

APPENDIX 2E

Jurisdictional Waters Delineation

JURISDICTIONAL WATERS DELINEATION

MILLCREEK PROMENADE MENIFEE, RIVERSIDE COUNTY, CALIFORNIA

**(Township 7 South, Range 3 West, Section 15)
(APN 360-350-006, 360-350-011, and 360-350-017)**

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EST. 1981

Project Number: #2016-60(JD)

**January 29, 2018
(Updated August 14, 2018)**

TITLE PAGE

Date Report Written: January 29, 2018 (Updated August 14, 2018)

Date Field Work Completed: January 15 and July 30, 2018

Report Title: Jurisdictional Waters Delineation

Assessor's Parcel Number: 360-350-006, 360-350-011, and 360-350-017

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EXECUTIVE SUMMARY

RCA Associates, Inc. was retained by the project proponent to conduct a jurisdictional waters delineation (JD) in association with the proposed project located in Menifee, California (Section 15, Township 6 South, Range 3 West, San Bernardino Base Meridian) (Figures 1, 2, 3, 4, 5 and 6). The site currently supports little native vegetation with the exception of the vegetation present in the channel. The site was previously used for agricultural purposes.

The delineation was conducted to evaluate and analyze the ordinary high-water mark of the two channels that bisects the site in a southwest to the northeast direction and an east to west direction. This report is being prepared for submittal to the various local, State, and Federal agencies as part of the environmental requirements of the California Environmental Quality Act (CEQA) and will be forwarded to the appropriate agencies for their review and comment.

The purpose of this jurisdictional delineation was to determine the location and size of areas that may be defined as Waters of the U.S. (WoUS) and Waters of the state (WoS). The data provided in this report was utilized to determine if any permits may be required for the proposed project, including a California Department of Fish and Wildlife (CDFW) Section 1600 permit, a U.S. Army Corps of Engineers (COE) Section 404 Nationwide or Individual Permit, and a California Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certification.

Based on the results of the delineation and the jurisdictional analysis, it was determined the channels on the site meet the criteria as WoS and WoUS based on several factors (See Section 2.4 for complete analysis.). The channels meet the characteristics that define Mill Creek and Garbani drainage as a nexus to the nearest Traditional Navigable Water (TNW) (i.e., Canyon Lake) which is located approximately 6-miles northwest of the property site. Canyon Lake is considered a TNW since it supports habitats which may support populations of special status species, drains a large watershed, and is utilized by a wide variety of waterfowl when water is present.

RCA Associates, Inc. conducted a jurisdictional delineation on January 15 and July 30, 2018, during which the ordinary high-water mark (OHWM) was evaluated and the banks of the channels were recorded along the edge of the channels. Based on the proposed construction plans, the

project would impact streambeds and/or banks corresponding with the channel. Therefore, Section 1600, USCOE 404, and RWQCB 401 permits will be required due to the impacts being greater than 0.10-acres. The appropriate agencies should be contacted for concurrence with this conclusion.

1.0 INTRODUCTION

1.0 Summary

As part of the environmental process, a jurisdictional delineation (JD) was deemed necessary due to possible impacts to potential jurisdictional waters. The purpose of this jurisdictional delineation was to determine the location and size of any areas that may be defined as waters of the State (WoS) and waters of the U.S. (WoUS) and to identify the OHWM or the banks of any jurisdictional areas. Pursuant to Title 14 of the California Code of Regulations and Article 4, Chapter 3, Sections 15050-15053 of the California Environmental Quality Act (CEQA), the City of Menifee is the “Lead Agency” and is responsible for distributing all environmental documents to the appropriate State and Federal agencies. The data collected during the field investigation for this JD was used in conjunction with other technical documents to determine if the project would impact any jurisdictional waters. The following sections provide a summary of the data collected and the analysis performed for the proposed project.

1.1 Property Description

Initial biological surveys were conducted on a 59-acre property (approximate) located east of Haun Road, south of Garbani and west of Sherman Road in the City Menifee (Figures 1, 2, 3, 4, 5 & 6). The site is located in Section 15, Township 6 South, Range 3 West on the USGS Romoland 7.5’ topographic quadrangle. The approximately 59-acre site is composed of three parcels (APN 360-350-006, 360-350-011, and 360-350-017), and is approximately 0.1-miles east of Interstate 215 (Appendix A: Figures 1, 2, and 3). The site is highly disturbed and currently supports little native vegetation with the exception of vegetation present in the Mill Creek channel on the site. There are two separate channels located on the site.

Mill Creek bisects the site in a north-south direction eventually connecting to a culvert along the eastern boundary of the site, which extends under Haun Road to an adjacent property. Mill Creek is considered to be an intermittent blue line stream. Current condition of the channel is considered to be poor due to the sedimentation that has choked up the northern section of the channel causing water to puddle onsite. The cause of this sediment buildup is believed to have been created from decades of agricultural production on site and encroachment from machinery on the channel banks.

The property also consists of a small manmade v-drainage feature along the south side of Garbani Road. This feature is considered to be an ephemeral drainage with no associated riparian vegetation or habitat. Water enters the drainage feature due to runoff from Garbani Road and flows into culvert located near the intersection of Haun Road and Garbani Road. This feature is ephemeral drainage that is approximately 1,300 linear feet with a streambed width of 2 feet.

1.2 Project Description

The proposed Millcreek Promenade project is a mixed development which would consist of residential units (attached single-family dwellings), and various commercial/retail businesses and restaurants. Infrastructures would also be a component of the development including streets, sidewalks, alleys, parking, and sewer, and utility lines.

1.3 Regulatory Overview

Activities within streams, wetlands, and riparian areas are regulated by Federal, State, and regional agencies. The U.S. Army Corps of Engineers (COE) regulates Waters of the U.S. (WoUS) and wetlands under Section 404 of the Clean Water Act. The California Department of Fish and Wildlife (CDFW) regulates activities within the streambed, bank, and associated habitat of stream channels under Fish and Game Code 1600-1616. The California Regional Water Quality Control Board regulates discharge into “waters of the U.S.” under Section 401 of the Federal Clean Water Act and into “Waters of the State” under the California Porter-Cologne Water Quality Act.

1.3.1 U.S. Army Corps of Engineers (COE)

The COE oversees activities associated with Section 404 which includes permits, jurisdictional determinations, and enforcing Section 404 regulations. Specifically, the jurisdictional scope of Section 404 of the Clean Water Act was defined by the U.S. Supreme Court in 2006 in their decision in *Rapanos v. U.S.* and *Carbell v. U.S.* The decisions in these two cases outlined the specific analytical standards for determining jurisdictional issues associated with WoUS. These accepted standards have been utilized in the analysis for this project in determining the presence or absence of WoUS.

1.3.2 Regional Water Quality Control Board (RWQCB)

Based on the field investigations conducted on the site by RCA Associates, Inc. on January 15 and July 30, 2018, the two channels bisecting the 59-acre property does meet the criteria for “Waters of the State” (WoS) based on several factors.

Waters of the State are defined as any surface water or groundwater that are within the boundaries of the State (Public Code Section 71200), which differs from the CWA definition of WoUS by its inclusion of groundwater and waters outside of the ordinary high-water mark in its jurisdiction.

1.3.3 California Department of Fish and Wildlife (CDFW)

CDFW asserts jurisdiction over the bed and banks of a stream channel and associated wildlife and habitats as per CDFW Code Sections 1600-1616. The CDFW jurisdictional area is defined as the “top of bank” of a channel or to the limit (outer dripline) of the adjacent riparian vegetation. CDFW regulates any activities that would “substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, ground pavement where it would pass into any river, stream, or lake” (Section 1602 of the CDFW Code [Streambed Alteration]).

2.0 METHODOLOGY

2.1 Delineation Methodology

The initial steps in the delineation process involved conducting a literature review of all available data sources for the area prior to the start of field investigations. The literature review was used to determine where field surveys should be conducted and to locate areas of potential jurisdictional waters on available aerial photos. Following completion of the review of all available data, field surveys were conducted on January 15 and July 30, 2018. Figure 4 shows the location of the channels in relation to the project boundaries.

2.2 Literature Review

The following literature was used to identify areas that may fall under agency jurisdiction and the following resources were reviewed or used prior to the field surveys.

- The Corps of Engineers Wetlands Delineation Manual (USACE 1987)
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (USACE 2008)
- A Field Guide to the Identification of the Ordinary High-Water mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008)
- U.S. Geological Survey 7.5 Minute Series Topographical Quadrangle for the site.
- California Soils Resources Lab's Soil Web Google Earth interface
<http://casoilresource.lawr.ucdavis.edu/drupal/node/902>
- U.S. Fish and Wildlife Service, Department of Habitat and Resource Conservation, Wetland Geodatabase: <http://wetlandsfws.er.usgs.gov/NWI/index.html>
- Natural Resources Conservation Services, Hydric Soils List of California, 2010:
<http://soils.usda.gov/use/hydric/lists/state.html>

2.3 Field Survey

Field investigations were conducted on January 15 and July 30, 2018, to determine the structure and composition of the channels on the site in order to identify all potential jurisdictional areas. Vegetation communities observed during the surveys were initially viewed on aerial photos, evaluated during the field investigations, and described and classified using Holland's system

(1986) (Appendix A: Table 1). Transect data was collected using a handheld Global Positioning System (GPS) unit. The GPS coordinates were recorded along the OHWM of the channel for WoUS and top of banks for WoS.

2.4 Potential Waters of the United States

Federal jurisdiction over a non-wetland WoUS extends to the ordinary high-water mark (OHWM), defined in 33 CFR Part 328.3 of the Code of Federal Regulations as “the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the presence of litter and debris.” (Army Corps of Engineers Manual, 1987). In the Arid West region of the United States, waters are variable and include ephemeral/intermittent and perennial channel forms. The most problematic ordinary high-water (OHW) delineations are associated with the commonly occurring ephemeral/intermittent channels that dominate the chaparral landscape.

The hydrology, channel-forming processes, and distribution of OHWM indicators are significantly influenced by the desert climate which can make delineations difficult. Typically, the OHWM zone in a low-gradient, alluvial ephemeral/intermittent channel is considered the active floodplain. The dynamics of channels in the arid regions and the frequent transitory nature of traditional OHW indicators in arid environments render the limit of the active floodplain and is the only reliable and repeatable feature in terms of OHW delineation according to Lichvar and McColley (2008). This conclusion was also supported by recent additional research in Vegetation and Channel Morphology Responses to ordinary High-Water Discharge Events in Arid West Stream Channels (Lichvar et Al. 2009). Delineation was performed by using the ordinary high water mark (OHWM).

The location of the edge of the channel in question was identified based on field investigations. The OHWM is well defined in most areas along the channel. During the surveys, RCA Associates, Inc. evaluated the characteristics of vegetation and substrate composition along the intermittent blue-line channel and assessed its OHWMs. The boundaries of the OHWMs were walked while

recording GPS data along the OHWM of the channel. A shapefile of the recorded data is available upon request.

3.0 DELINEATION RESULTS

Based on the results of the field investigations that were conducted on January 15 and July 30, 2018, it was determined that both the Garbani drainage and Mill Creek meet the criteria as a jurisdictional channel based on several factors discussed below. Mill Creek traverses the site and a direct surface connection with Canyon Lake approximately 6-miles to the northwest. Water enters the site from the southwest and flows in a northeasterly direction until it crosses under Haun Road via box culvert approximately 0.8-miles south of the intersection of Haun Road and Garbani Road (Figure 4). After the water has left the site via the culvert it then flows in a northeasterly direction for approximately 0.40-miles before merging with a larger intermittent blue-line channel then traveling another 2-miles to the north and converging with a large man-made channel that directly links to Canyon Lake.

The property also consists of a small manmade v-drainage feature along the south side of Garbani Road. This feature is considered to be an ephemeral drainage with no associated riparian vegetation or habitat. Water enters the drainage feature due to runoff from Garbani Road and flows into a culvert located near the intersection of Haun Road and Garbani Road.

3.1 PRELIMINARY JURISDICTIONAL DETERMINATION

3.1.1 U.S. Army Corps of Engineers Methodology Determination

Based on a review of the U.S. Army Corps of Engineers Jurisdictional Delineation Instruction Guidebook (COE, 2007), 33 CFR Part 328, and the results of the fieldwork conducted on January 15 and July 30, 2018, it was determined that both the Garbani drainage and the intermittent blue-line channel, Mill Creek, bisecting the property is considered jurisdictional and has a direct nexus to any WoS, WoUS, or the nearest TNW (Canyon Lake), which is located about 6-miles northwest of the site. A brief discussion of characteristics of the Waters of the United States follows:

Vegetation - The majority of the site supports little native vegetation consisting mostly of Mediterranean grasses. However, the intermittent blue-line channel which isolates an approximately 8-acre area of the overall 59-acre site supports a moderately dense stand of vegetation consisting of various shrubs and herbaceous species; however, the overall functional

value of the riparian area is expected to be relatively low given its small size. Plant species identified in the riparian area include seep willow (*Baccharis emoryi*), red-osier dogwood (*Cornus stolonifera*), cottonwood (*Populus angustifolia*), and arroyo willow (*Salix lasiolepis*).

Soils - The soils within both Mill Creek and Garbani drainage are not hydric. The soils were sandy and well-drained, with scattered small gravel, as well as small to large rocks within the channels.

Hydrology – The waters in Mill Creek enters the site from the southwest and flows in a north easterly direction until it crosses under Haun Road via box culvert approximately 0.8-miles south of the intersection of Haun Road and Garbani Road (Figure 4). Water that flows through Garbani drainage is captured from road runoff of Garbani Road and flows westerly before entering a culvert and into the stormwater system.

The proposed drainage improvements to Mill Creek are expected to result in permanent impacts to approximately 0.22-acres (9,381 SF) of Waters of the United States due to the installation of a culvert and a pedestrian bridge. The improvements that are proposed for the Garbani drainage are expected to result in permanent impacts to approximately 0.06-acres (2,300 SF) of Waters of the United States due to road widening and bike path installation. The Waters of the United States were determined by identifying the OHWM within the channel. There are no adjacent wetlands associated with the offsite drainage.

Proposed Impacts to Waters of the United States (acres)		
Channels	Avoided	Impacts
Mill Creek	0.66	0.22
Garboni Drainage	0.00	0.06
TOTAL	0.66	0.28

3.1.2 Regional Water Quality Control Board Determination

Based on the field investigations and a review of available data, the USGS does show one intermittent blue-line channel bisecting the property.

3.1.3 California Department of Fish and Wildlife Determination

The delineation summarized in this report indicates that both Mill Creek and Garbani drainage does meet the criteria to be considered WoS. Impacts are expected to be minor (approximately 1.275-acres) however the project will require a 1602 permit. Approximately 1.05-acres of upland vegetation in the Garbani ephemeral drainage would be considered California Department of Fish and Wildlife (CDFW) jurisdictional drainage. Mill Creek improvements will have a permanent impact on 0.22-acres (9,381 SF) of CDFW jurisdictional due to the installation of a culvert and a pedestrian bridge. The CDFW jurisdictional areas were determined by measuring from the top of the physical bank.

Proposed Impacts to CDFW Jurisdiction (acres)		
Habitat	Avoided	Impacts
Riparian Habitat		
Southern cottonwood-willow riparian forest	0.66	0.02
Riverine Habitat		
Non-native Vegetation/Sheet Flow	0.00	0.20
Upland Vegetation	0.00	1.05
TOTAL	0.66	1.27

3.1.4 Significant Nexus Determination

As referenced above, Canyon Lake, which is about 6-miles northwest of the site, is a 525-acre reservoir with special status species likely to occur along the edge of the lake and in adjacent habitats. The reservoir is supplied by stormwater runoff from the San Jacinto River and Salt Creek north of the lake. Water from the reservoir feeds the Canyon Lake Water Treatment Plant, which provides approximately 10% of the domestic water supply in the Canyon Lake/Canyon Lake area. The lake also supports some recreational uses and is used by various waterfowl year-round. These characteristics, in total, result in Canyon Lake being classified as a “Traditional Navigable Water” (TNW) based on the Corps of Engineers Guidelines for Waters of the United States. Based on the analysis of the Corps Guidelines, a nexus with a TNW (i.e., Canyon Lake) does exist. As described in Section 3.0, water enters the site from the southwest and flows in a northeasterly direction until it crosses under Haun Road via box culvert approximately 0.8-miles south of the intersection of Haun Road and Garbani Road (Figure 4). After the water has left the site via the culvert it than flows in a northeasterly direction for approximately 0.40-miles before merging with a larger

intermittent blueline channel then traveling another 2-miles to the north and converging with the channel that directly links to Canyon Lake.

The Garbani drainage is presumed to have a connection with the San Jacinto River, which is considered to be a tributary to the Santa Ana River.

3.2 US Army Corps of Engineers Permits

The COE regulates the discharge of dredged fill materials into WoUS pursuant to Section 404 of the Clean Water Act. Based on the data collected and presented in this report, a 404 permit from the Los Angeles COE District office will be required if impacts to the channels are more than 0.10-acres. The COE District office will be contacted during the environmental review process for concurrence with this conclusion and for additional discussions.

3.3 Regional Water Quality Control Board

The RWQCB regulates discharge to surface waters under the CWA and the California Porter-Cologne Water Quality Act. Effective July 1, 2010, all dischargers are required to obtain coverage under the Construction General Permit Order 2009-0009-DWQ adopted on September 2, 2009, if any impacts occur to WoUS. Therefore, a Section 401 permit is required due to the intermittent blueline channel being considered WoUS.

3.4 California Department of Fish and Wildlife

Based on the field investigations conducted on January 15 and July 30, 2018, Mill Creek and Garbani drainage are considered to be jurisdictional waters based on several factors discussed in section 3.0. CDFW regulates streambeds and banks, and issues streambed alteration permits (Section 1600-1616) for those projects which impact jurisdictional channels; therefore, a 1602 Permit may be required for the project since the channels are considered to be jurisdictional.

4.0 CONCLUSION AND RECOMMENDATIONS

State and federal regulations typically recommend avoiding riparian/riverine resources. As discussed in the above sections, the proposed project is not expected to pose a significant impact to any Jurisdictional waters nor will the proposed project have a significant adverse effect on any riparian/riverine areas on site or in the surrounding area. As stated above, a USACOE 404, CDFW 1602 and RWQCB 401 permit, will be required. The appropriate agencies should be contacted for concurrence with this conclusion. The City of Menifee is a participant in the Multiple Species Habitat Conservation Plan (MSHCP); therefore, impacts to riparian/riverine habitat associated with this project will be fully mitigated through the implementation of the mitigation measures outlined below.

Mitigation Measure #1: The project proponent will mitigate for on-site impacts to approximately 0.02-acres of riverine and riparian habitats through on-site restoration and enhancement.

Mitigation Measure #2: The MSHCP Urban/Wildlands Interface Guidelines will be implemented to ensure all indirect impacts to off-site drainage channels and associated riparian/riverine habitats downstream will be minimized to the greatest extent possible.

Mitigation Measure #3: Pre-construction surveys will be performed for the burrowing owl as per CDFW survey protocols immediately prior to the start of site grading/clearing to verify the presence or absence of the species. A survey report will be prepared within seven days following completion of the survey and will be submitted to the City for their review. If the species is observed during the pre-construction surveys, mitigation measures required by CDFW and the MSHCP will be implemented following consultations with CDFW and the City.

Mitigation Measure #4: All Best Management Practices (BMP), as well as measures required by the NPDES requirements, will be implemented to ensure that the quantity and quality of runoff from the site is not altered in a significant way when compared to existing conditions. Stormwater systems for the project will be designed to prevent toxins, chemicals, petroleum products, and other toxic substances from entering any adjacent drainage channels which could potentially impact downstream riparian/riverine habitats.

Mitigation Measure #5: Temporary silt fences will be installed along both sides of the channel with a buffer of 25 feet from OHWM to avoid impacts to the channel during the construction of the pedestrian and vehicle bridges. Once construction is complete the silt fence can be removed and the habitat restored to its natural state.

5.0 REFERENCES

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APPENDIX A
Table and Figures

Table 1 - Plants observed on the site and known to occur in the area.

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, Inc.

Common Name	Scientific Name	Comments
Annuals		
Snakeweed	<i>Gutierrezia sarothrea</i>	Observed off-site
Telegraph weed	<i>Heterotheca gradifolia</i>	“
Bladderpod	<i>Isomeris aroborea</i>	“
Fiddleneck	<i>Amsinckia tessellate</i>	“
Black mustard	<i>Brassica nigra</i>	“
Plantain	<i>Plantago erecta</i>	“
Croton	<i>Croton californica</i>	“
Coyote melon	<i>Cucurbita foetidissima</i>	“
Pearly everlasting	<i>Gnaphalium californicum</i>	“
Phacelia	<i>Phacelia distans</i>	“
Lambs quarters	<i>Chenopodium californicum</i>	“
Centaurem	<i>Centaurea squarrosa</i>	“
Brome grass	<i>Bromus sp.</i>	On-site
Dove weed	<i>Eremocarpus setigerus</i>	“
Tobacco	<i>Nicotiana attenuata</i>	“
Lamb’s quarters	<i>Chenopodium album</i>	“
Cottonwood	<i>Populus angustifolia</i>	“
Arroyo Willow	<i>(Salix lasiolepis</i>	“
Heliotrope	<i>Heliotropium sp.</i>	“
Erodium	<i>Erodium cicutarium</i>	“
Goldfields	<i>Lasthenia californica</i>	“
Russian thistle	<i>Salsola tragus</i>	“
Stephanomeria	<i>Stephanomeria sp.</i>	“
Seep willow	<i>Baccharis emoryi</i>	“
Mustard	<i>Brassica tourneforti</i>	“
Red-osier dogwood	<i>Cornus stolonifera</i>	“
Tamarisk	<i>Tamarix ramoissina</i>	“

Source: Munz, P.A. 1974. A Flora of Southern California. University of California Press. Berkeley, California. 1086 p

Table 2 - Wildlife observed on the site and those species expected to the area.

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, Inc.

Common Name	Scientific Name	Comments
Mammals		
Desert cottontail	<i>Sylvilagus auduboni</i>	Observed on-site
California ground squirrel	<i>Spermophilus beecheyi</i>	“
Coyote	<i>Canis latrans</i>	Scats observed on-site.
Deer mouse	<i>Peromyscus maniculatus</i>	May occur on-site.
California mouse	<i>P. californicus</i>	“
Botta’s pocket gopher	<i>Thomomys bottae</i>	“
Birds		
Raven	<i>Corvus corax</i>	Observed on-site.
Crow	<i>C. brachyrhynchos</i>	“
American Kestrel	<i>Falco sparverius</i>	“
Burrowing Owl	<i>Athene cunicularia</i>	“
Western meadowlark	<i>Sturnella neglecta</i>	“
Western kingbird	<i>Tyrannus verticalis</i>	“
Say’s Phoebe	<i>Sayornis saya</i>	“
Northern mockingbird	<i>Mimus polyglottus</i>	“
Anna’s hummingbird	<i>Calypte anna</i>	Observed on site
Mourning dove	<i>Zenaida macroura</i>	“
California quail	<i>Callipepla Californica</i>	Observed in surrounding area
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	“
Red-tail Hawk	<i>Buteo jamaicensis</i>	“
Greater Roadrunner	<i>Geococcyx californianus</i>	“
Rock pigeon	<i>Columba livia</i>	“
Brewer’s blackbird	<i>Euphagus cyanocephalus</i>	“
Lark sparrow	<i>Chondestes grammacus</i>	“
House finch	<i>Carpodacus mexicanis</i>	“
Bullock’s oriole	<i>Icterus bullockii</i>	“
Sage sparrow	<i>Amphispiza belli</i>	“
Costa hummingbird	<i>Calypte costae</i>	“
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>	“
American robin	<i>Turdus migratorius</i>	“
Scrub jay	<i>Aphelocoma coerulescens</i>	“
Reptiles and Amphibians		
Side-blotched lizard	<i>Uta stansburiana</i>	Observed on site.
Western fence lizard	<i>Sceloporus occidentalis</i>	“
Granite spiny lizard	<i>Sceloporus orcuttii</i>	“
Common garter snake	<i>Thamnophis sirtalis</i>	Occurs in area
Gopher snake	<i>Pituophis melanoleucus</i>	“
Western toad	<i>Bufo boreas</i>	“
Southwestern toad	<i>Bufo microscaphus</i>	“

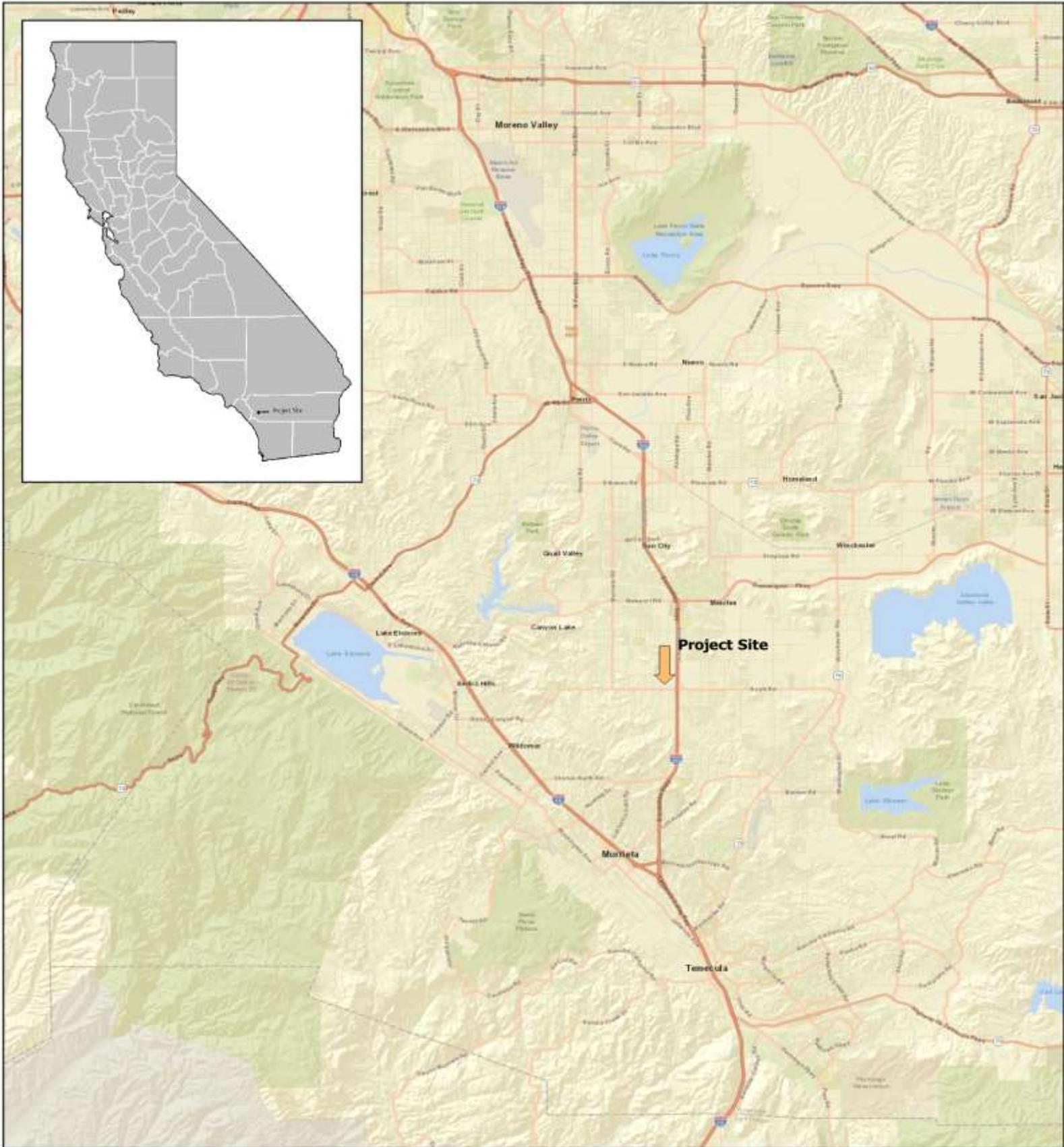
SOURCES:

(1) Blair, W.F. 1968. Vertebrates of the United States. McGraw-Hill, Inc. New York. 616 pp.

(2) Whitaker, J. O. 1980. The Audubon Society Field Guide to North American Mammals. A. A. Knopf, New York. 745 pp.

Figure 1

Regional Vicinity Map

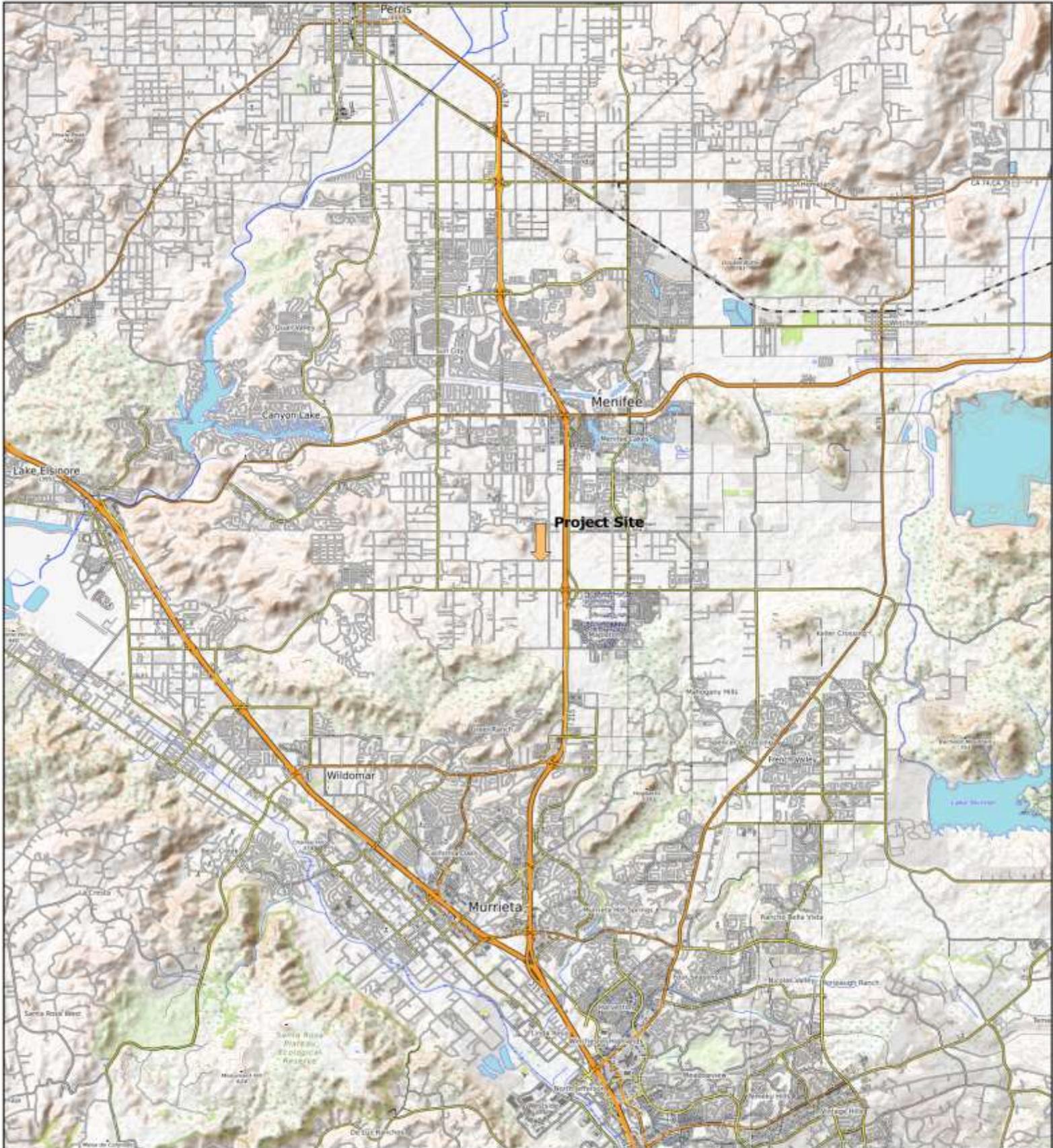


Credit: Google Imagery 2017, ESRI



Figure 2

Local Topographic Map



Credit: Google Imagery 2017, ESRI



Figure 3

Local Vicinity Map



Credit: Google Imagery 2017



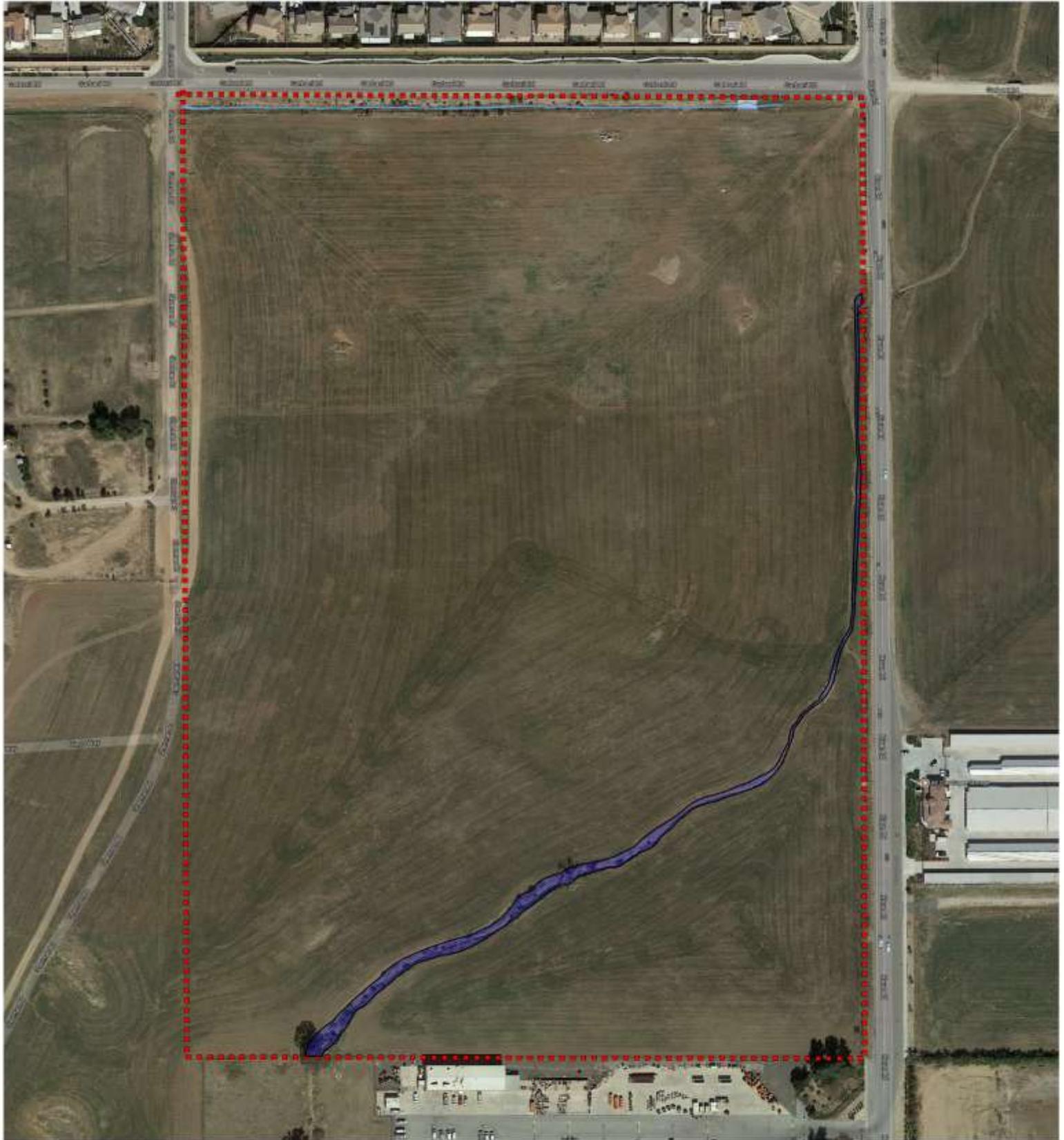
Legend

..... Project Border



Figure 4

Channel Location Map



Credit: Google Imagery 2017



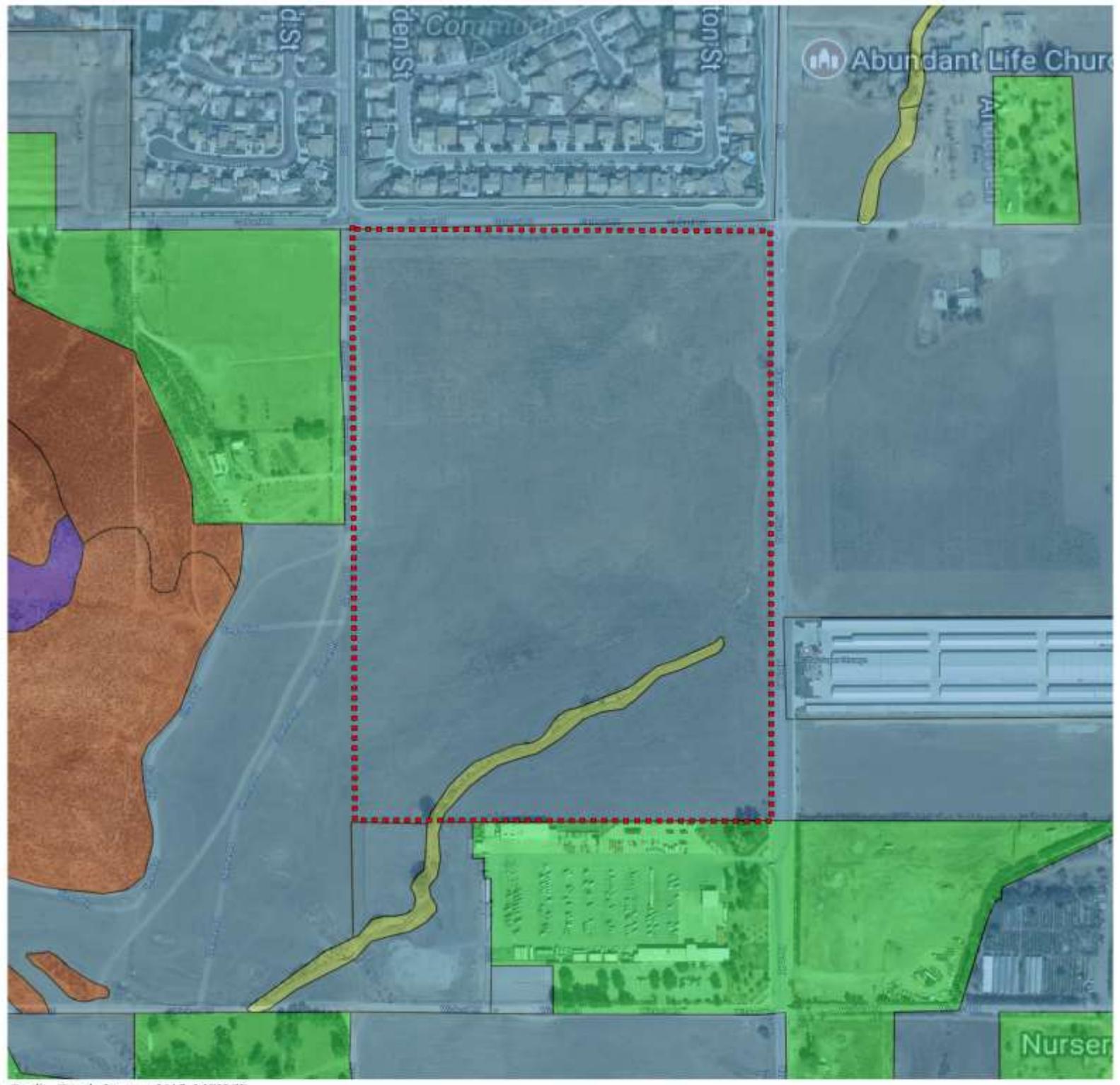
Legend

- Project Border
- Channel
 - Mill Creek
 - Garbani Drainage

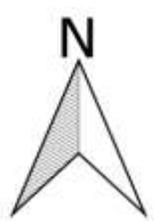


Figure 5

Vegetation Community Map



Credit: Google Imagery 2017, MSHCP



Legend

- Project Border
- Vegetation
 - Agricultural Land
 - Coastal Sage Scrub
 - Developed/Disturbed Land
 - Grassland
 - Riparian Scrub, Woodland, Forest

Figure 6

Site Photographs



LOOKING NORTH INTO CHANNEL



LOOKING INTO CHANNEL

REGULATORY CONTEXT

The following provides a summary of federal and state regulatory jurisdiction over biological and wetland resources. Although most of these regulations do not directly apply to the site, given the general lack of sensitive resource, they provide important background information.

Federal Endangered Species Act

The USFWS has jurisdiction over federally listed threatened and endangered plant and animal species. The federal Endangered Species Act (ESA) and its implementing regulations prohibit the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval pursuant to either Section 7 or Section 10 of the ESA. ESA defines “take” as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Federal regulation 50CFR17.3 defines the term “harass” as an intentional or negligent act that creates the likelihood of injuring wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering (50CFR17.3). Furthermore, federal regulation 50CFR17.3 defines “harm” as an act that either kills or injures a listed species. By definition, “harm” includes habitat modification or degradation that actually kills or injures a listed species by significantly impairing essential behavior patterns such as breeding, spawning, rearing, migrating, feeding, or sheltering (50CFR217.12).

Section 10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes nonfederal entities to incidentally take federally listed wildlife or fish. Incidental take is defined by ESA as take that is “incidental to, and not the purpose of, the carrying out of another wise lawful activity.” Preparation of a habitat conservation plan, generally referred to as an HCP, is required for all Section 10(a) permit applications. The USFWS and National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service) have joint authority under the ESA for administering the incidental take program. NOAA Fisheries Service has jurisdiction over anadromous fish species and USFWS has jurisdiction over all other fish and wildlife species.

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA, or result in the destruction or adverse modification of its habitat. Federal agencies are also required

to minimize impacts to all listed species resulting from their actions, including issuance or permits or funding. Section 7 requires consideration of the indirect effects of a project, effects on federally listed plants, and effects on critical habitat (ESA requires that the USFWS identify critical habitat to the maximum extent that it is prudent and determinable when a species is listed as threatened or endangered). This consultation results in a Biological Opinion prepared by the USFWS stating whether implementation of the HCP will result in jeopardy to any HCP Covered Species or will adversely modify critical habitat and the measures necessary to avoid or minimize effects to listed species.

Although federally listed animals are legally protected from harm no matter where they occur, the Section 9 of the ESA provides protection for endangered plants by prohibiting the malicious destruction on federal land and other “take” that violates State law. Protection for plants not living on federal lands is provided by the California Endangered Species Act.

California Endangered Species Act

CDFW has jurisdiction over species listed as threatened or endangered under Section 2080 of the California Fish and Wildlife Code. Section 2080 prohibits the take of a species listed by CDFW as threatened or endangered. The state definition of take is similar to the federal definition, except that Section 2080 does not prohibit indirect harm to listed species by way of habitat modification. To qualify as take under the state ESA, an action must have direct, demonstrable detrimental effect on individuals of the species. Impacts on habitat that may ultimately result in effects on individuals are not considered take under the state ESA but can be considered take under the federal ESA.

Proponents of a project affecting a state-listed species must consult with CDFW and enter into a management agreement and take permit under Section 2081. The state ESA consultation process is similar to the federal process. California ESA does not require preparation of a state biological assessment; the federal biological assessment and the CEQA analysis or any other relevant information can provide the basis for consultation. California ESA requires that CDFW coordinate consultation for joint federally listed and state-listed species to the extent possible; generally, the state opinion for the listed species is brief and references provisions under the federal opinion.

Clean Water Act, Section 404

The COE and the U.S. Environmental Protection Agency regulates the placement of dredged or fill material into “Waters of the United States” under Section 404 of the Clean Water Act. Waters of the United States include lakes, rivers, streams, and their tributaries, and wetlands. Wetlands are defined for regulatory purposes as “areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3).

The COE may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits (NWP’s) are general permits issued to cover particular fill activities. All NWP’s have general conditions that must be met for the permits to apply to a particular project, as well as specific conditions that apply to each NWP.

Clean Water Act, Section 401

Section 401 of the Clean Water Act requires water quality certification and authorization of placement of dredged or fills material in wetlands and Other Waters of the United States. In accordance with Section 401 of the Clean Water Act, criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. As such, proponents of any new project which may impair water quality as a result of the project are required to create a post construction stormwater management plan to ensure offsite water quality is not degraded. The resulting requirements are used as criteria in granting National Pollution Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Central Valley Regional Water Quality Control Board (RWQCB). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

California Fish and Wildlife Code, Sections 1600-1616

Under the California Fish and Wildlife Code, Sections 1600-1616 CDFW regulates projects that divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. Proponents of such projects must notify CDFW and enter into a streambed alteration agreement with them.

Section 1602 of the California Fish and Wildlife Code requires a state or local government agency, public utility, or private entity to notify CDFW before it begins a construction project that will: (1) divert, obstruct, or change the natural flow or the bed, bank, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. Once the notification is filed and determined to be complete, CDFW issues a streambed alteration agreement that contains conditions for construction and operations of the proposed project.

California Fish and Wildlife Code, Section 3503.5

Under the California Fish and Wildlife Code, Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls). Take would include the disturbance of an active nest resulting in the abandonment or loss of young.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, or their eggs and nests. As used in the MBTA, the term “take” is defined as “to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires.” Most bird species native to North America are covered by this act.

Sensitive Natural Communities

The California Office of Planning and Research and the Office of Permit Assistance (1986) define project effects that substantially diminish habitat for fish, wildlife, or plants, or that disrupt or divide the physical arrangement of an established community as significant impacts under CEQA. This definition applies to certain natural communities because of their scarcity and ecological

values and because the remaining occurrences are vulnerable to elimination. For this study, the term “sensitive natural community” includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribution and viability of the community. If the number and extent of sensitive natural communities continue to diminish, the status of rare, threatened, or endangered species could become more precarious, and populations of common species (i.e., not special status species) could become less viable. Loss of sensitive natural communities also can eliminate or reduce important ecosystem functions, such as water filtration by wetlands and bank stabilization by riparian woodlands for example.