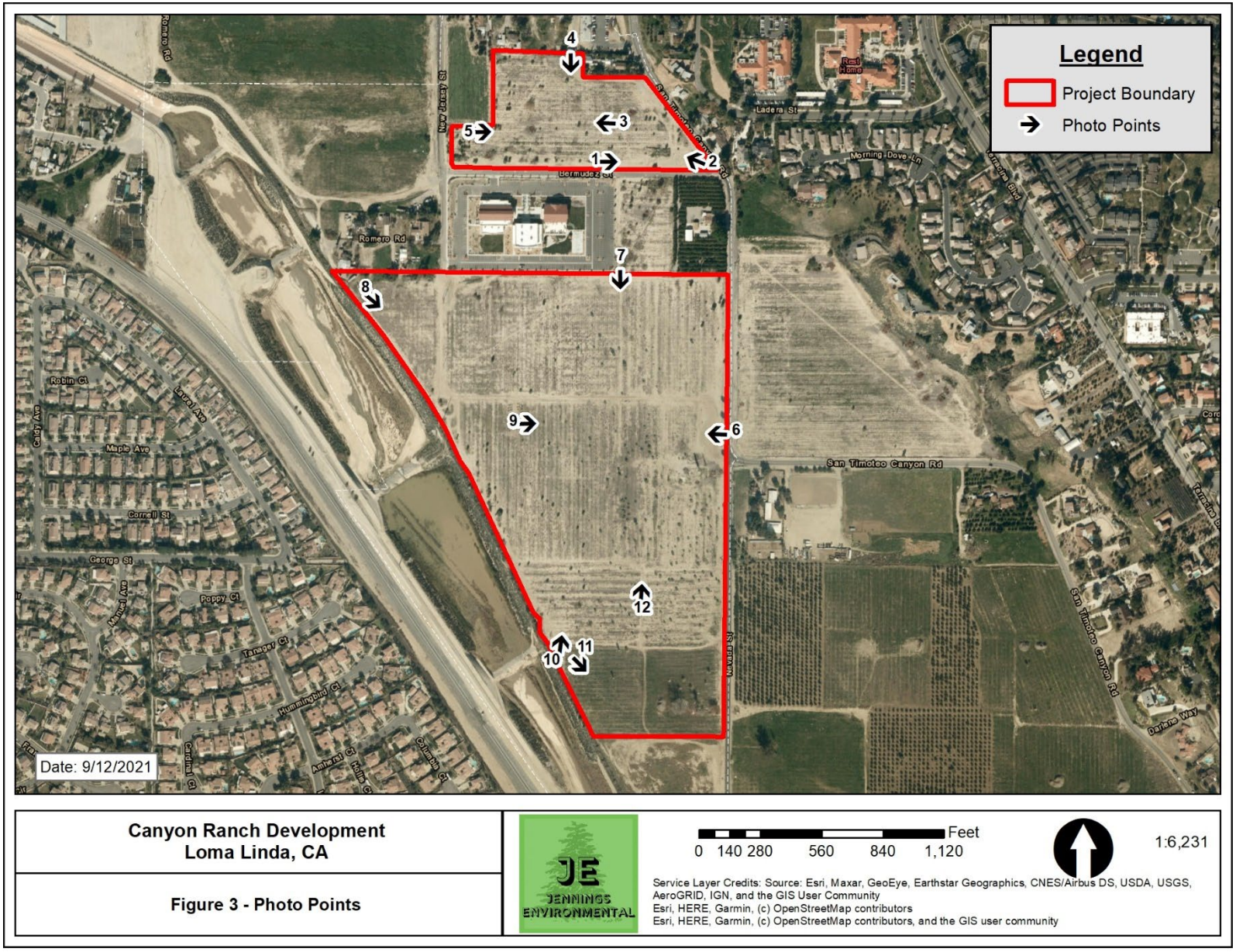
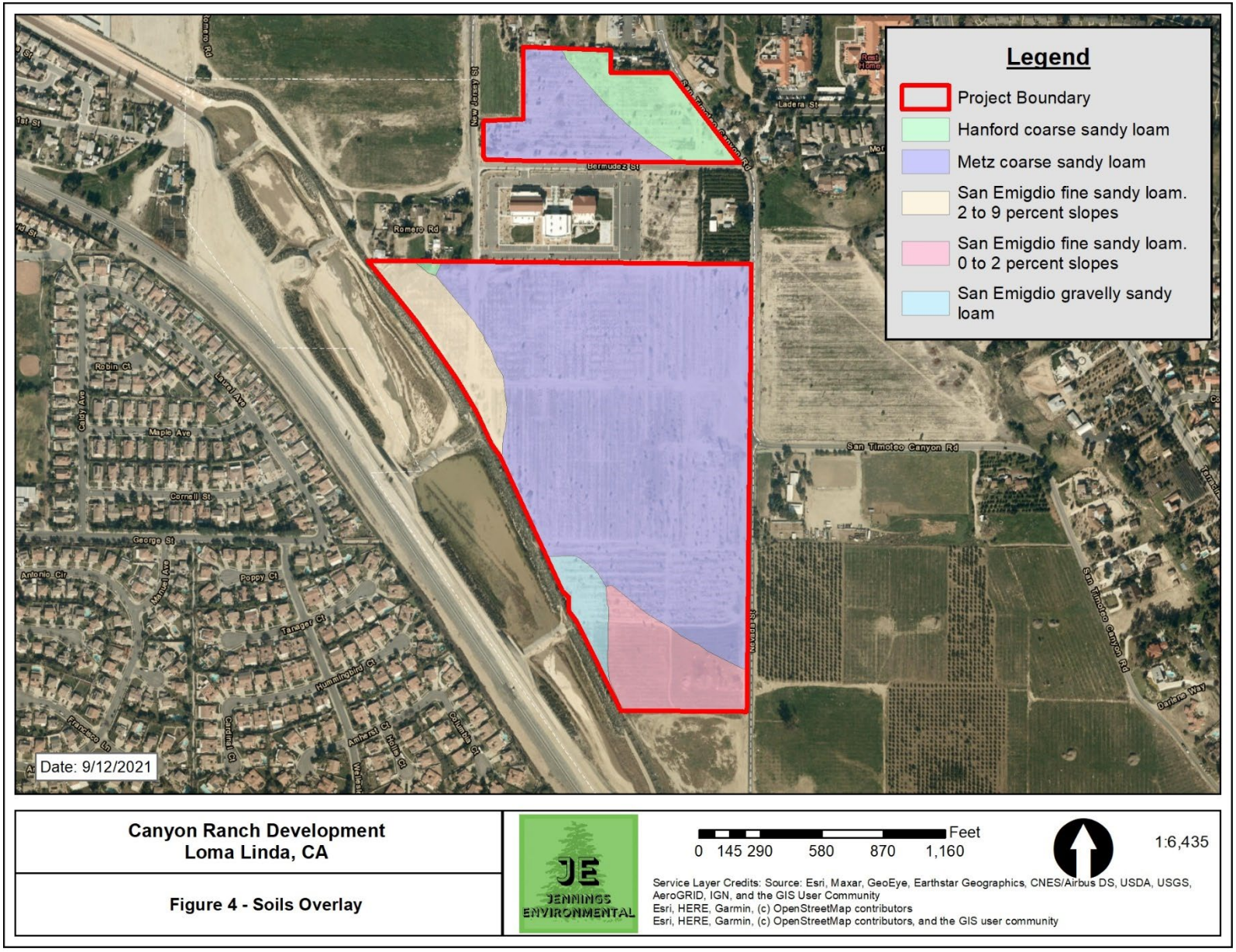
Appendix A - Figures



Canyon Ranch Development **Loma Linda, CA**	0 0.1 0.2 0.4 0.6 0.8 Miles	1:24,000
Figure 1 - Regional Overview and Site Vicinity	Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community Copyright:© 2013 National Geographic Society, i-cubed	


Legend
Project Boundary
Romero Rd
New Jersey St
Bermudez St
Ladera St
Morning Dove Ln
Tournament Blvd
San Timoteo Canyon Rd
Robin Ct
Laural Ave
Maple Ave
Cornell St
George St
Poppy Ct
Tanager Ct
Hummingbird Ct
Cardinal Ct
Columbia St
Date: 9/12/2021
Canyon Ranch Development
Loma Linda, CA
Figure 2 - Site Location
JE
JENNINGS ENVIRONMENTAL
Feet
0 140 280 560 840 1,120
1:6,231
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Legend
Project Boundary
Photo Points
1
2
3
4
5
6
7
8
9
10
11
12
Date: 9/12/2021
Canyon Ranch Development
Loma Linda, CA
Figure 3 - Photo Points
JE
JENNINGS ENVIRONMENTAL
Feet
0 140 280 560 840 1,120
1:6,231
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Legend
Project Boundary
Hanford coarse sandy loam
Metz coarse sandy loam
San Emigdio fine sandy loam. 2 to 9 percent slopes
San Emigdio fine sandy loam. 0 to 2 percent slopes
San Emigdio gravelly sandy loam
Bermudez St
Romero Rd
San Timoteo Canyon Rd
Ladera St
Robin Ct
Maple Ave
Cornell St
George St
Poppy Ct
Date: 9/12/2021
Canyon Ranch Development
Loma Linda, CA
Figure 4 - Soils Overlay
JE
JENNINGS ENVIRONMENTAL
Feet
0 145 290 580 870 1,160
1:6,435
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
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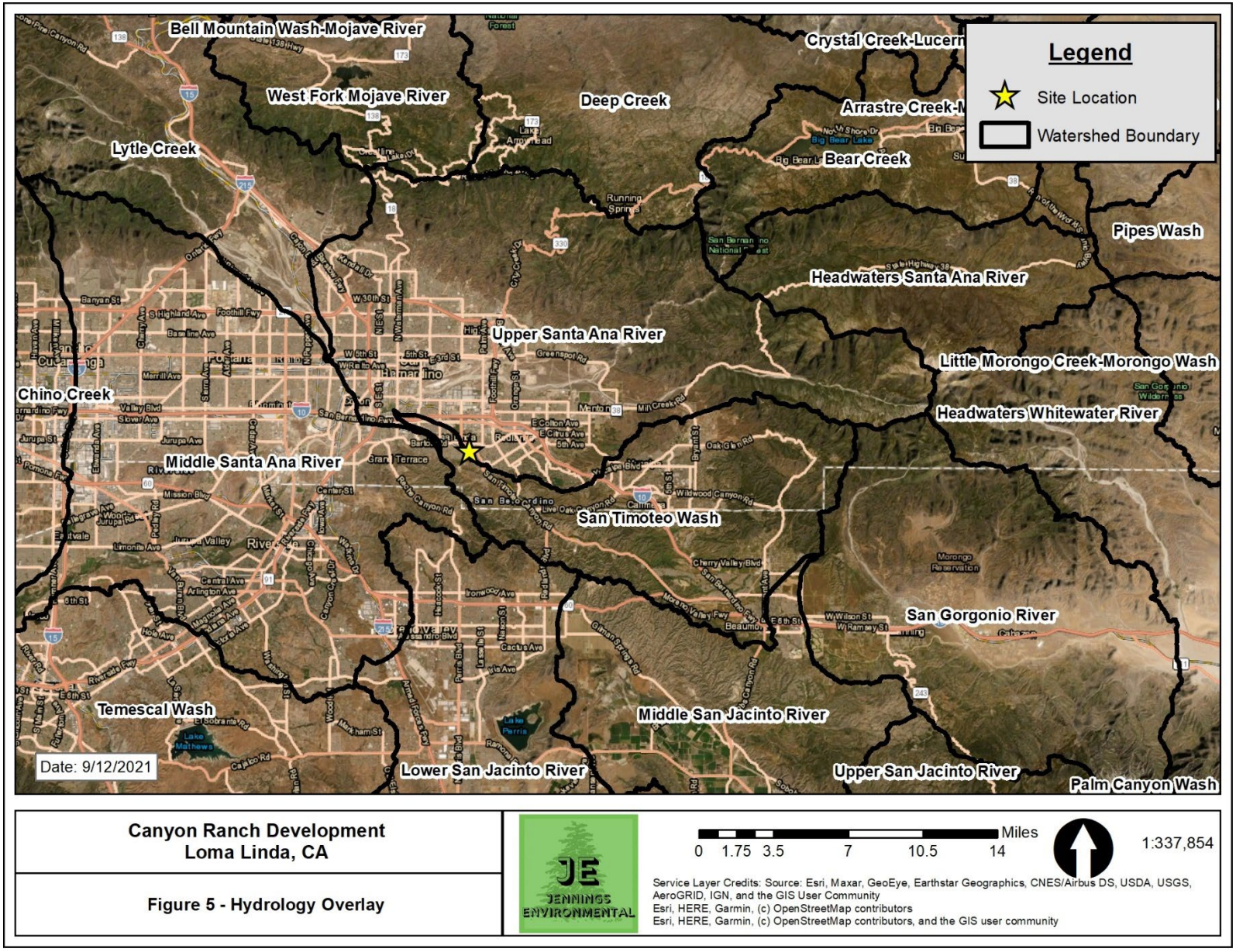
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Bell Mountain Wash-Mojave River
West Fork Mojave River
Lytle Creek
Deep Creek
Crystal Creek-Lucern
Arrastre Creek-M
Bear Creek
Pipes Wash
Headwaters Santa Ana River
Upper Santa Ana River
Little Morongo Creek-Morongo Wash
Chino Creek
Headwaters Whitewater River
Middle Santa Ana River
San Timoteo Wash
San Gorgonio River
Temescal Wash
Middle San Jacinto River
Lower San Jacinto River
Upper San Jacinto River
Palm Canyon Wash
Legend
Site Location
Watershed Boundary
Date: 9/12/2021
Canyon Ranch Development
Loma Linda, CA
Figure 5 - Hydrology Overlay
JE
JENNINGS ENVIRONMENTAL
0 1.75 3.5 7 10.5 14
Miles
1:337,854
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
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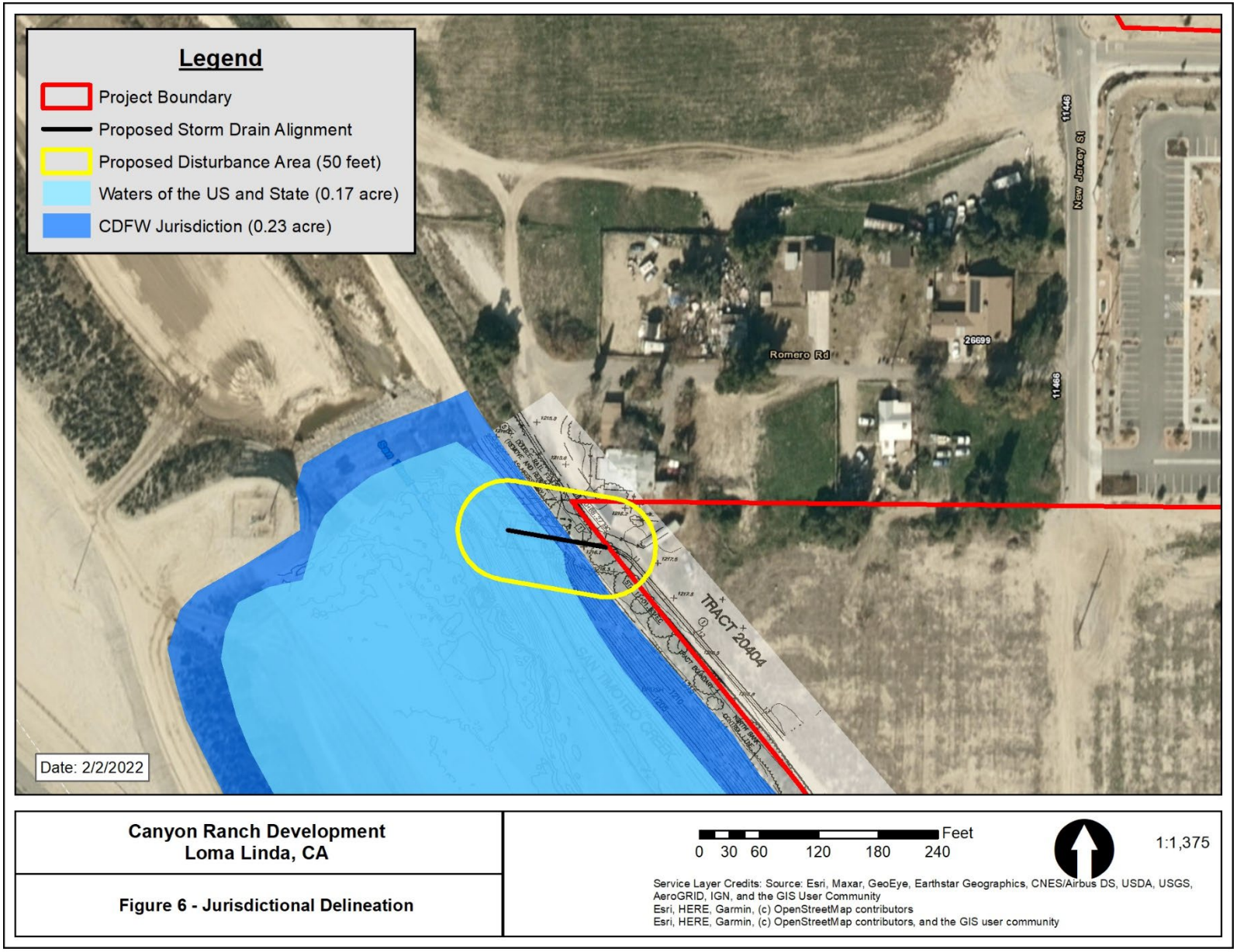

Legend
Project Boundary
Proposed Storm Drain Alignment
Proposed Disturbance Area (50 feet)
Waters of the US and State (0.17 acre)
CDFW Jurisdiction (0.23 acre)
Romero Rd
New Jersey St
11443
11466
26699
TRACT 20404
Date: 2/2/2022
Canyon Ranch Development
Loma Linda, CA
Figure 6 - Jurisdictional Delineation
0 30 60 120 180 240
Feet
1:1,375
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Appendix B - Photos

	Photo 1 – Southern edge of parcel, facing east. Showing tumbleweed and bare ground.
	Photo 2 – Southeastern portion of parcel, facing northwest. Showing tumbleweed and bare ground.

	Photo 3 – Center portion of parcel, facing west. Showing dense tumbleweed.
	Photo 4 – Northern portion of parcel, facing south. Showing tumbleweed and bare ground.

	Photo 5 – Western portion of parcel, facing east. Showing tumbleweed and bare ground with a canary date palm tree.
	Photo 6 – Eastern portion of parcel, facing west. Showing tumbleweed and bare ground.

	Photo 7 – Northern portion of parcel, facing south. Showing tumbleweed, bare ground and tree of heaven.
	Photo 8 – Northwestern portion of parcel, facing southeast. Showing Schismus grass ssp. and bare ground.

	Photo 9 – Central portion of parcel, facing east. Showing tumbleweed and bare ground.
	Photo 10 – Southern portion of parcel, facing north. Showing tumbleweed, trash and bare ground.

	Photo 11 – Southwestern portion of parcel, facing southeast. Showing tumbleweed, mustard and bare ground.
	Photo 12 – Central portion of parcel, facing North. Showing tumbleweed and bare ground.

Appendix C – Regulatory Framework

1.1 FEDERAL JURISDICTION

1.1.1 United States Army Corps of Engineers

Pursuant to Section 404 of the CWA, the United States Army Corps of Engineers (USACE) regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined by 33 Code of Federal Regulations (CFR) Part 328 and currently includes: (1) all navigable waters (including all waters subject to the ebb and flow of the tide), (2) all interstate waters and wetlands, (3) all other waters (e.g., lakes, rivers, intermittent streams) that could affect interstate or foreign commerce, (4) all impoundments of waters mentioned above, (5) all tributaries to waters mentioned above, (6) the territorial seas, and (7) all wetlands adjacent to waters mentioned above. Waters of the United States do not include (1) waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (CWA), and (2) prior converted cropland. Waters of the United States typically are separated into two types: (1) wetlands and (2) "other waters" (non-wetlands) of the United States.

Wetlands are defined by 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support … a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987, USACE published a manual (1987 Wetland Manual) to guide its field personnel in determining jurisdictional wetland boundaries. This manual was amended in 2008 to the USACE 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (2008 Arid West Supplement). Currently, the 1987 Wetland Manual and the 2008 Arid West Supplement provide the legally accepted methodology for identification and delineation of USACE-jurisdictional wetlands in southern California.

In the absence of wetlands, the limits of USACE jurisdiction in nontidal waters, including intermittent Relatively Permanent Water (RPW) streams, extend to the Ordinary High Water Mark (OHWM), which is defined by 33 CFR 328.3(e) as:

> … that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

On January 9, 2001, the U.S. Supreme Court ruled (in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers) (SWANCC) that USACE jurisdiction does not extend to previously regulated isolated waters, including but not limited to isolated ponds, reservoirs, and wetlands. Examples of isolated waters that are affected by this ruling include vernal pools, stock ponds, lakes (without outlets), playa lakes, and desert washes that are not tributary to navigable or interstate waters or to other jurisdictional waters. A joint legal memorandum by EPA and USACE was signed on January 15, 2003.

In May 2007, USACE and EPA jointly published and authorized the use of the Jurisdictional Determination Form Instructional Guidebook (USACE 2007). The form and guidebook define how to determine if an area is USACE jurisdictional and if a significant nexus exists per the Rapanos decision. A nexus must have more than insubstantial and speculative effects on the downstream TNW to be considered a significant nexus. This guidebook is updated by the 2008 Arid West Supplement, the 2010 Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, and the 2011 Ordinary High Flows and the Stage-Discharge Relationship in the Arid West Region.

A joint guidance by EPA and USACE was issued on June 5, 2007, and revised on December 2, 2008, is consistent with the Supreme Court's decision in the consolidated cases Rapanos v. United States and Carabell v. United States (126 S. Ct. 2208 [2006]) (Rapanos), which addresses the jurisdiction over waters of the United States under the CWA (33 U.S.C. §1251 et seq.). A draft guidance was circulated in April 2011 to supercede both the 2003 SWANCC guidance and 2008 Rapanos decision; however, this guidance is not finalized and lacks the force of law.

USACE will continue to assert jurisdiction over Traditionally Navigable Waters (TNWs), wetlands adjacent to TNW, non-navigable tributaries of TNW that are Relatively Permanent Waters (RPW) where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months), and wetlands that directly abut such tributaries.

USACE generally will not assert jurisdiction over swales or erosional features (e.g., gullies or small washes characterized by low volume, infrequent, or short duration flow) or nontidal drainage ditches (including roadside ditches) that are (1) excavated wholly in and draining only uplands and (2) that do not carry a relatively permanent flow of water. USACE defines a drainage ditch as:

> A linear excavation or depression constructed for the purpose of conveying surface runoff or groundwater from one area to another. An "upland drainage ditch" is a drainage ditch constructed entirely in uplands (i.e., not in waters of the United States) and is not a water of the United States, unless it becomes tidal or otherwise extends the ordinary high water line of existing waters of the United States.

Furthermore, USACE generally does not consider "[a]rtificially irrigated areas which would revert to upland if the irrigation ceased" to be subject to their jurisdiction. Such irrigation ditches are linear excavations constructed for the purpose of conveying agricultural water from the adjacent fields. Therefore, such agricultural ditches are not considered to be subject to USACE jurisdiction.

USACE will use fact-specific analysis to determine whether waters have a significant nexus with (1) TNW for nonnavigable tributaries that are not relatively permanent (non-RPW); (2) wetlands adjacent to nonnavigable tributaries that are not relatively permanent; and (3) wetlands adjacent to, but that do not directly abut, a relatively permanent nonnavigable tributary. According to USACE, "a significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to

determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters," including consideration of hydrologic and ecologic factors. A primary component of this determination lies in establishing the connectivity or lack of connectivity of the subject drainages to a TNW.

1.2 STATE JURISDICTION

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA as well as the California Porter-Cologne Water Quality Control Act (Porter-Cologne; California Water Code, Division 7, §13000 et seq.). Waters of the State are defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050(e)). Waters of the State broadly includes all waters within the State's boundaries (public or private), including waters in both natural and artificial channels.

1.2.1 Regional Water Quality Control Board

Under Porter-Cologne, the State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Boards (RWQCB) regulate the discharge of waste into waters of the State. Discharges of waste include "fill, any material resulting from human activity, or any other 'discharge' that may directly or indirectly impact 'waters of the state.'" Porter-Cologne reserves the right for the State to regulate activities that could affect the quantity and/or quality of surface and/or groundwaters, including isolated wetlands, within the State. Wetlands were defined as waters of the State if they demonstrated both wetland hydrology and hydric soils. Waters of the State determined to be jurisdictional for these purposes require, if impacted, waste discharge requirements (WDRs).

When an activity results in fill or discharge directly below the OHWM of jurisdictional waters of the United States (federal jurisdiction), including wetlands, a CWA Section 401 Water Quality Certification is required. If a proposed project is not subject to CWA Section 401 certification but involves activities that may result in a discharge to waters of the State, the project may still be regulated under Porter-Cologne and may be subject to waste discharge requirements. In cases where waters apply to both CWA and Porter-Cologne, RWQCB may consolidate permitting requirements to one permit.

1.2.2 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other

aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation" (California Code of Regulations, Title 14, Section 1.72). The jurisdiction of CDFW may include areas in or near intermittent streams, ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams that are indicated on USGS maps, watercourses that may contain subsurface flows, or within the flood plain of a water body. CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW limits of jurisdiction typically include the maximum extents of the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

In a CDFW guidance of stream processes and forms in dryland watersheds (Vyverberg 2010), streams are identified as having one or more channels that may all be active or receive water only during some high flow event. Subordinate features, such as low flow channels, active channels, banks associated with secondary channels, floodplains, and stream-associated vegetation, may occur within the bounds of a single, larger channel. The water course is defined by the topography or elevations of land that confine a stream to a definite course when its waters rise to their highest level. A watercourse is defined as a stream with boundaries defined by the maximal extent or expression on the landscape even though flow may otherwise be intermittent or ephemeral.

Artificial waterways such as ditches (including roadside ditches), canals, aqueducts, irrigation ditches, and other artificially created water conveyance systems also may be under the jurisdiction of CDFW. CDFW may claim jurisdiction over these features based on the presence of habitat characteristics suitable to support aquatic life, riparian vegetation, and/or stream-dependent terrestrial wildlife. As with natural waterways, the limit of CDFW jurisdiction of artificial waterways includes the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

CDFW does not have jurisdiction over wetlands but has jurisdiction to protect against a net loss of wetlands. CDFW supports the wetland criteria recognized by USFWS; one or more indicators of wetland conditions must exist for wetlands conditions to be considered present. The following is the USFWS accepted definition of a wetland:

> Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the lands supports hydrophytes, (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated withwater or covered by shallow water at some time during the growing season of each year (Cowardin et al. 1979).

In A Clarification of the U.S. Fish and Wildlife Service's Wetland Definition (Tiner 1989), the USFWS definition was further clarified "that in order for any area to be classified as wetland by the Service, the area must be periodically saturated or covered by shallow water, whether wetland vegetation and/or hydric soils are present or not; this hydrologic requirement is

addressed in the first sentence of the definition." When considering whether an action would result in a net loss of wetlands, CDFW will extend jurisdiction to USFWS-defined wetland conditions where such conditions exist within the riparian vegetation that is associated with a stream or lake and does not depend on whether those features meet the three-parameter USACE methodology of wetland determination. If impacts to wetlands under the jurisdiction of CDFW are unavoidable, a mitigation plan will be implemented in coordination with CDFW to support the CDFW policy of "no net loss" of wetland habitat.

Appendix D – Tables

Table 1. Species Observed On-Site

Common Name	Scientific Name
Plants	
Canary date palm tree	*Phoenix canariensis*
Tumbleweed	*Salsola tragus*
Mexican fan palm	*Washingtonia robusta*
Schismus grasses	*Schismus ssp.*
Wall barley	*Hordeum murinum L. ssp. murinum*
Castor bean	*Ricinus communis*
Peruvian pepper tree	*Schinus molle*
Wild tarragon	*Artemisia dracunculus*
Mulefat	*Baccharis salicifolia*
Fig tree	*Ficus carica*
Mediterranean mustard	*Hirschfeldia incana*
Jimson weed	*Datura stramonium*
Stinknet	*Oncosiphon pilulifer*
Brittle bush	*Encelia farinosa*
Italian cypress	*Cupressus sempervirens*
Orange tree	*Citrus sinensis*
Slender wild oat	*Avena barbata*
Foxtail brome	*Bromus madritensis*
Mammals	
California ground squirrel	*Otospermophilus beecheyi*
Desert cottontail	*Sylvilagus audubonii*
Birds	
Anna's humming bird	*Calypte anna*
Mourning dove	*Zenaida macroura*
California towhee	*Melozone crissalis*
Western kingbird	*Tyrannus verticalis*
Northern mocking bird	*Mimus polyglottos*

Table 2 – CNDDB Potential to Occur for the *Redlands* and *San Bernardino South* USGS 7.5 minute Quadrangles

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Accipiter cooperii	Cooper's hawk	None, None	G5, S4, CDFW-WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Agelaius tricolor	tricolored blackbird	None, None	G1G2, S1S2, CDFW-SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None, None	G5T3, S3, CDFW-WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Anniella stebbinsi	Southern California legless lizard	None, None	G3, S3, CDFW-SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Antrozous pallidus	pallid bat	None, None	G4, S3, CDFW-SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Arenaria paludicola	marsh sandwort	None, None	G1, S1, 1B.1	Marshes and swamps. Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Arizona elegans occidentalis	California glossy snake	None, None	G5T2, S2, CDFW-SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Artemisiospiza belli belli	Bell's sage sparrow	None, None	G5T2T3, S3, CDFW-WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Aspidoscelis hyperythra	orange-throated whiptail	None, None	G5, S2S3, CDFW-WL	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Aspidoscelis tigris stejnegeri	coastal whiptail	None, None	G5T5, S3, CDFW-SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Astragalus hornii var. hornii	Horn's milk-vetch	None, None	GUT1, S1, 1B.1	Meadows and seeps, playas. Lake margins, alkaline sites. 75-350 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Athene cunicularia	burrowing owl	None, None	G4, S3, CDFW-SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	There are portions of the site that contain marginally suitable habitat for this species. This spcies **was not** observe during the site survey. 30-day pre-construction surveys are recommended.
Berberis nevinii	Nevin's barberry	None, None	G1, S1, 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub. On steep, N-facing slopes or in low grade sandy washes. 90-1590 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Bombus crotchii	Crotch bumble bee	None, None	G3G4, S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Buteo swainsoni	Swainson's hawk	None, None	G5, S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Calochortus plummerae	Plummer's mariposa-lily	None, None	G4, S4, 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Carex comosa	bristly sedge	None, None	G5, S2, 2B.1	Marshes and swamps, coastal prairie, valley and foothill grassland. Lake margins, wet places; site below sea level is on a Delta island. -5-1010 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Catostomus santaanae	Santa Ana sucker	None, None	G1, S1	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Centromadia pungens ssp. laevis	smooth tarplant	None, None	G3G4T2, S2, 1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None, None	G5T3T4, S3S4, CDFW-SSC	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	None, None	G4?T1, S1, 1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat. 0-10 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Chorizanthe parryi var. parryi	Parry's spineflower	None, None	G3T2, S2, 1B.1	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	None, None	G5T2T3, S1, CDFW-SSC	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Coleonyx variegatus abbotti	San Diego banded gecko	None, None	G5T5, S1S2, CDFW-SSC	Coastal & cismontane Southern California. Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Crotalus ruber	red-diamond rattlesnake	None, None	G4, S3, CDFW-SSC	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	None, None	G5T4?, SH, 2B.2	Marshes and swamps (freshwater). Freshwater marsh. 15-280 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Dipodomys merriami parvus	San Bernardino kangaroo rat	None, None	G5T1, S1, CDFW-SSC	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Dipodomys stephensi	Stephens' kangaroo rat	None, None	G2, S2	Primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Dodecahema leptoceras	slender-horned spineflower	None, None	G1, S1, 1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Empidonax traillii extimus	southwestern willow flycatcher	None, None	G5T2, S1	Riparian woodlands in Southern California.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Eremophila alpestris actia	California horned lark	None, None	G5T4Q, S4, CDFW-WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	None, None	G4T1, S1, 1B.1	Coastal scrub, chaparral. In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Eugnosta busckana	Busck's gallmoth	None, None	G1G3, SH	Coastal dunes | Coastal scrub	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Eumops perotis californicus	western mastiff bat	None, None	G4G5T4, S3S4, CDFW-SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Euphydryas editha quino	quino checkerspot butterfly	None, None	G5T1T2, S1S2	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Falco columbarius	merlin	None, None	G5, S3S4, CDFW-WL	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches. Clumps of trees or windbreaks are required for roosting in open country.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Galium californicum ssp. primum	Alvin Meadow bedstraw	None, None	G5T2, S2, 1B.2	Chaparral, lower montane coniferous forest. Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest-chaparral ecotone. Granitic, sandy soils. 1460-1830 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Gila orcuttii	arroyo chub	None, None	G2, S2, CDFW-SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	None, None	G5TX, SX, 1A	Marshes and swamps (coastal salt and freshwater). 35-1525 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Horkelia cuneata var. puberula	mesa horkelia	None, None	G4T1, S1, 1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 15-1645 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Icteria virens	yellow-breasted chat	None, None	G5, S3, CDFW-SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Imperata brevifolia	California satintail	None, None	G4, S3, 2B.1	Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 3-1495 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Lanius ludovicianus	loggerhead shrike	None, None	G4, S4, CDFW-SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Lasiurus xanthinus	western yellow bat	None, None	G4G5, S3, CDFW-SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Laterallus jamaicensis coturniculus	California black rail	None, None	G3G4T1, S1, CDFW-SSC	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	None, None	G5T3, S3, 4.3	Chaparral, coastal scrub. Dry soils, shrubland. 4-1435 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None, None	G5T3T4, S3S4, CDFW-SSC	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Lycium parishii	Parish's desert-thorn	None, None	G4, S1, 2B.3	Coastal scrub, Sonoran desert scrub. -3-570 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Malacothamnus parishii	Parish's bush-mallow	None, None	GXQ, SX, 1A	Chaparral, coastal sage scrub. In a wash. 305-455 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Monardella pringlei	Pringle's monardella	None, None	GX, SX, 1A	Coastal scrub. Sandy hills. 300-400 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Nasturtium gambelii	Gambel's water cress	None, None	G1, S1, 1B.1	Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 m.	
Neolarra alba	white cuckoo bee	None, None	GH, SH	Known only from localities in Southern California. Cleptoparasitic in the nests of perdita bees.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Neotoma lepida intermedia	San Diego desert woodrat	None, None	G5T3T4, S3S4, CDFW-SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Nyctinomops femorosaccus	pocketed free-tailed bat	None, None	G5, S3, CDFW-SSC	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	None, None	G5T1Q, S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Onychomys torridus ramona	southern grasshopper mouse	None, None	G5T3, S3, CDFW-SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None, None	G5T2, S1S2, CDFW-SSC	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Phrynosoma blainvillii	coast horned lizard	None, None	G3G4, S3S4, CDFW-SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Polioptila californica californica	coastal California gnatcatcher	None, None	G4G5T3Q, S2, CDFW-SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Rana muscosa	southern mountain yellow-legged frog	None, None	G1, S1, CDFW-WL	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, Apr 2014, effective Jun 30, 2014. Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	None, None	G1T1, S1	Found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation. Oviposition req. shade.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	None, None	G5T1, S1	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Ribes divaricatum var. parishii	Parish's gooseberry	None, None	G5TX, SX, 1A	Riparian woodland. Salix swales in riparian habitats. 65-300 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	None, None	G1, S1.1	Coastal scrub	This habitat is **not present** within the Project boundary.
Senecio aphanactis	chaparral ragwort	None, None	G3, S2, 2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 20-1020 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Setophaga petechia	yellow warbler	None, None	G5, S3S4, CDFW-SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Sidalcea neomexicana	salt spring checkerbloom	None, None	G4, S2, 2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3-2380 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	None, None	G4, S4	Riparian forest	This habitat is **not present** within the Project boundary.
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	None, None	G3, S3.2	Riparian forest	This habitat is **not present** within the Project boundary.
Southern Riparian Scrub	Southern Riparian Scrub	None, None	G3, S3.2	Riparian scrub	This habitat is **not present** within the Project boundary.
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	None, None	G4, S4	Riparian woodland	This habitat is **not present** within the Project boundary.
Spea hammondii	western spadefoot	None, None	G2G3, S3, CDFW-SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Sphenopholis obtusata	prairie wedge grass	None, None	G5, S2, 2B.2	Cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Symphyotrichum defoliatum	San Bernardino aster	None, None	G2, S2, 1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Taxidea taxus	American badger	None, None	G5, S3, CDFW-SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Thamnophis hammondii	two-striped gartersnake	None, None	G4, S3S4, CDFW-SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Vireo bellii pusillus	least Bell's vireo	None, None	G5T2, S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Coding and Terms

E = Endangered T = Threatened C = Candidate FP = Fully Protected WL = Watch List SSC = Species of Special Concern R = Rare

State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."

State Fully Protected: The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Global Rankings (Species or Natural Community Level):

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure – Common; widespread and abundant.
? = Uncertainty in the exact status of an element (could move up or down one direction from current rank)

Subspecies Level: Taxa which are subspecies or varieties receive a taxon rank (T-rank**)** attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa.* The T-rank refers only to the global condition of ssp. *phaea*.

State Ranking:

S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.
S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.
S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.
S5 = Secure – Common, widespread, and abundant in the State.

California Rare Plant Rankings (CNPS List):

1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
1B = Plants rare, threatened, or endangered in California and elsewhere.
2A = Plants presumed extirpated in California, but common elsewhere.
2B = Plants rare, threatened, or endangered in California, but more common elsewhere.
3 = Plants about which more information is needed; a review list.
4 = Plants of limited distribution; a watch list.

Threat Ranks:

.1 = Seriously threatened in California (over 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)

Appendix E – Ordinary High Water Mark Datasheet

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Canyon Ranch Development
Project Number:
Stream: San Timoteo Wash
Investigator(s):

Date: 8-27-2021 **Time:** 0900
Town: Loma Linda **State:** CA
Photo begin file#: **Photo end file#:**

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☒ / N ☐ Is the site significantly disturbed?

Location Details:

Projection: WGS 84 **Datum:**
Coordinates: 34.044323° -117.223334°

Potential anthropogenic influences on the channel system:

The site is a maintained flood control channel.

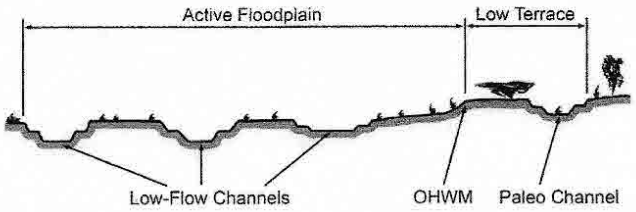
Brief site description:

The bottom of the channel is unvegetated as it is currently maintained.

Checklist of resources (if available):

- ☒ Aerial photography
  Dates:
- ☒ Topographic maps
- ☐ Geologic maps
- ☒ Vegetation maps
- ☒ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☐ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

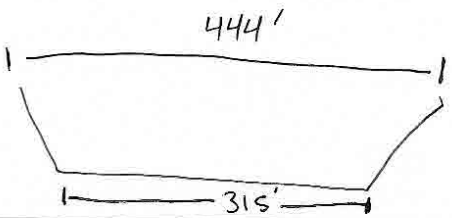


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☒ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

Project ID: **Cross section ID:** **Date:** **Time:**

Cross section drawing:



OHWM

GPS point: _____

Indicators:

- ☒ Change in average sediment texture
- ☒ Change in vegetation species
- ☒ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Floodplain unit: ☒ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: Sandy

Total veg cover: 0 % Tree: ____ % Shrub: ____ % Herb: ____ %

Community successional stage:

- ☒ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☒ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Active flood control channel.