Appendix C

Biotic Resources Report

Jurisdictional Delineation

Approved Jurisdictional Determination (Department of the Army)

ROCKS
BIOLOGICAL CONSULTING



9TH & VINEYARD DEVELOPMENT PROJECT

BIOTIC RESOURCES REPORT

San Bernardino County, California

June 2021

Prepared for:
Kimley-Horn and Associates, Inc.
401 B Street #600
San Diego, CA 92101
(858) 234-2400

Prepared by:
Rocks Biological Consulting
4312 Rialto Street
San Diego, CA 92107
(619) 701-6798

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1 SUMMARY

This report presents the results of a biological resource assessment conducted by Rocks Biological Consulting (RBC) for the 9th and Vineyard Development Project (project) in the City of Rancho Cucamonga, San Bernardino County, California. The 47.07-acre project site primarily supports non-native grassland with large areas that are disturbed or developed. The site has no potential to support the U.S. Fish and Wildlife Service (USFWS) federally endangered Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), and low potential to support the California Department of Fish and Wildlife (CDFW) Species of Special Concern (SSC) burrowing owl (*Athene cunicularia*). The site supports a concrete-lined, non-wetland water of the U.S./State, Cucamonga Creek, jurisdictional by the U.S. Army Corps of Engineers (Corps) and Santa Ana Regional Water Quality Control Board (RWQCB), and a streambed jurisdictional by CDFW. Impacts to biological resources will be less than significant with implementation of the suggested mitigation measures outlined in this report.

2. INTRODUCTION

2.1 PROJECT LOCATION

The 47.07-acre project site for the proposed project is located south of East 9th Street and directly west of Vineyard Avenue within the City of Rancho Cucamonga, in San Bernardino County, California (Figure 1). The project site is located approximately 1.4 miles north of Interstate 10 (I-10), 2.9 miles south of State Route 210 (SR-210), and approximately 2.3 miles east of State Route 83 (SR-83).

The proposed 9th Street and Vineyard Development Project (proposed Project) is comprised of three warehouse buildings with ancillary office space and associated parking and landscaping on approximately 47.07 acres. The Project site is located on the following Assessor Parcel Numbers (APN No.):

- 0207-271-25
- 0207-271-27
- 0207-271-39
- 0207-271-40
- 0207-271-89
- 0207-271-93
- 0207-271-94
- 0207-271-96
- 0207-271-97

2.2 PROJECT DESCRIPTION

As shown in Table 1, the proposed project would include three warehouse buildings for a total of 13,000 square feet (sf) of office uses and 1,024,467 sf of warehouse uses for a total of 1,037,467

sf. The Project would require 370 automobile parking spaces and would provide 415 automobile parking spaces. The Project would require 141 trailer parking stalls and would provide 195 trailer parking spaces.

Table 1: Three Building Site Summary

Building	Warehouse (sf)	Office 1st Floor (sf)	Office 2nd Floor (sf)	Total Building (sf)	Automobile Parking Stalls		Trailer Parking Stalls	
					Required	Provided	Required	Provided
Building 1	632,580	4,000	0	636,580	195	195	100	148
Building 2	126,531	2,000	2,000	130,531	68	73	13	13
Building 3	265,356	2,500	2,500	270,356	107	147	28	34

The warehouse distribution buildings are currently planned as "speculative buildings." Consequently, the future tenants or buyers of the buildings are not currently known. Without knowing the future tenants or buyers an exact number of future employees or hours of operation cannot be determined. Therefore, this technical report uses approximate potential on-site employees, hours of operation, and vehicular traffic generation based on the Project's proposed square footage and use as warehouse distribution facilities.

Vehicular access to the proposed Project would consist of six project driveways; one on 9th Street, two on Vineyard Avenue, and three on Baker Avenue. All entrances to the site would be unsignalized. As shown in Table 1, the proposed Project would meet the parking requirements for all proposed buildings.

Adjacent properties to the north are zoned for Industrial Park (IP), General Industrial (GI), Medium Density Residential (M), and General Commercial (GC) uses. Properties to the west are zoned Low Density Residential (L). The BNSF railway and properties zoned for Industrial uses are directly south of the site. The site is partially bordered to the east by Cucamonga Creek, a concrete-lined stormwater drainage channel. Cucamonga Creek originates in the San Gabriel Mountains to the north of the site and flows roughly north to south into the Santa Ana River at the Prado Dam.

2.3 SCOPE OF WORK

This report identifies and evaluates impacts on biological resources associated with the proposed project in the context of County of San Bernardino (County) Land Use regulations, the California Environmental Quality Act (CEQA; Public Resources Code § 21000 et seq.), and state and federal regulations, such as the federal Endangered Species Act (ESA; 16 U.S. Code [USC] § 1531 et seq.), Clean Water Act (CWA; 33 USC § 1251 et seq.), Porter-Cologne Water Quality Control Act (Porter-Cologne; Water Code Section 13000 et seq.), and the California Fish and Game Code (CFGC).

RBC conducted an initial site visit on March 12, 2019 to assess the project for significant biological resources pursuant to CEQA, including conducting: (1) general biological surveys; (2) vegetation mapping; (3) habitat assessments for special-status plant species, Delhi Sands flower-loving fly, and burrowing owl; and (4) an assessment for areas anticipated to be jurisdictional under the

Corps pursuant to Section 404 of the CWA, under the RWQCB pursuant to Section 401 of the CWA and Porter-Cologne Act; and under CDFW pursuant to Section 1602 of the CFGC.

Following the initial site visit, RBC conducted focused surveys for burrowing owl between April 16 and June 20, 2019. RBC also conducted a formal jurisdictional delineation field visit on April 9, 2019.

2.4 EXISTING CONDITIONS

The project site is mostly flat with elevations ranging from approximately 1,110 to 1,160 feet above mean sea level (amsl). The project site primarily supports non-native grassland with large areas that are disturbed or developed. Site photographs are presented in Appendix A.

2.5 REGULATORY FRAMEWORK

Federal, state, and local agencies have established several regulations to protect and conserve biological resources. The descriptions below provide an overview of the agency regulations that may be applicable to the project. The final determination as to what types of permits are required will be made by the regulating agencies.

2.5.1 FEDERAL REGULATIONS

Federal Endangered Species Act

The ESA provides for the listing of endangered and threatened species of plants and animals and the designation of critical habitat for these listed species. ESA regulates the "taking" of any endangered fish or wildlife species, per Section 9. As development is proposed, the responsible agency or individual landowner is required to consult with the U.S. Fish and Wildlife Service (USFWS) to assess potential impacts on listed species (including plants) or the critical habitat of a listed species, pursuant to Sections 7 and 10 of the ESA. USFWS is required to determine the extent a project would impact a particular species. If USFWS determines that a project is likely to potentially impact a species, measures to avoid or reduce such impacts must be identified. Following consultation and the issuance of a Biological Opinion, USFWS may issue an incidental take statement which allows for the take of a species if it is incidental to another authorized activity and will not adversely affect the existence of the species. Section 10 of the ESA provides for issuance of incidental take permits to non-federal parties in conjunction with the development of a habitat conservation plan (HCP). Section 7 of the ESA provides for permitting of projects where interagency cooperation is necessary to ensure that a federal action/decision does not jeopardize the existence of a listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 USC § 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed at 50 Code of Federal Regulations (CFR) 10.13. USFWS enforces the MBTA, which prohibits "by any means or in any manner, to

pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation.

Rivers and Harbors Appropriation Act of 1899

The Rivers and Harbors Appropriation Act of 1899 (Rivers and Harbors Act; 33 USC § 403) prohibits the discharge of any material into navigable waters of the United States, or tributaries thereof, without a permit. The act also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, or channel; or to dam navigable streams without a permit.

Many activities originally covered by the Rivers and Harbors Act are now regulated under the CWA, discussed below. However, the 1899 act retains relevance and created the structure under which the Corps oversees permitting under CWA § 404.

Clean Water Act

Pursuant to Section 404 of the CWA (33 U.S.C. 1251 *et seq.*), the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which includes those waters listed in 33 CFR 328.3 (85 Federal Register [FR] 22250, April 21, 2020). The Corps, with oversight from the U.S. Environmental Protection Agency (EPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts to waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The RWQCB, divisions of the State Water Resources Control Board (SWRCB), provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that a proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

2.5.2 STATE REGULATIONS

State of California Endangered Species Act

The California Endangered Species Act of 1984 (CESA), in combination with the California Native Plant Protection Act of 1977 (NPPA; CFGC § 1900 et seq.), regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists SSC based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. CESA defines an endangered species as "a native

species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the California Fish and Game Commission. Unlike the federal ESA, CESA does not list invertebrate species.

Sections 2080 through 2085 of CESA address the take of threatened, endangered, or candidate species by stating "no person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under CESA, "take" is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. CFGC §§ 1901 and 1913 provide that notification is required prior to disturbance. CDFW is responsible for assessing development projects for their potential to impact listed species and their habitats. State-listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

California Environmental Quality Act

CEQA was established in 1970 as California's counterpart to the National Environmental Policy Act (NEPA; 42 USC § 4321 et seq.). This statute requires state and local agencies to identify significant environmental impacts related to their actions and to avoid or mitigate those impacts, where feasible.

A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity that must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

Natural Community Conservation Planning Act

In 1991, the California Natural Community Conservation Planning Act (NCCP Act; CFGC § 1900 et seq.) was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. California law (CFGC § 2800 et seq.) established the NCCP program "to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP Act encourages preparation of plans that address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

California Fish and Game Code Sections 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the CFGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake that supports fish or wildlife. A Notification of Lake or Streambed Alteration must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses and wetland habitats supported by a river, lake, or stream. Jurisdictional waters are delineated by the outer edge of riparian vegetation (i.e., drip line) or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not extend to tidal areas or isolated resources (e.g., riparian or wetland areas not supported by a river, lake, or stream). CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515

Within California, fish, wildlife, and native plant resources are protected and managed by CDFW. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the CFGC address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). In addition, the protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the CFGC.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act (Water Code Section 13000 *et seq*.) provides for statewide coordination of water quality regulations. The SWRCB was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis. The RWRCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCBs regulate discharges to surface waters under the CWA. In addition, the RWQCBs are responsible for administering the Porter-Cologne Act.

Pursuant to the Porter-Cologne Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any

person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 of the CWA is not required for the activity. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

2.5.3 REGIONAL AND LOCAL PLANS

County of San Bernardino Land Use Services, Planning Division

According to the County's Biotic Resources Overlay Map the project site is located within the County of San Bernardino's Burrowing Owl Overlay Zone (County of San Bernardino 2012). The burrowing owl is listed as an SSC by CDFW.

City of Rancho Cucamonga Development Code, Chapter 17.80 – Tree Preservation

According to the City of Rancho Cucamonga Development Code Section 17.80 (City of Rancho Cucamonga 2012), trees shall be protected from indiscriminate cutting or removal, with emphasis on the protection and expansion of eucalyptus windrows. An approved Tree Removal Permit issued in compliance with Section 17.16.080 (Tree Removal Permit) is required to remove heritage trees, which are defined as any tree which meets at least one of the following criteria:

1) All eucalyptus windrows; or
2) Any tree in excess of 30 feet in height and having a single trunk diameter at breast height (DBH) of 20 inches or more as measured 4½ feet from ground level; or
3) Multi-trunk trees having a total diameter at breast height (DBH) of 30 inches or more as measured 4½ feet from ground level; or
4) A stand of trees the nature of which makes each dependent upon the others for survival; or
5) Any other tree as may be deemed historically or culturally significant by the planning director because of age, size, condition, location, or aesthetic qualities.

3 METHODS

RBC biologists Ian Hirschler and Brenda Bennett visited the project site on March 12, 2019 to conduct general biological surveys, vegetation mapping, a wetland/waters jurisdictional constraints assessment, and habitat assessments for special-status plant and wildlife species including the Delhi Sands flower-loving fly and burrowing owl. Binoculars (10 x 42) were used to aid in the observation of species during the survey. RBC biologists identified plant species using *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) and local botanical knowledge. RBC conducted focused surveys for burrowing owl between April 16 and June 20, 2019. RBC also conducted a formal jurisdictional delineation field visit on April 9, 2019 to determine areas of potential jurisdiction by the Corps, RWQCB, and CDFW. All plant and wildlife species observed on the project site are presented in Appendix B.

3.1 BIOLOGICAL RESOURCE DATABASE REVIEW

RBC queried the CDFW's California Natural Diversity Database (CNDDB; CDFW 2019) and the database of threatened/endangered USFWS species for a three-mile radius around the project site (USFWS 2019). RBC queried the California Native Plant Society (CNPS) Electronic Inventory (CNPS 2019) for the nine USGS 7.5' quadrangles surrounding the project site for the elevation range of 500 to 1,500 feet amsl. RBC also queried the Natural Resources Conservation Service (NRCS; USDA 2019) for the soils present on the project site and consulted the County of San Bernardino's Biotic Resources Overlay Map (County of San Bernardino 2012) for biotic resources overlay zones within the project site and any County-mapped biological resources with potential to occur on site. RBC refined the potential for special-status species to occur within the project site by considering the habitat affinities of each species, the results of field habitat assessments, vegetation mapping, and knowledge of local biological resources.

3.2 DELHI SANDS FLOWER–LOVING FLY HABITAT ASSESSMENT

Delhi Sands flower-loving fly is most commonly observed in sandy areas composed of Delhi fine sand with sparse cover of native shrubs (USFWS 2008). The primary nectar source for the Delhi Sands flower-loving fly is flat-top buckwheat (*Eriogonum fasciculatum*; USFWS 1997). Since several historic occurrences surround the project site, RBC conducted a habitat assessment by surveying for suitable Delhi fine sands soil and potential Delhi Sands flower-loving fly nectar sources on the project site.

3.3 BURROWING OWL HABITAT ASSESSMENT

RBC assessed burrowing owl habitat in accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (the Guidelines; California Department of Fish and Game 2012). Suitable burrowing owl habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation (Zarn 1974). Suitable owl habitat may also include trees and shrubs if the canopy covers less than 30 percent of the ground surface. Burrows are the essential component of burrowing owl habitat; both natural and artificial burrows provide protection, shelter, and nests for burrowing owl (Henny and Blus 1981). Burrowing owl typically use burrows made by rodents, such as ground squirrels or badgers, but may also use human-made structures, such as concrete culverts; concrete, asphalt, or wood debris piles; or openings beneath concrete or asphalt pavement.

Following the habitat assessment, RBC conducted four protocol breeding season surveys for burrowing owl between April 16 and June 20, 2019 within the project site and a 500-foot buffer. Complete methods are presented in the 2019 burrowing owl survey report (Appendix C).

3.4 VEGETATION MAPPING AND GENERAL PLANT AND WILDLIFE SURVEYS

Vegetation mapping took place directly on a 150-scale (1" = 150') aerial photograph following *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). RBC

mapped vegetation on the project site including a 50-foot buffer and identified all observed flora and fauna for inclusion in plant and wildlife lists for the project site.

3.5 JURISDICTIONAL DELINEATION

RBC conducted a wetland/waters jurisdictional constraints assessment on March 12, 2019 to identify potential aquatic resource areas. Following this initial assessment, RBC conducted a formal aquatic resources delineation per Corps, RWQCB, and CDFW regulations, guidelines, and protocols on April 9, 2019 to assess the presence or absence of potentially jurisdictional features on site.

Prior to the formal jurisdictional delineation, field maps were created using a Geographic Information System (GIS) and a color aerial photograph at a 1:100 scale. RBC staff reviewed USGS National Hydrography Dataset (NHD) and topography data and USFWS National Wetlands Inventory (NWI) data to further determine the potential locations of jurisdictional aquatic resources. RBC also utilized Google Earth to assess current and historic presence or absence of flow in the project area. The survey area included the project site with a 50-foot buffer. Areas with depressions, drainage patterns, and/or wetland vegetation within the project impact area were evaluated for potential jurisdictional status, with a focus on the presence of defined channels and/or wetland vegetation, soils, and hydrology. Field staff examined potential jurisdictional wetland areas using the routine determination methods set forth in Part IV, Section D, Subsection 2 of the Corps 1987 *Wetland Delineation Manual* (Wetland Manual; Environmental Laboratory 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (Arid West Supplement; Corps 2008a). RWQCB potential jurisdictional wetland areas were determined based on the state wetland definition provided in the SWRCB's *State Wetland Definition for Discharges of Dredged or Fill Material to Waters of the State* (the Procedures; SWRCB 2019). Additionally, the Procedures provide that the RWQCB shall rely on a wetland area delineation from a final aquatic resource report verified by the Corps to determine the extent of potential wetland waters of the State. The SWRCB and RWQCBs do not have regulations or guidance on defining the extent of non-wetland waters of the State. As such, lateral limits of potential non-wetland waters of the U.S./State for the Corps and RWQCB, respectively, were identified per *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (Corps 2008b). CDFW potential jurisdictional boundaries were determined based on the presence of lake and/or streambed (i.e., bank-to-bank) and riparian habitat or wetland areas supported by a lake or streambed.

Complete methods are presented in the *9th & Vineyard Development Project Jurisdictional Delineation Report (*Jurisdictional Delineation Report; RBC 2019; Appendix D).

4 RESULTS

4.1 BIOLOGICAL RESOURCE DATABASE REVIEW RESULTS

The 3-mile CNDDB query returned historical occurrences of six special-status plant species and 13 special-status wildlife species (Figure 4; Table 1). Additional wildlife species that were not in the

CNDDB query were added to the analysis based on their presence on site or local knowledge and experience of the biologist. A much broader search of the CNPS Electronic Inventory (nine surrounding quadrangles) returned a list of 45 plant species with a California Rare Plant Ranking (CRPR). This list of plants was analyzed for potential to occur and 22 of the 45 plants were eliminated from further consideration because: 1) they are only known to occur at higher elevation, 2) the project site is clearly outside of their known range or, 3) suitable habitat is not present on site or in the vicinity of the project (Table 1). Please note that the table lists five plants and five wildlife species that have no potential to occur. These species were included in the analysis because the project site supports habitat similar to those that a particular species may occupy, but the habitats on site are highly disturbed or lack specific features (e.g., seep, soil type, etc.) required for the species to occur.

There are no USFWS historical occurrences of special-status species within one mile of the project site and no designated critical habitat within one mile of the project site.

The project site is within the County of San Bernardino's Burrowing Owl Overlay Zone (County of San Bernardino 2012).

4.2 DELHI SANDS FLOWER-LOVING FLY HABITAT ASSESSMENT RESULTS

Delhi fine sands are not present on the project site according to the NRCS soils map for the site (Figure 3), Delhi Soils Area Boundary Figure (City of Rancho Cucamonga 2001) and based on the field investigation. The site mainly supports non-native grassland with large areas that are disturbed or developed and contains very few possible nectar sources for the Delhi Sands flower-loving fly. Due to a lack of suitable Delhi fine sands and a lack of nectar sources for the Delhi Sands flower-loving fly RBC concluded there is no potential for this species to occur on-site.

4.3 BURROWING OWL HABITAT ASSESSMENT RESULTS

The project site is within the County of San Bernardino's Burrowing Owl Overlay Zone (County of San Bernardino 2012). RBC did not observe any burrowing owl individuals, active burrows or burrowing owl sign during the 2019 protocol surveys. Based on the negative protocol surveys the project site has low potential to support burrowing owl.

Table 2. Special-Status Plant and Wildlife Species – Potential for Occurrence

Species	Status*	Habitat Description	Potential for Occurrence within Project Site
PLANTS			
San Diego ambrosia (*Ambrosia pumila*)	FE, CRPR 1B.1	Perennial rhizomatous herb. Blooms April-October. Chaparral, coastal scrub, valley and foothill grasslands, vernal pools. Sandy loam or clay soils, sometimes alkaline, often in disturbed areas. Elev. 65-1360 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This perennial species would likely have been observed during field surveys if present.

Species	Status*	Habitat Description	Potential for Occurrence within Project Site
Braunton's milk-vetch (*Astragalus brauntonii*)	FE, CRPR 1B.1	Perennial herb. Blooms January-August. Chaparral, coastal scrub, valley and foothill grassland. Elev. 13-2100 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This perennial species would likely have been observed during field surveys if present.
Coulter's saltbush (*Atriplex coulteri*)	CRPR 1B.2	Perennial herb. Blooms March-October. Coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland in alkaline and clay soils. Elev. 10-1510 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This perennial species would likely have been observed during field surveys if present.
Catalina mariposa lily (*Calochortus catalinae*)	CRPR 4.2	Perennial bulbiferous herb. Blooms (February) March-June. Chaparral, cismontane woodlands, coastal scrub, and valley and foothill grasslands Elev. 49-2296 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This showy species would likely have been observed during field surveys if present.
slender mariposa lily (*Calochortus clavatus* var. *gracilis*)	CRPR 1B.2	Perennial bulbiferous herb. Blooms March-Jun (November). Chaparral, coastal scrub, valley and foothill grassland. Elev. 1045-3280 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This showy species would likely have been observed during field surveys if present.
Lewis' evening primrose (*Camissoniopsis lewisii*)	CRPR 3	Annual herb. Blooms March-May (June). Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland. Elev. 0-984 ft.	Low. Suitable habitat is present, but this showy species was not observed during field surveys.
smooth tarplant (*Centromadia pungens* ssp. *laevis*)	CRPR 1B.1	Annual herb. Blooms April-September. Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland. Alkaline soils. Elev. 0-2100 ft.	Low. Suitable habitat is present, but this species was not observed during field surveys.
Parry's spineflower (*Chorizanthe parryi* var. *parryi*)	CRPR 1B.1	Annual herb. Blooms April-June. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Openings in sandy or rocky soils. Elev. 900-4005.	Very low. Suitable habitat on the project site is minimal and disturbed and this species was not observed during field surveys.

Species	Status*	Habitat Description	Potential for Occurrence within Project Site
California saw-grass (*Cladium californicum*)	CRPR 2B.2	Perennial rhizomatous herb. Blooms June-September. Meadows, seeps, and alkaline or freshwater marshes and swamps. Elev. 196-5249 ft.	None. No suitable habitat is present within project site.
paniculate tarplant (*Deinandra paniculata*)	CRPR 4.2	Annual herb. Blooms April-November. Coastal scrub, valley and foothill grassland, vernal pools. Elev. 80-3085 ft.	Low. Suitable habitat is present, but this species was not observed during field surveys.
slender-horned spineflower (*Dodecahema leptoceras*)	CRPR 1B.1	Annual herb. Blooms April-June. Alluvial fans in chaparral and coastal sage scrub. Elev. 284-5,871 ft.	None. No suitable habitat is present within project site.
mesa horkelia (*Horkelia cuneata* var*. puberula*)	CRPR 1B.1	Perennial herb. Blooms February-September. Maritime chaparral, cismontane woodland, and coastal scrub. Elev. 230-2,657 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This perennial species would likely have been observed during field surveys if present.
Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)	CRPR 4.3	Annual. Blooms January-July. Chaparral and coastal scrub. Elev. 0-2905 ft.	Very low. Suitable habitat on the project site is minimal and disturbed and this species was not observed during field surveys.
ocellated Humboldt lily (*Lilium humboldtii* ssp*. ocellatum*)	CRPR 4.2	Perennial bulbiferous herb. Blooms March-July (August). Openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. Elev. 95-5905 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This showy species would likely have been observed during field surveys if present.
Pringle's monardella (*Monardella pringlei*)	CRPR 1A	Annual herb. Blooms May-June. Coastal Scrub (sandy). Elev. 980-1310 ft.	Very low. Presumed extinct. Suitable habitat on the project site is minimal and disturbed and this species was not observed during field surveys..
California muhly (*Muhlenbergia californica*)	CRPR 4.3	Rhizomatous, perennial herb. Blooms June-September. Chaparral, yellow pine forest, coastal sage scrub, wetland-riparian. Elev. 816-7,834 ft.	None. No suitable habitat is present.

Species	Status*	Habitat Description	Potential for Occurrence within Project Site
prostrate navarretia (*Navarretia prostrata*)	CRPR 1B.1	Annual herb. Blooms April-July. Coastal sage scrub, wetland-riparian. Elev. 65-490 ft.	None. No suitable habitat is present.
Brand's star phacelia (*Phacelia stellaris*)	CRPR 1B.1	Annual herb. Blooms March-June. Coastal dunes, coastal scrub. Elev. 0-1310 ft.	Very low. Suitable habitat on the project site is minimal and disturbed and this species was not observed during field surveys.
white rabbit-tobacco (*Pseudognaphalium leucocephalum*)	CRPR 2B.2	Perennial herb. Blooms August-November. Chaparral, cismontane woodland, coastal scrub, riparian woodland on sandy and gravelly soil. Elev. 0-6889 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This perennial species would likely have been observed during field surveys if present.
Coulter's matilija poppy (*Romneya coulteri*)	CRPR 4.2	Perennial rhizomatous herb. Blooms March-July (August). Chaparral, coastal scrub, often in burns. Elev. 65-3935 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This showy species would have been observed during field surveys if present.
chaparral ragwort (*Senecio aphanactis*)	CRPR 2B.2	Annual herb. Blooms January-April. Chaparral, cismontane woodland, coastal scrub. Elev. 45-2625 ft.	Very low. Suitable habitat on the project site is minimal and disturbed.
salt spring checkerbloom (*Sidalcea neomexicana*)	CRPR 2B.2	Perennial herb. Blooms March-June. Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas. Elev. 45-5020 ft.	Very low. Suitable habitat on the project site is minimal and disturbed. This perennial species would likely have been observed during field surveys if present.
San Bernardino aster (*Symphyotrichum defoliatum*)	CRPR 1B.2	Perennial herb. Blooms July-November. Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic). Elev. 5-6695 ft.	None. Suitable habitat is not present.

Species	Status*	Habitat Description	Potential for Occurrence within Project Site
REPTILES			
Belding's orange-throated whiptail (*Aspidoscelis hyperythra*)	WL	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub.	Low. Suitable habitat is limited and this species was not observed during field surveys.
California glossy snake (*Arizona elegans occidentalis*)	SSC	Found in arid scrub, rocky washes, grasslands, and chaparral habitats. Prefers habitats containing open areas and loose soils for burrowing.	Low. Suitable arid scrub and grassland habitats limited.
coast horned lizard (*Phrynosoma blainvillii*)	SSC	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub. Requires open areas, bushes, and fine loose soil.	Low. Suitable open scrub habitat is limited. Species is typically known from closer to the coast.
Southern California legless lizard (*Anniella stebbinsi*)	SSC	Occurs in moist, warm loose soil with plant cover.	None. Suitable habitat is not present.
INVERTEBRATES			
Crotch bumble bee (*Bombus crotchii*)	SCE	Open grassland and scrub habitats containing food plants including plant genera: *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.	Low. Suitable open grassland and scrub habitat and food plants not present.
Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*)	FE	Found in sandy areas composed of Delhi Fine Sands, stabilized by sparse native vegetation.	None. Suitable habitat is not present.
MAMMALS			
northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	SSC	Inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities.	Low. Suitable habitat limited on site; repeated disturbance of the site would likely preclude this species.
pallid bat (*Antrozous pallidus*)	SSC	Day roosts in caves, crevices, mines, and in hollow trees and buildings.	Low. No suitable roosting habitat present.

Species	Status*	Habitat Description	Potential for Occurrence within Project Site
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	SSC	Habitats include early stages of chaparral, open coastal sage scrub, and grasslands near the edges of brush. Uses open land but requires some shrubs for cover.	Low. Suitable habitat is minimal and this species was not observed during field surveys.
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC	Inhabits pinyon-juniper woodlands, chaparral habitats, sagebrush, and deserts. Houses are constructed out of sticks, twigs, and rocks.	None. Suitable habitat not present.
western mastiff bat (*Eumops perotis californicus*)	SSC	Chaparral, live oaks, and arid, rocky regions. Requires downward opening crevices.	None. Suitable downward-opening crevice roosts not present.
western yellow bat (*Lasiurus xanthinus*)	SSC	Occupies a range of habitats in arid and dry areas. Inhabits secluded woodlands, agricultural lands, and sometimes even residential areas.	Low. Suitable roosting habitat not present.
BIRDS			
burrowing owl (*Athene cunicularia*)	SSC	Found in grasslands and open scrub from coast to foothills. Strongly associated with California ground squirrel and other fossorial mammal burrows.	Low. Suitable habitat is present on-site, but no BUOW or sign observed.
California black rail (*Laterallus jamaicensis coturniculus*)	ST, FP	Found in salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation containing emergent vegetation.	None. No suitable wet marsh habitats with emergent vegetation present.
California horned lark (*Eremophila alpestris actia*)	WL	Found from coastal deserts and grasslands to alpine dwarf-shrub habitat above treeline. Also seen in coniferous or chaparral habitats.	Low. Species known to occupy disturbed, open habitats, however this species was not observed during field surveys.
Cooper's hawk (*Accipiter cooperii*)	WL (Nesting)	Typically occurs in oak woodlands but occasionally in willow or eucalyptus woodlands.	Present. Species observed flying over the project site during field surveys.

Species	Status*	Habitat Description	Potential for Occurrence within Project Site
loggerhead shrike (*Lanius ludovicianus*)	SSC (Nesting)	Found within grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for nesting.	Low. The site supports suitable foraging habitat, but dense vegetation for nesting is not present.
southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	WL	Found in arid, moderate to steep rocky terrain with scattered shrub and grass cover.	Low. Suitable steep, rocky shrub and grassland terrain not present.

*CRPR – California Rare Plant Rank
1B – Plants rare, threatened, or endangered in California and elsewhere
2B – Plants rare, threatened, or endangered in California but more common elsewhere
3 – Review List: Plants about which more information is needed
4 – Plants of limited distribution
Threat Ranks
0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
0.2 – Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

FE – Federally Endangered (USFWS)
ST – State Threatened (CDFW)
SCE – State Candidate for Listing as Endangered (CDFW)
FP – Fully Protected (CDFW)
SSC – Species of Special Concern (CDFW)
WL – Watch List (CDFW)

4.4 VEGETATION MAPPING AND GENERAL PLANT AND WILDLIFE SURVEYS

The project site includes developed areas (16.74 acres), disturbed habitat (4.02 acres), eucalyptus woodland (0.88 acre), Fremont's cottonwood trees (*Populus fremontii*) (0.02 acre), non-native grassland (24.94 acres), disturbed Riversidean sage scrub (0.46 acre), and a western sycamore tree (*Platanus racemosa*) (0.01 acre) (Figure 2). The vegetation communities/land uses that occur within the project site are described below.

Developed

Developed areas on site include industrial buildings in the northeast, southeast, and center of the project site as well as a developed area on the western side of the project site along Baker Avenue.

Disturbed

Disturbed habitat is typically classified as land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a plant association (e.g., disturbed chaparral). Disturbed habitat is typically found in vacant lots, along roadsides, within construction staging areas, and in abandoned fields. The habitat is typically dominated by non-native annual species and perennial broadleaf species. Disturbed habitat occurs along E 9th Street,

in the northwestern portion of the project site, and along the southern boundary of the project site (Appendix A, Photos 6 and 8).

Eucalyptus woodland

Eucalyptus woodland is typically characterized by dense stands of gum trees (*Eucalyptus* spp.) that are native to Australia. The Eucalyptus woodland on-site is dominated by river red gum (*Eucalyptus camaldulensis*) and occurs along E 9th Street and within the center of the project site, adjacent to a developed area. Gum trees are considered heritage trees under the City of Rancho Cucamonga Development Code, Section 17.16.080 (City of Rancho Cucamonga 2012). As such, an arborist report and tree removal permit are required to remove gum trees within the City of Rancho Cucamonga.

Fremont's cottonwood

Seven individual Fremont's cottonwood trees occur within the project site. Fremont's cottonwood is a large tree native to California that can grow between 39 and 115 feet in height. Although sometimes associated with riparian vegetation, the Fremont's cottonwood trees on the project site are located in a distinctly upland area not associated with riparian communities or wetlands.

Non-Native Grassland

Non-native grassland comprises a majority of the project site. Non-native grassland generally occurs on fine-textured loam or clay soils that are moist during the winter rainy season and very dry during the summer and fall (Holland 1986). Non-native grassland within the project site is dominated by red brome (*Bromus madritensis* ssp. *rubens*), slender wild oat (*Avena barbata*), and long-beak filaree (*Erodium botrys*). Other prevalent species include short-pod mustard (*Hirschfeldia incana*) and rancher's fiddleneck (*Amsinckia intermedia*) (Appendix A, Photos 2 and 10).

Riversidean sage scrub – disturbed

Riversidean sage scrub is a form of coastal sage scrub found in Riverside County. The Riversidean sage scrub on the project site is disturbed and includes non-native grasses and debris, though it is still dominated by inland California buckwheat (*Eriogonum fasciculatum* sp. *foliolosum*) and sparse coastal sagebrush (*Artemisia californica*) (Appendix A, Photo 3).

Western Sycamore Tree

One individual western sycamore (*Platanus racemosa*) occurs within the project site. The western sycamore is a large tree native to California that can grow up to 110 feet in height. Although sometimes associated with riparian vegetation, the sycamore tree on the project site is located in a distinctly upland area not associated with riparian communities or wetlands.

4.5 JURISDICTIONAL WATERS AND STREAMBED

The formal jurisdictional delineation determined that approximately 0.40 acre (234 linear feet) of a concrete-lined portion of Cucamonga Creek occurs within the project site and is expected to be

considered a non-wetland water of the U.S./State jurisdictional by the Corps and RWQCB and an intermittent streambed jurisdictional by CDFW. The project site also supports two ditches (Ditch 1 and Ditch 2) that are not expected to be considered jurisdictional by the Corps, RWQCB, and CDFW as these features appear to be human-made ditches excavated wholly in and draining only uplands for localized runoff-conveyance purposes (i.e., do not appear to connect to Cucamonga Creek) lacking a defined bed and bank or ordinary high water mark (OHWM) and are not relocated natural drainages or excavated tributaries. Complete results are presented under separate cover in the Jurisdictional Delineation Report (Appendix D). Please note, RBC completed and submitted the Jurisdictional Delineation Report (Appendix D) and an associated request for an Approved Jurisdictional Determination (AJD), to the Corps to conclude that Ditch 1 and 2 are not Corps-jurisdictional in November 2019. The Corps issued the AJD in May 2020 and determined the Cucamonga Creek to be a jurisdictional non-wetland water of the U.S. and Ditch 1 and 2 to be non-jurisdictional aquatic resources.

To clarify, the Jurisdictional Delineation Report and an associated request for an AJD were completed and submitted to the Corps in November 2019, prior to the effective date of the updated definition of the waters of the U.S. per the Navigable Waters Protection Rule (NWPR; 85 FR 22250, April 21, 2020) and while the Clean Water Rule (as amended at 80 FR 37104, June 29, 2015) defined waters of the U.S. between submittal of the AJD request and finalization of the AJD, the pre-2015 definition of waters of the U.S. (51 FR 41217, November 13, 1986; 53 FR 20764, June 6, 1988) became effective on December 23, 2020. Therefore, the Corps issued an AJD on May 14, 2020 and determined Ditch 1 and 2 to be non-jurisdictional under the pre-2015 waters of the U.S. definition using the information provided in and referencing the November 2019 Jurisdictional Delineation Report. As such, the currently applicable NWPR does not apply to the proposed project. Should the AJD expire for the project's Jurisdictional Delineation Report review area, the on-site jurisdiction will be reanalyzed under the applicable waters of the U.S. definition.

Permitting for impacts on the delineated jurisdictional areas will require permitting through the Corps, RWQCB, and CDFW.

5 IMPACTS

Direct impacts refer to any alteration, disturbance, or destruction of biological resources caused by and occurring at the same time and place as the project. Examples include direct losses to native habitats, potential jurisdictional waters, wetlands, and special-status species; the crushing of adult plants, bulbs, or seeds; the diversion of natural surface water flows; injury, death, and/or harassment of listed and/or special-status species; and the destruction of habitats necessary for species breeding, feeding, or sheltering.

Indirect impacts may occur later in time or at a place that is farther removed in distance from the project than direct impacts, but indirect impacts are still reasonably foreseeable and attributable to project-related activities. Examples include habitat fragmentation; elevated noise, dust, and lighting levels; changes in hydrology, runoff, and sedimentation; decreased water quality; soil compaction;

increased human activity; and the introduction of invasive wildlife (domestic cats and dogs) and plants.

Cumulative impacts are the direct and indirect impacts of a proposed project which, when considered alone, would not be deemed substantial, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. 'Related projects' refers to past, present, and reasonably foreseeable future projects which would have similar impacts on the proposed project.

CEQA Guidelines Form J thresholds of significance have been used to determine whether project implementation would result in a significant direct, indirect, and/or cumulative impact. These thresholds are based on Appendix G of the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000–15387). A significant biological resources impact would occur if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance;
- Conflict with the provisions of an adopted HCP; Natural Community Conservation Plan; or other approved local, regional, or state habitat conservation plan.

5.1 NATIVE HABITAT IMPACT ANALYSIS

The project will impact seven habitats or land uses as outlined in Table 2. The project will impact 0.49 acre of native vegetation communities; 0.01 acre of sycamore, 0.02 acre of Fremont's cottonwood, and 0.46 acre of disturbed Riversidean sage scrub. As noted above, the entire property is highly disturbed and dominated by non-native vegetation. Impacts on non-native vegetation communities or habitats would be less than significant.

Fremont's cottonwood (0.02 acre) and western sycamore (0.01 acre) vegetation communities contain native tree species. A Tree Removal Permit issued in compliance with Section 17.16.080 of the City of Rancho Cucamonga Development Code must be obtained to remove any tree which meets the criteria of a heritage tree, as described in Section 2.5.3 above.

Table 3. Potential Project Impacts on Vegetation Communities/Land Uses

Land Use (Map Code)	Impacts within Project Boundary (Acres)*
Developed (DEV)	16.74
Disturbed (DIST)	4.02
Eucalyptus woodland (EUC)	0.88
Fremont's cottonwood (FC)	0.02
Non-native grassland (NNG)	24.94
Riversidean sage scrub - Disturbed (RSS-D)	0.46
Western sycamore (SYC)	0.01
Total	47.07

*Acreages rounded to the hundredths based on raw numbers provided during GIS analysis of the project, which are available upon request.

5.2 SPECIAL-STATUS PLANTS IMPACT ANALYSIS

No special-status plant species were observed during project field surveys. As summarized in Table 2, there are no special-status plant species with moderate or high potential to occur on the project site; three species have low potential to occur and 15 species have low or very low potential to occur.

Of the three special-status plants with low potential to occur, two are still relatively common throughout their range (paniculate tarplant and Lewis' evening primrose) and the other less common species, smooth tarplant, would likely have been observed if present on site. In addition, the small impact on suitable habitat for these species would not cause a significant decline in their numbers (if present) or geographical distribution. Of the 15 special-status plants with very low potential to occur, 10 are showy (e.g. large flower or stature) and/or perennial and would likely have been observed if present on site. The five annual species would also likely have been observed as multiple field surveys were conducted during the appropriate blooming period for these species. These species are considered highly unlikely to occur.

Direct and indirect impacts on special-status plant species could occur from construction crews removing vegetation, trampling, covering, and crushing individual plants, populations, or suitable potential habitat for special-status plant species. Due to the high level of disturbance on the project site, potentially suitable habitat for special-status plant species is limited and has been degraded and such species are not likely to occur. In addition, such species would likely have been observed during field surveys, if present. Impacts on potentially suitable habitat for each special-status plant with potential to occur on site would be relatively small and therefore impacts on individual special-status plants, if present or their suitable habitat would be less than significant.

5.3 SPECIAL-STATUS ANIMALS IMPACT ANALYSIS

As summarized in Table 2, 12 special-status animals have low potential to occur onsite and one such species, Cooper's hawk, was observed flying over the site. No special-status animal species has a moderate or high potential to occur on the project site.

Direct impacts on special-status animals, if present could include mortality or injury, or the permanent conversion and loss of potentially suitable habitat during construction activities (e.g., grubbing, grading, excavation). Specifically, special-status birds, raptors, and migratory birds could be directly impacted by removal or disturbance of nesting habitat during breeding season. The project will avoid direct impacts on special-status birds as pre-construction surveys for burrowing owl will be conducted to verify their presence/absence and avoidance measures will be implemented, if present, and pre-construction surveys for all nesting birds will be conducted if vegetation is to be removed during the breeding season (January 15 – August 31). Direct impacts on special-status bats, invertebrates, mammals, and reptiles are not expected or would be minimal as these species are expected to flush during vegetation removal or other construction activities.

Due to the degraded condition of the project site, suitable habitat for special-status animals is limited and disturbed. Through compliance with the project-specific mitigation measures in Section 6 of this report, direct impacts on special-status animals would be reduced or avoided and project impacts on special-status animals would be less than significant.

5.4 NESTING BIRD IMPACT ANALYSIS

The project site has the potential to impact active bird nests if vegetation is removed or ground disturbing activities occur during the nesting season (January 15 to August 31). Impacts on nesting birds are prohibited by the MBTA and CFGC. A project-specific mitigation measure that will avoid project impacts on nesting birds is identified in Section 6.2 of this report. With implementation of this measure, impacts on nesting birds would be less than significant.

5.5 WILDLIFE MOVEMENT IMPACT ANALYSIS

Although suitable habitat for burrowing owl and nesting birds exist on the project site, the site is not large enough to support significant wildlife movement. Additionally, the site is surrounded in all directions by developed land, which precludes habitat connectivity and use of the site as a wildlife corridor. As such, impacts to wildlife movement and corridors would not be significant.

5.6 CONFORMANCE WITH LOCAL BIOLOGICAL POLICIES, ORDINANCES, AND PLANS

The project has the potential to impact trees and would require an approved Tree Removal Permit issued in compliance with Section 17.16.080 in the City of Rancho Cucamonga Development Code, Chapter 17.80 – Tree Preservation referenced in section 2.5.3 above. With issuance of a Tree Removal Permit, the project would conform with local policies/ordinances.

The project will not conflict with local habitat conservation plans.

5.7 JURISDICTIONAL RIPARIAN AREAS IMPACT ANALYSIS

The project will not impact riparian areas or vernal pools.

5.8 JURISDICTIONAL WATERS IMPACT ANALYSIS

Based upon the results in the Jurisdictional Delineation Report (Appendix D), RBC expects that the project would permanently impact approximately 0.01 acre of non-wetland water of the U.S./State jurisdictional by the Corps and RWQCB and intermittent streambed jurisdictional by CDFW within the concrete-lined portion of Cucamonga Creek. Note that project impacts are based on preliminary project designs, specifically an approximately 66 to 78-inch wide storm drain that will connect the storm drain system to the concrete-lined Cucamonga Creek. Project impacts may change once project designs are finalized. Ditch 1 and Ditch 2 are not expected to be considered jurisdictional by the Corps, RWQCB, and CDFW as these features appear to be man-made ditches excavated wholly in and draining only uplands for localized runoff-conveyance purposes (i.e., do not appear to connect to Cucamonga Creek) with no defined bed and bank or OHWM and are not relocated natural drainages or excavated tributaries. Please note, RBC completed and submitted the Jurisdictional Delineation Report (Appendix D) and an associated request for an AJD, to the Corps to conclude that Ditch 1 and 2 are not Corps-jurisdictional in November 2019. The Corps issued the AJD in May 2020 and determined the Cucamonga Creek to be a jurisdictional non-wetland water of the U.S. and Ditch 1 and 2 to be non-jurisdictional aquatic resources.

Permitting through the Corps, RWQCB, and CDFW will be required for impacts on non-wetland waters of the U.S./State jurisdictional by the Corps and RWQCB and intermittent streambed jurisdictional by CDFW. The project applicant will be responsible for acquiring the necessary authorizations required by the Corps, RWQCB, and CDFW and associated compensatory mitigation requirements, if applicable.

5.9 INDIRECT IMPACT ANALYSIS

In the context of biological resources, indirect impacts are those effects associated with construction activities adjacent to native open space. Potential indirect effects associated with development include water quality impacts from drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities. Since the project is adjacent to already developed or disturbed areas, the project will not result in significant indirect effects to biological resources.

5.10 CUMULATIVE IMPACT ANALYSIS

Due to the level of disturbance on the project site, the adjacent developed land, and the lack of sensitive biological resources, the project will not result in any significant cumulative impacts to biological resources.

6 Mitigation and Avoidance Measures

The following discussion provides project-specific mitigation/avoidance measures for actual or potential impacts on special-status biological resources.

6.1 Burrowing Owl

As noted above, burrowing owls, active burrows, or burrowing owl sign was not observed at the project site during the habitat assessment or the protocol breeding season surveys, and limited suitable habitat is present on site. Although the potential for burrowing owl to occur on site is low, a pre-construction burrowing owl survey should be conducted prior to project construction to ensure that burrowing owl have not colonized the site. In order to avoid impacts on burrowing owl, the following mitigation measure is recommended:

> MM-1: A qualified biologist(s) will conduct a pre-construction presence/absence survey for burrowing owl at least 14 days prior to ground-disturbing activities and within 24 hours immediately before ground-disturbing activities. If burrowing owl are documented on-site, a plan for passive relocation prepared by a City-approved biologist, following CDFW protocols and performance standards established in the CDFW Staff Report on Burrowing Owl Mitigation (2012) prior to any ground disturbing activities. Construction activities may proceed in the non-breeding season with the establishment and protection of a minimum 300' buffer area around occupied burrow(s). The size of the buffer may be reduced, if appropriate, in consultation and approval from CDFW. If the survey is negative, the Project may proceed without further restrictions related to burrowing owls.

6.2 Nesting Birds

As noted above, the project site has the potential to support nesting birds. To avoid impacts on nesting birds the following mitigation measure is recommended:

> MM-2: Vegetation clearing and ground disturbing activities should be conducted outside of the nesting season (January 15 to August 31). If construction activities occur during the nesting season, a qualified biologist will conduct a nesting bird survey within three days prior to any disturbance of the site, including tree and shrub removal, disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and species observed, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Raptor species will have an avoidance buffer of 500 feet and other bird species will have an avoidance buffer of 300 feet. These buffers may be reduced in consultation with the CDFW. If active nests are not identified, vegetation clearing and ground disturbing activities may commence. If ground disturbing activities are scheduled outside of the nesting season, a nesting bird survey will not be required.

6.3 JURISDICTIONAL WATERS AND STREAMBEDS

As noted above, the project has the potential to permanently impact non-wetland waters of the U.S./State jurisdictional by the Corps and RWQCB and streambed jurisdictional by CDFW. To reduce impacts on jurisdictional waters and streambed the following mitigation measure is recommended:

> MM-3: Based on preliminary project designs and the results of the Jurisdictional Delineation Report (Appendix D) for the project, RBC expects that the project would permanently impact approximately 0.01 acre of non-wetland water of the U.S./State jurisdictional by the Corps and the RWQCB and intermittent streambed jurisdictional by the CDFW within the concrete-lined portion of Cucamonga Creek. Temporary fill from the concrete channel would be removed after construction and would not require post-project restoration. Prior to any ground-disturbing activity near the jurisdictional feature, applicable permits shall be obtained through the Corps, RWQCB, and CDFW for impacts to jurisdictional features. The Applicant shall be obligated to implement/comply with the mitigation measures required by the resource agencies regarding impacts on their respective jurisdictions.
>
> In light of the disturbed and limited aquatic resource functions of the concrete Cucamonga Creek, compensatory mitigation should not be required given the minimal adverse impacts on jurisdictional features. Furthermore, the project does not result in a permanent loss of waters of the U.S., waters of the State, or CDFW streamed given the project essentially replaces a portion of concrete-lined bank of the Cucamonga Creek Channel with a concrete outfall structure. Thus, the channel is anticipated to maintain the current aquatic resource function after project implementation and will not be converted to an upland, nonaquatic resource.
>
> Should compensatory mitigation be required by the regulatory agencies, it is expected that permanent impacts to jurisdictional features would be compensated for at a maximum of a 1:1 mitigation ratio. Potential compensatory mitigation to offset impacts to jurisdictional resources may be implemented through off-site, permittee-responsible mitigation, in-lieu fee program or mitigation bank credit purchase, or a combination of these options depending on availability. The proposed mitigation strategy will prioritize in-kind and in-watershed options per the regulatory agencies' preferences. The regulatory agencies will make the final determination of the final compensatory mitigation requirements during the permit evaluation process.

7 CONCLUSION

As outlined above, the project will not result in significant impacts on biological resources with the implementation of MM-1 through MM-3 in Section 6. The project site is highly disturbed, and no special-status plant, wildlife, or habitats were observed within the project site. The potential for special-status plants and animals is low to very low. Several special-status wildlife species, most notably burrowing owl have low or very low potential to occur based on their current distribution and habitat requirements. No burrowing owl, burrowing owl sign, or active burrows were observed

during the habitat assessment or breeding season protocol surveys, and burrowing owl are presumed absent from the site. However, a pre-construction burrowing owl survey should be conducted to document the continued absence of burrowing owl from the project site (see recommended MM-1). Suitable avian nesting habitat is present on site. A pre-construction clearance survey for nesting birds should be conducted to ensure there are no impacts on nesting birds (see recommended MM-2). The project, as currently proposed, would permanently impact non-wetland waters of the U.S./State jurisdictional by the Corps and RWQCB and intermittent streambed jurisdictional by CDFW. Permitting through the Corps, RWQCB, and CDFW for such impacts will be required (see recommended MM-3).

8 REFERENCES

Baldwin, B.G., D. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D. Wilken. 2012. The Jepson Manual: Vascular Plants of California, Thoroughly Revised and Expanded. University of California Press, Berkeley, CA.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843

California Department of Fish and Wildlife (CDFW). 2019. California Department of Fish and Game Natural Diversity Database – Electronic Format. Last visited July 19, 2019. https://www.wildlife.ca.gov/Data/CNDDB

California Native Plant Society (CNPS), Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Accessed 2019. http://www.rareplants.cnps.org

California State Water Resources Control Board (SWRCB). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf

City of Rancho Cucamonga. 2001. 2001 General Plan City of Rancho Cucamonga. Accessed on October 16, 2019. https://cdm16255.contentdm.oclc.org/digital/collection/p266301ccp2/id/572/

City of Rancho Cucamonga. 2012. Rancho Cucamonga Development Code. Accessed on October 16, 2019. http://qcode.us/codes/ranchocucamonga/view.php?topic=17&frames=on

County of San Bernardino. 2007. County of San Bernardino 2007 Development Code. Last accessed July 19, 2019. (http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DCWebsite.pdf

County of San Bernardino. 2012. Biotic Resources Overlay Map. Accessed 2019. http://www.sbcounty.gov/Uploads/lus/BioMaps/cnty_all_biotic_resources_map_final.pdf

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 100 pp. with Appendices.

Henny, C.J. and L.J. Blus. 1981. Artificial burrows provide new insight into burrowing owl nesting biology. Raptor Research 15:82-85.

Holland, R. 1986. Preliminary descriptions of the terrestrial natural communities of California. Unpublished document, California Department of Fish and Game, Natural Heritage Division. Sacramento, CA.

Rocks Biological Consulting (RBC). 2019. Panattoni E 9th St & Vineyard Ave Project Jurisdictional Delineation Report. May 29.

U.S. Army Corps of Engineers (Corps). 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Eds. J.S. Wakely, R.W.

Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers (Corps). 2008b. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual. R.W. Lichvar, and S.M. McColley. ERDC/CRREL TR-08-12. Hanover, NH: U.S. Army Engineer Research and Development Center.

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service. 2019. Natural Resources Conservation Service Web Soil Survey – Electronic Format. Accessed 2019. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

U.S. Fish and Wildlife Service (USFWS). 1997. Delhi Sands flower-loving fly *(Rhaphiomidas terminatus abdominalis)* Recovery Plan. U. S. Fish and Wildlife Service, Portland, OR. 51 pages.

U.S. Fish and Wildlife Service (USFWS). 2008. 5-Year Review: Delhi Sands flower-loving fly *(Rhaphiomidas terminatus abdominalis)* Carlsbad, CA.

U.S. Fish and Wildlife Service (USFWS). 2019. Endangered Species Database. Accessed 2019. https://www.fws.gov/endangered

Zarn, M. 1974. Burrowing owl. U.S. Department of Interior, Bureau of Land Management. Technical Note T-N 250. Denver, Colorado. 25pp.

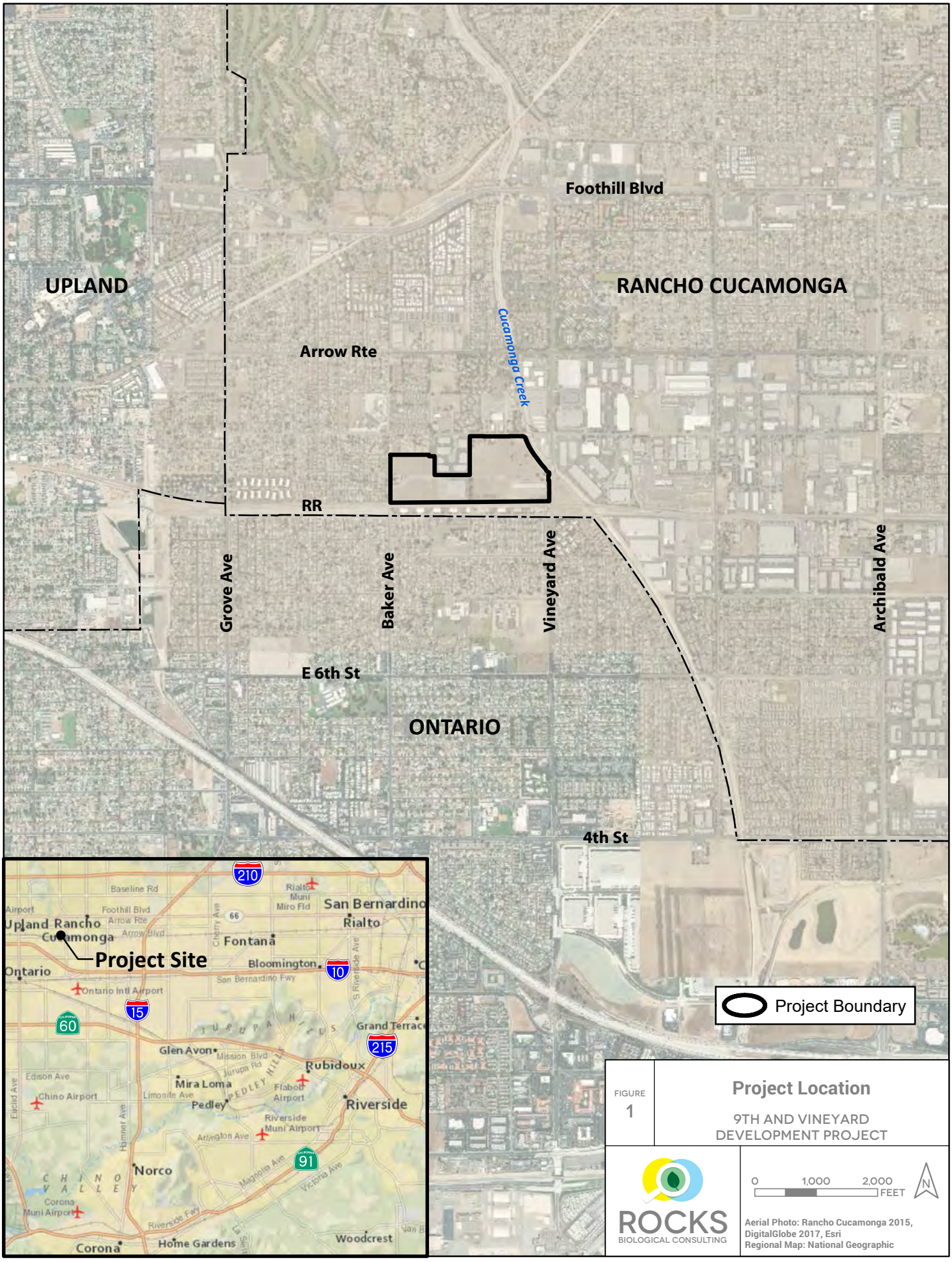


FIGURE 1

Project Location

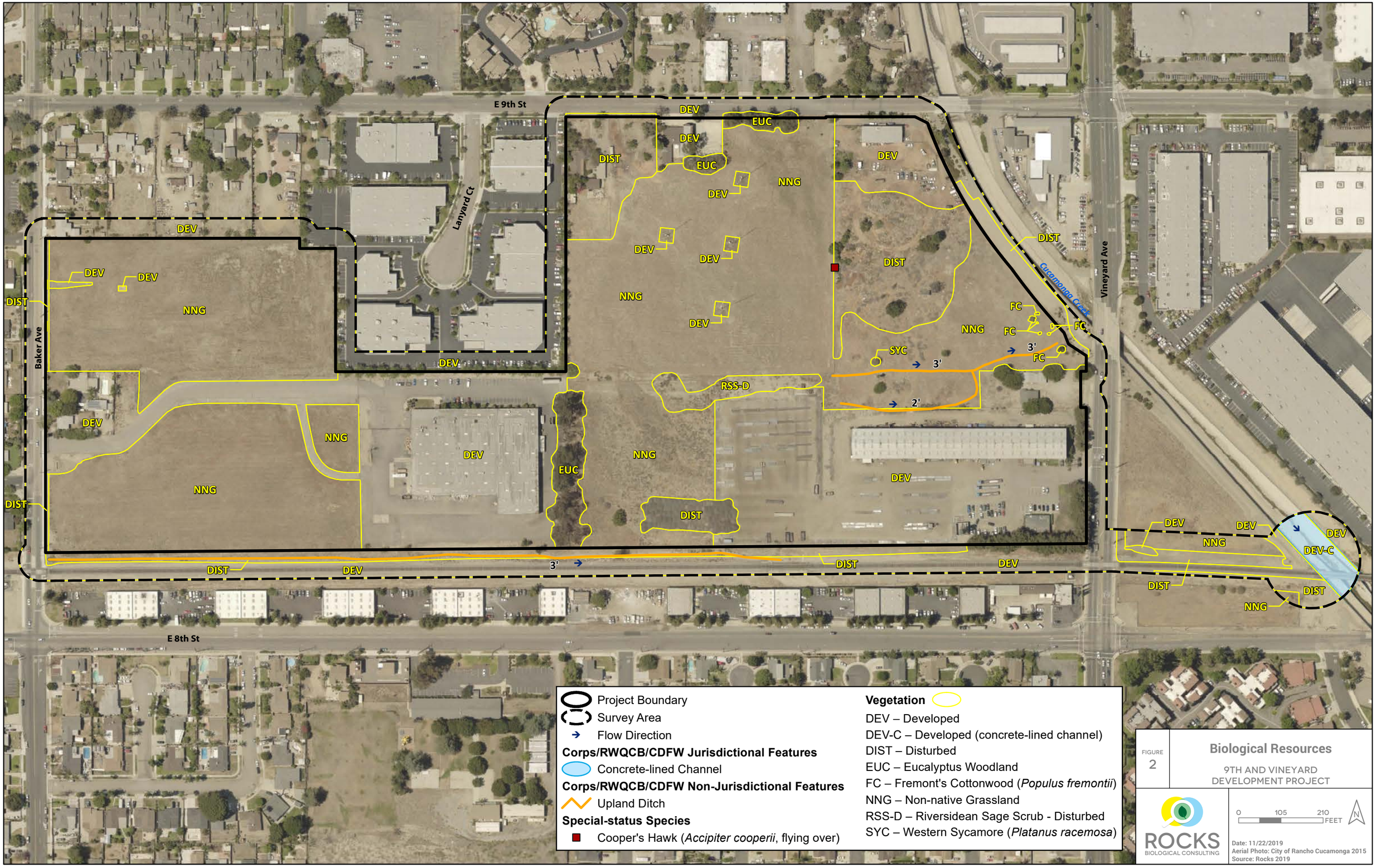
9TH AND VINEYARD DEVELOPMENT PROJECT

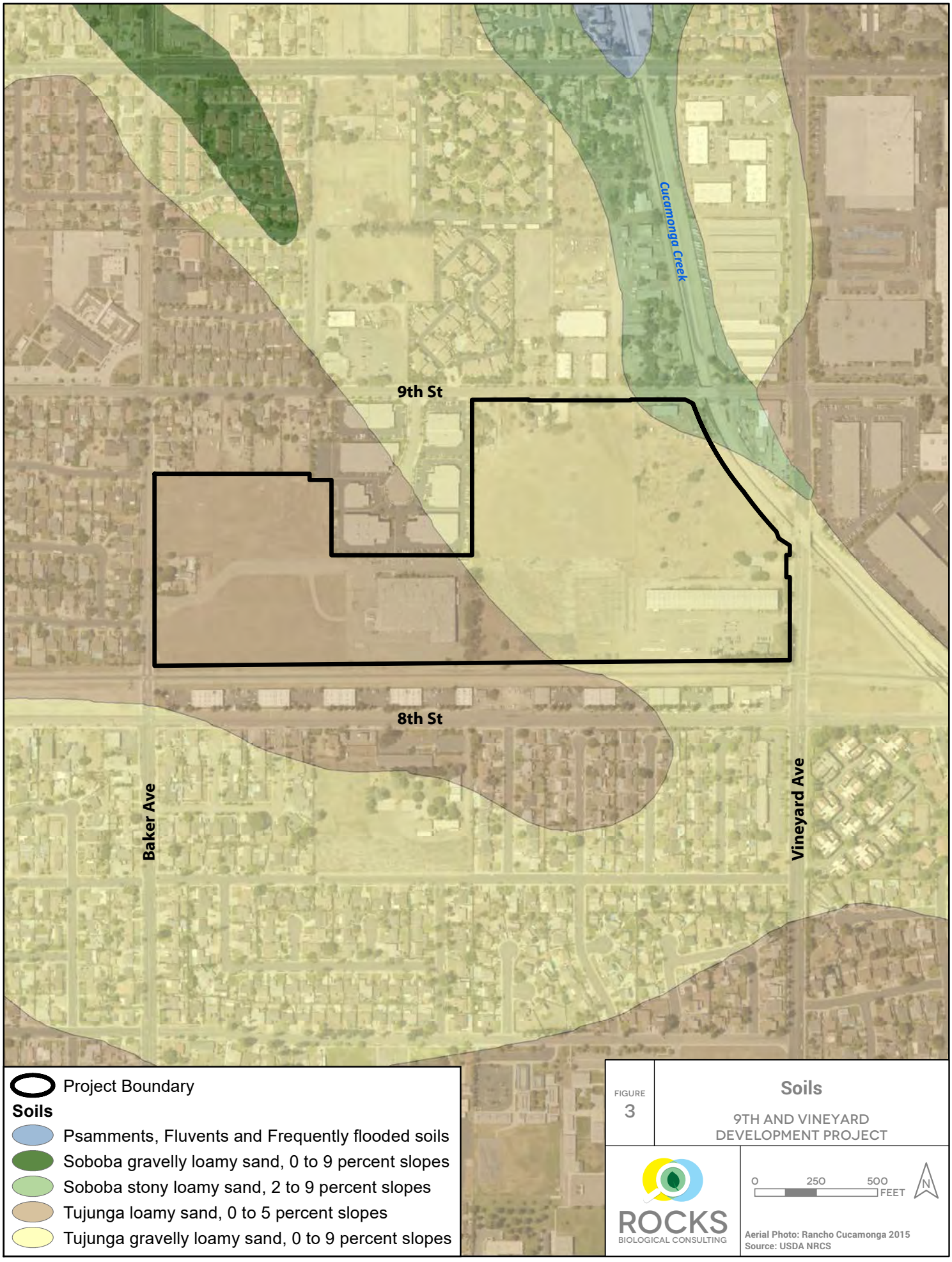
ROCKS BIOLOGICAL CONSULTING

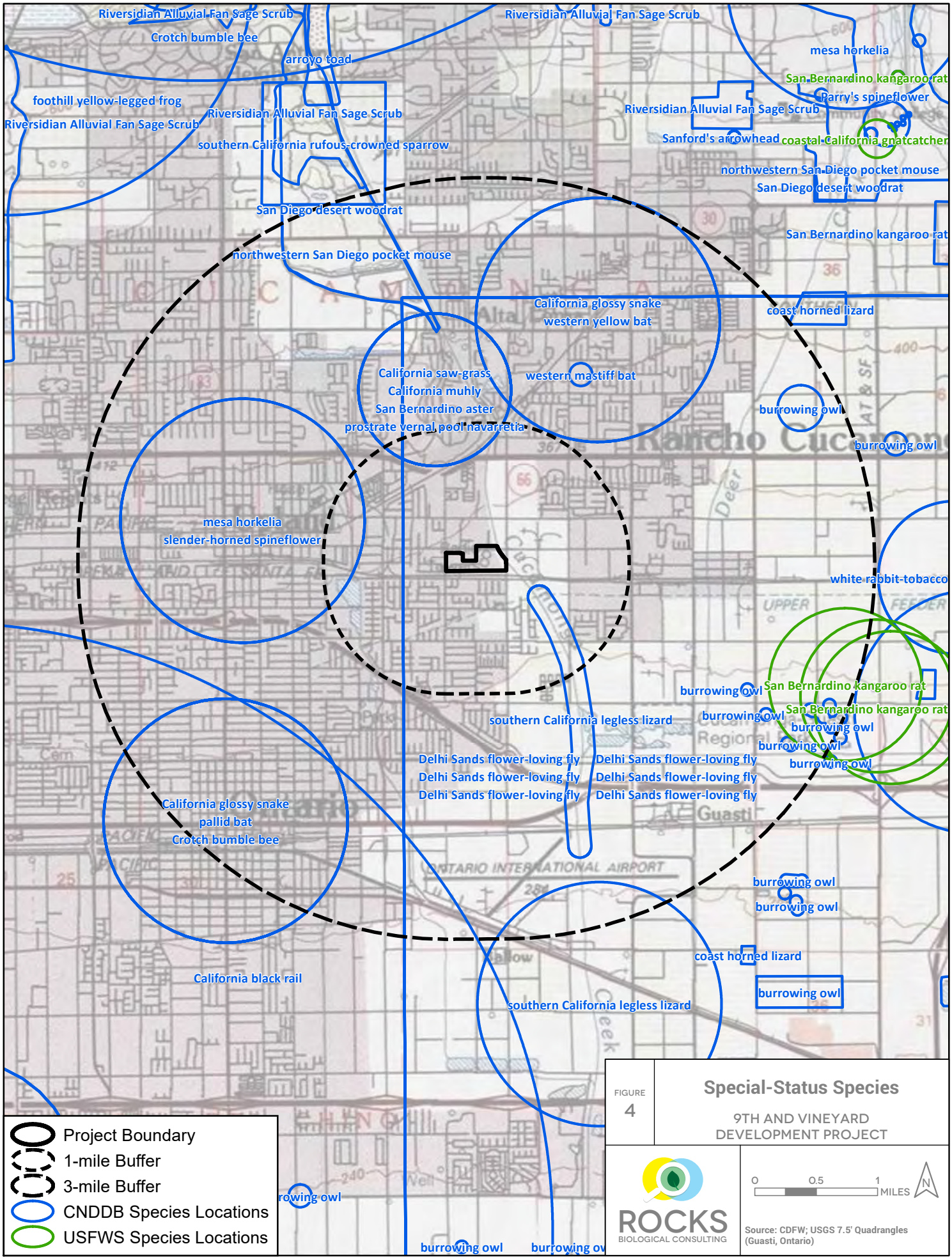
0 1,000 2,000 FEET

N

Aerial Photo: Rancho Cucamonga 2015, DigitalGlobe 2017, Esri
Regional Map: National Geographic


E 9th St
E 8th St
Baker Ave
Lanyard Ct
Vineyard Ave
Cucamonga Creek
DEV
DIST
NNG
EUC
RSS-D
SYC
FC
DEV-C
3'
2'
Project Boundary
Survey Area
Flow Direction
Corps/RWQCB/CDFW Jurisdictional Features
Concrete-lined Channel
Corps/RWQCB/CDFW Non-Jurisdictional Features
Upland Ditch
Special-status Species
Cooper's Hawk (Accipiter cooperii, flying over)
Vegetation
DEV – Developed
DEV-C – Developed (concrete-lined channel)
DIST – Disturbed
EUC – Eucalyptus Woodland
FC – Fremont's Cottonwood (Populus fremontii)
NNG – Non-native Grassland
RSS-D – Riversidean Sage Scrub - Disturbed
SYC – Western Sycamore (Platanus racemosa)
FIGURE 2
Biological Resources
9TH AND VINEYARD DEVELOPMENT PROJECT
ROCKS BIOLOGICAL CONSULTING
0 105 210 FEET
N
Date: 11/22/2019
Aerial Photo: City of Rancho Cucamonga 2015
Source: Rocks 2019


Cucamonga Creek
9th St
8th St
Baker Ave
Vineyard Ave
Project Boundary
Soils
Psamments, Fluvents and Frequently flooded soils
Soboba gravelly loamy sand, 0 to 9 percent slopes
Soboba stony loamy sand, 2 to 9 percent slopes
Tujunga loamy sand, 0 to 5 percent slopes
Tujunga gravelly loamy sand, 0 to 9 percent slopes
FIGURE 3
Soils
9TH AND VINEYARD DEVELOPMENT PROJECT
ROCKS BIOLOGICAL CONSULTING
0 250 500 FEET
N
Aerial Photo: Rancho Cucamonga 2015
Source: USDA NRCS


Riversidian Alluvial Fan Sage Scrub
Crotch bumble bee
arroyo toad
foothill yellow-legged frog
Riversidian Alluvial Fan Sage Scrub
Riversidian Alluvial Fan Sage Scrub
southern California rufous-crowned sparrow
San Diego desert woodrat
northwestern San Diego pocket mouse
Riversidian Alluvial Fan Sage Scrub
mesa horkelia
San Bernardino kangaroo rat
Parry's spineflower
Riversidian Alluvial Fan Sage Scrub
Sanford's arrowhead
coastal California gnatcatcher
northwestern San Diego pocket mouse
San Diego desert woodrat
San Bernardino kangaroo rat
California glossy snake
western yellow bat
coast horned lizard
California saw-grass
California muhly
San Bernardino aster
prostrate vernal pool navarretia
western mastiff bat
burrowing owl
burrowing owl
mesa horkelia
slender-horned spineflower
white rabbit-tobacco
burrowing owl
San Bernardino kangaroo rat
burrowing owl
San Bernardino kangaroo rat
burrowing owl
burrowing owl
burrowing owl
southern California legless lizard
Delhi Sands flower-loving fly
Delhi Sands flower-loving fly
Delhi Sands flower-loving fly
Delhi Sands flower-loving fly
Delhi Sands flower-loving fly
Delhi Sands flower-loving fly
California glossy snake
pallid bat
Crotch bumble bee
burrowing owl
burrowing owl
coast horned lizard
California black rail
burrowing owl
southern California legless lizard
burrowing owl
burrowing owl
burrowing owl
Project Boundary
1-mile Buffer
3-mile Buffer
CNDDB Species Locations
USFWS Species Locations
FIGURE 4
Special-Status Species
9TH AND VINEYARD DEVELOPMENT PROJECT
ROCKS BIOLOGICAL CONSULTING
0 0.5 1 MILES
N
Source: CDFW; USGS 7.5' Quadrangles (Guasti, Ontario)

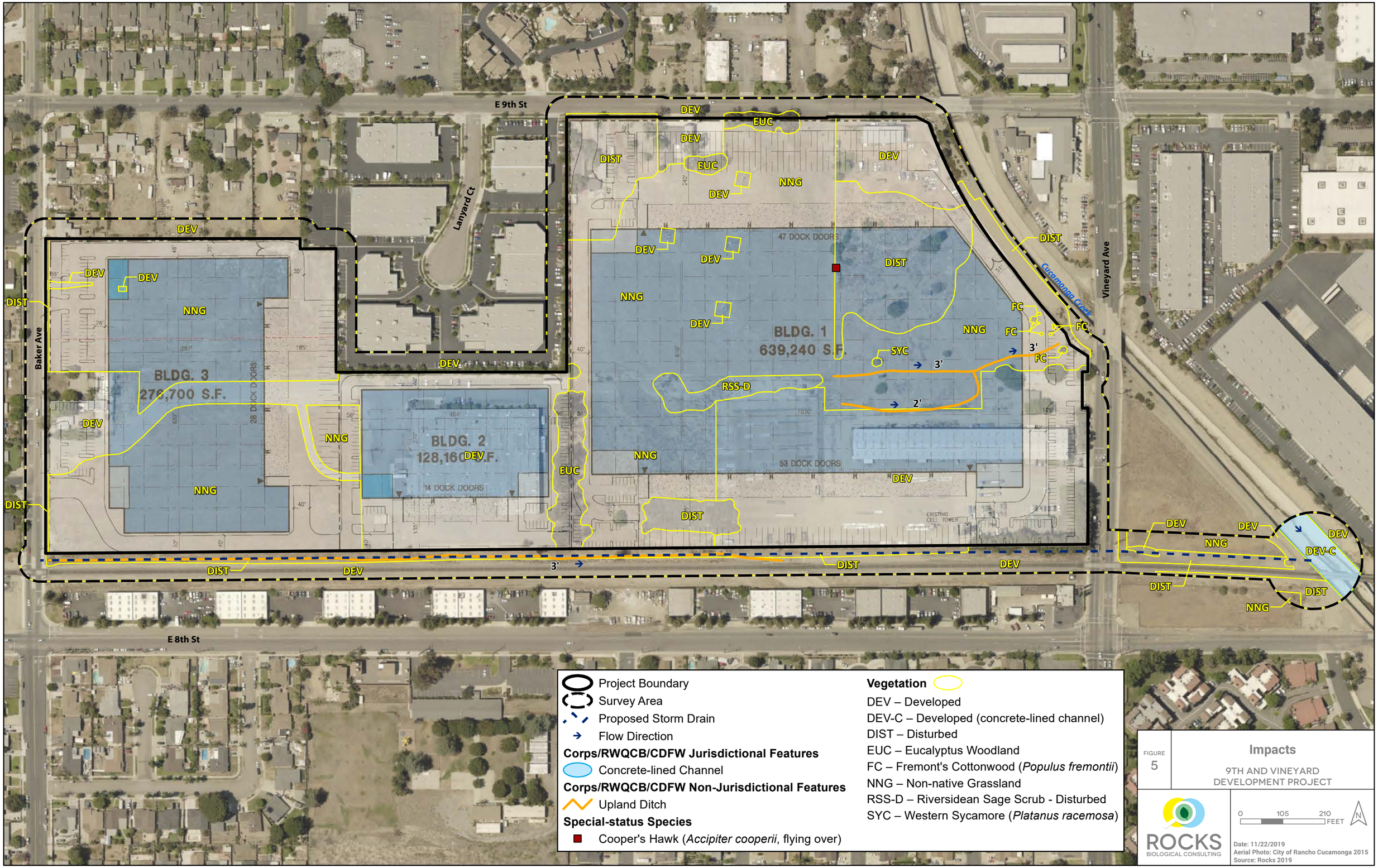


FIGURE 5

Impacts

9TH AND VINEYARD DEVELOPMENT PROJECT

ROCKS BIOLOGICAL CONSULTING

0 105 210 FEET

N

Date: 11/22/2019
Aerial Photo: City of Rancho Cucamonga 2015
Source: Rocks 2019

APPENDIX A

SITE PHOTOGRAPHS

Appendix A

Site Photographs

Photo 1. View of disturbed ground and non-native grassland on project site, facing southwest. March 12, 2019.

Photo 2. View of non-native grassland on project site, facing northwest. March 12, 2019.

Photo 3. View of the small patch of disturbed Riversidean sage scrub on project site. March 12, 2019.

Photo 4. View of non-native grassland on project site, facing north. March 12, 2019.

Photo 5. View of non-native grassland on the western parcel, facing north. March 12, 2019.

Photo 6. View of disturbed debris piles on project site, facing east. April 16, 2019.

Photo 7. View of the upland ditch on the eastern parcel, facing east. April 16, 2019.

Photo 8. View of debris on site, facing north. April 16, 2019.

Photo 9. View of non-native grassland on the western parcel, facing east. April 16, 2019.

Photo 10. View of mowed, non-native grassland on the western parcel facing west. June 20, 2019.

APPENDIX B

PLANT AND WILDLIFE SPECIES OBSERVED

Appendix B

Plant and Wildlife Species Observed

Family	Scientific Name	Common Name
PLANTS		
Adoxaceae	*Sambucus nigra* ssp. *caerulea*	blue elderberry
Anacardiaceae	*Schinus molle**	Peruvian pepper tree*
Anacardiaceae	*Schinus terebinthifolius**	Brazilian pepper tree*
Arecaceae	*Phoenix canariensis**	Canary Island date palm*
Arecaceae	*Washingtonia robusta**	Mexican fan palm*
Asteraceae	*Ambrosia confertiflora*	weak-leaf bur-sage
Asteraceae	*Artemisia californica*	coastal sagebrush
Asteraceae	*Centaurea melitensis**	tocalote*
Asteraceae	*Heterotheca grandiflora*	telegraph weed
Asteraceae	*Sonchus oleraceus**	common sow-thistle*
Boraginaceae	*Amsinckia intermedia*	rancher's fiddleneck
Boraginaceae	*Pectocarya peninsularis*	peninsular combseed
Boraginaceae	*Plagiobothrys collinus*	popcornflower
Brassicaceae	*Brassica tournefortii**	Sahara mustard*
Brassicaceae	*Descurainia pinnata*	western tansy-mustard
Brassicaceae	*Hirschfeldia incana**	short-pod mustard*
Brassicaceae	*Sisymbrium irio**	London rocket*
Chenopodiaceae	*Salsola* sp.*	tumbleweed*
Crassulaceae	*Crassula connata*	pygmyweed
Ephedraceae	*Ephedra viridis*	green ephedra
Euphorbiaceae	*Croton setiger*	doveweed
Fabaceae	*Acmispon glaber* var. *brevialatus*	short-wing deerweed
Fabaceae	*Lupinus bicolor*	miniature lupine
Fabaceae	*Melilotus indicus**	indian sweetclover*
Geraniaceae	*Erodium botrys**	long-beak filaree/storksbill*
Geraniaceae	*Erodium cicutarium**	red-stem filaree/storksbill*
Lamiaceae	*Marrubium vulgare**	horehound*
Meliaceae	*Melia azedarach**	China berry, Persian-lilac*
Myrtaceae	*Eucalyptus camaldulensis**	river red gum*
Platanaceae	*Platanus racemosa*	western sycamore
Poaceae	*Avena barbata**	slender wild oat*
Poaceae	*Bromus diandrus**	ripgut grass*
Poaceae	*Bromus madritensis* ssp. *rubens*	red brome*
Poaceae	*Schismus barbatus**	Mediterranean schismus*
Polygonaceae	*Eriogonum fasciculatum* var. *foliolosum*	inland California buckwheat
Polygonaceae	*Eriogonum gracile* var. *gracile*	slender buckwheat
Salicaceae	*Populus fremontii* ssp. *fremontii*	Fremont cottonwood

Simaroubaceae	*Ailanthus altissima**	tree-of-heaven*
Solanaceae	*Datura wrightii*	western jimson weed
Urticaceae	*Urtica dioica* ssp. *holosericea*	hoary nettle
INVERTEBRATES		
Nymphalidae	*Vanessa cardui*	painted lady
Pieridae	*Pontia protodice*	checkered white
Riodinidae	*Apodemia virgulti*	Behr's metalmark
REPTILES		
Iguanidae	*Sceloporus occidentalis longipes*	western fence lizard
Iguanidae	*Uta stansburiana*	side-blotched lizard
BIRDS		
Accipitridae	*Accipiter cooperi* (WL; nesting)	Cooper's hawk (WL; nesting)
Accipitridae	*Buteo jamaicensis*	red-tailed hawk
Aegithalidae	*Psaltriparus minimus*	bushtit
Bombycillidae	*Bombycilla cedrorum*	cedar waxwing
Cardinalidae	*Piranga ludoviciana*	western tanager
Charadriidae	*Charadrius vociferous*	killdeer
Columbidae	*Columba livia**	rock pigeon*
Columbidae	*Streptopelia decaocto**	Eurasian collared-dove*
Columbidae	*Zenaida macroura*	mourning dove
Corvidae	*Corvus brachyrhynchos*	American crow
Corvidae	*Corvus corax*	common raven
Falconidae	*Falco sparverius*	American kestrel
Fringillidae	*Haemorhous mexicanus*	house finch
Fringillidae	*Spinus lawrencei*	Lawrence's goldfinch
Fringillidae	*Spinus psaltria*	lesser goldfinch
Fringillidae	*Spinus tristis*	American goldfinch
Hirundinidae	*Hirundo rustica*	barn swallow
Hirundinidae	*Petrochelidon pyrrhonota*	cliff swallow
Hirundinidae	*Stelgidopteryx serripennis*	northern rough-winged swallow
Icteridae	*Icterus cucullatus*	hooded oriole
Icteridae	*Sturnella neglecta*	western meadowlark
Mimidae	*Mimus polyglottus*	northern mockingbird
Parulidae	*Oreothlypis celata*	orange-crowned warbler
Parulidae	*Setophaga coronate*	yellow-rumped warbler
Passerellidae	*Melospiza melodia*	song sparrow
Passerellidae	*Melozone crissalis*	California towhee
Passereliidae	*Passerculus sandwichensis*	Savannah sparrow
Passerellidae	*Zonotrichia leucophrys*	white-crowned sparrow

Passeridae	*Passer domesticus**	house sparrow*
Picidae	*Colaptes auratus*	northern flicker
Picidae	*Picoides nuttallii*	Nuttall's woodpecker
Psittaculidae	*Psittacula krameria**	Indian rose-ringed parakeet*
Sturnidae	*Sturnus vulgaris**	European starling*
Trochillidae	*Calypte anna*	Anna's hummingbird
Trochillidae	*Selasphorus sasin*	Allen's hummingbird
Troglodytidae	*Thryomanes bewickii*	Bewick's wren
Troglodytidae	*Troglodytes aedon*	house wren
Turdidae	*Sialia mexicana*	western bluebird
Tyrannidae	*Sayornis nigricans*	black phoebe
Tyrannidae	*Sayornis saya*	Say's phoebe
Tyrannidae	*Tyrannus vociferous*	Cassin's kingbird
MAMMALS		
Leporidae	*Sylvillagus audubonii*	desert cottontail
Sciuridae	*Otospermophillus beecheyi*	California ground squirrel
* Non-native species		

APPENDIX C

PROTOCOL PRESENCE/ABSENCE 2019 SURVEY REPORT FOR BURROWING OWL

ROCKS
BIOLOGICAL CONSULTING



9TH AND VINEYARD DEVELOPMENT PROJECT

PROTOCOL PRESENCE/ABSENCE 2019 SURVEY REPORT FOR BURROWING OWL (*Athene cunicularia*)

San Bernardino County, California

July 23, 2019

Prepared for:
Kimley-Horn and Associates, Inc.
401 B Street #600
San Diego, CA 92101
(858) 234-2400

Prepared by:
Rocks Biological Consulting
2621 Denver Street, Ste. B
San Diego, CA 92110
(619) 701-6798

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1 SUMMARY

This report summarizes surveys Rocks Biological Consulting (RBC) conducted for burrowing owl (*Athene cunicularia*; BUOW) for the 9th and Vineyard Development Project (project) in the City of Rancho Cucamonga, San Bernardino County, California. RBC conducted four BUOW surveys between April 16, 2019 and June 20, 2019 within the project boundary and a 500-foot buffer. RBC did not document BUOW, active burrows, or BUOW sign on the project site or within the 500-foot buffer.

2 INTRODUCTION

2.1 PROJECT LOCATION AND BACKGROUND

The 47.07-acre project site for the proposed project is located south of East 9th Street and directly west of Vineyard Avenue within the City of Rancho Cucamonga, in San Bernardino County, California (Figure 1).

The project proposes to construct three warehouse buildings with associated parking on the project site. The project also proposes to install an approximately 66 to 78-inch wide storm drain pipe along the southern boundary of the project area with a new outfall structure to connect the storm drain system to the concrete-lined Cucamonga Creek.

2.2 BURROWING OWL NATURAL HISTORY

The BUOW is listed by the California Department of Fish and Wildlife (CDFW) as a species of special concern (SSC). Suitable habitat for the BUOW in California is typified by short, sparse vegetation with few shrubs, level to gently sloping topography and well-drained soils (CDFW 2012). Grassland, shrub steppe, and desert are naturally occurring habitat types used by the species. In addition, BUOWs may occur in some agricultural areas, ruderal grassy fields, vacant lots and pastures if the vegetation structure is suitable and there are useable burrows and foraging habitat in proximity (Gervais et al. 2008). Because suitable burrows are usually dug by other species, particular attention to California ground squirrel (*Otospermophilus beecheyi*) burrows or activity is important in assessing BUOW occupation of a site. Natural rock cavities, debris piles, culverts, and pipes are also used by BUOW for nesting and roosting (Rosenberg et al. 1998).

3 METHODS

In accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (2012), RBC conducted BUOW surveys during the breeding season (February 1 to August 31). RBC conducted the surveys at least three weeks apart with one survey conducted between June 15 and July 15. RBC did not conduct surveys during rain, dense fog, or in winds greater than 20 miles per hour.

RBC walked transects spaced 7-20 meters (20-60 feet) apart through potential BUOW habitat within the survey area searching for BUOW, active and potential burrows, and/or sign of BUOW. RBC examined all suitable burrows for sign, including feathers, pellets, whitewash, and/or prey remains. RBC considered burrows to be active if a BUOW was observed at or near the entrance or

if evidence or recent sign was present. RBC used binoculars (10x42) to aid in the identification of avian species.

4 RESULTS

The project site is relatively flat and consists of primarily non-native grassland and disturbed land with some developed areas. There is a small patch of disturbed Riversidian sage scrub dominated by inland California buckwheat (*Eriogonum fasciculatum* sp. *foliolosum*). RBC conducted four protocol BUOW surveys between morning civil twilight and 1000 from April 16 to June 20, 2019. Survey dates, times, and weather conditions are presented in Table 1, below.

Table 1. Burrowing Owl Survey Dates/Conditions

Survey Number	Date	Surveyor(s)	Time (Start-End)	Temperature (F) (Start-End)	Cloud Cover (Start-End)	Wind Range in mph (Start-End)
1	4/15/19	IH, CT	0730-0915	56-59	100%-100%	1-4; 0-3
2	5/7/19	IH	0815-1000	58-61	100%-100%	0-1; 0-1
3	5/29/19	IH	0830-1000	63-68	0%-0%	1-3; 1-3
4	6/18/19	IH	0815-1000	66-69	100%-100%	0-2; 0-2
Surveyors: IH= Ian Hirschler, CT= Chris Thomson						

During the four protocol surveys, RBC did not observe any BUOWs, active burrows, or fresh burrowing owl sign within the project site or the surrounding buffer. RBC documented several burrows of suitable size for BUOW. Most of these burrows are associated with active ground squirrel colonies on site. Potentially suitable BUOW habitat in the western parcel of the project site was mowed between survey 3 (May 29, 2019) and survey 4 (June 20, 2019). RBC observed 38 avian species during the four surveys. All bird species observed during the surveys are presented in Appendix B.

5 CONCLUSIONS

RBC did not observe any burrowing owls, active burrows, or BUOW sign during the four protocol breeding season surveys conducted April 16 to June 20, 2019.

At this time, the development of the project site would not impact BUOW. A pre-construction BUOW survey should be conducted within 30 days prior to ground disturbing activities. If burrowing owls are documented on site, then a plan for avoidance or passive exclusion shall be made in coordination with CDFW. If the survey is negative, the project may proceed without further restrictions related to burrowing owls.

6 REFERENCES

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. http://www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf

Gervais, J.A., D.K. Rosenberg, and L.A. Comrack. Burrowing owl (*Athene cunicularia*) in Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento, California, USA.

Rosenberg, D.K., J.A. Gervais, H. Ober, and D.F. DeSante. 1998. An adaptive management plan for the burrowing owl population at Naval Air Station Lemoore, California, USA. Publication 95, Institute for Bird Populations, P.O. Box 1346, Pt. Reyes Station, CA 94956

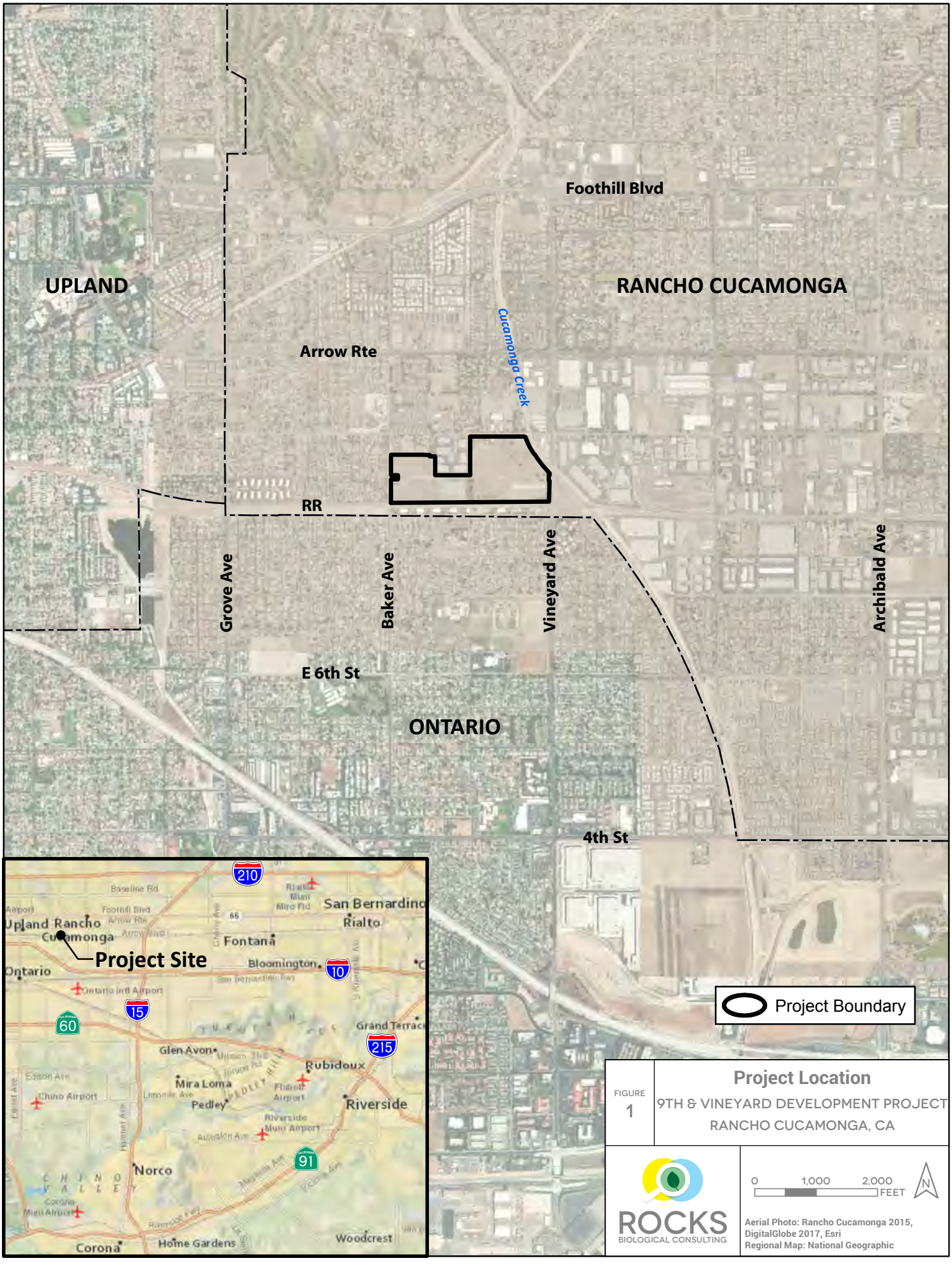


FIGURE 1

Project Location

9TH & VINEYARD DEVELOPMENT PROJECT
RANCHO CUCAMONGA, CA

ROCKS BIOLOGICAL CONSULTING

0 1,000 2,000 FEET

N

Aerial Photo: Rancho Cucamonga 2015, DigitalGlobe 2017, Esri
Regional Map: National Geographic

Appendix A

Site Photographs

Photo 1. View of disturbed ground and non-native grassland in project area, facing southwest. March 12, 2019.

Photo 2. View of the non-native grassland on the project site, facing northwest. March 12, 2019.

Photo 3. View of the small patch of disturbed Riversidian sage scrub. March 12, 2019.

Photo 4. View of non-native grassland within the project area, facing north. March 12, 2019.

Photo 5. View of disturbed debris piles on the project site, facing east. April 16, 2019.

Photo 6. View of debris on site, facing north. April 16, 2019.

Photo 7. View of the non-native grassland on the western parcel, facing east. April 16, 2019.

Photo 8. View of mowed, non-native grassland on the western parcel facing west. June 20, 2019.

Appendix B

Bird Species Observed – 9th and Vineyard Development Project
Breeding Season Burrowing Owl Surveys – April 16, 2019 to June 20, 2019

Family	**Scientific Name**	**Common Name**
Accipitridae	*Accipiter cooperi*	Cooper's hawk
Accipitridae	*Buteo jamaicensis*	Red-tailed hawk
Accipitridae	*Buteo linneatus*	Red-shouldered hawk
Aegithalidae	*Psaltriparus minimus*	Bushtit
Bombycillidae	*Bombycilla cedrorum*	Cedar waxwing
Cardinalidae	*Piranga ludoviciana*	Western tanager
Charadriidae	*Charadrius vociferous*	Killdeer
Columbidae	*Zenaida macroura*	Mourning dove
Columbidae	*Streptopelia decaocto*	Eurasian collared-dove
Columbidae*	*Columba livia*	Rock pigeon
Corvidae	*Corvus brachyrhynchos*	American crow
Corvidae	*Corvus corax*	Common raven
Falconidae	*Falco sparverius*	American kestrel
Fringillidae	*Haemorhous mexicanus*	House finch
Fringillidae	*Spinus psaltria*	Lesser goldfinch
Fringillidae	*Spinus lawrencei*	Lawrence's golfinch
Hirundinidae	*Petrochelidon pyrrhonota*	Cliff swallow
Hirundinidae	*Hirundo rustica*	Barn swallow
Hirundinidae	*Stelgidopteryx serripennis*	Northern rough-winged swallow
Icteridae	*Icterus bullocki*	Bullock's oriole
Icteridae	*Icterus cucullatus*	Hooded oriole
Icteridae	*Sturnella neglecta*	Western meadowlark
Mimidae	*Mimus polyglottus*	Northern mockingbird
Parulidae	*Setophaga coronate*	Yellow-rumped warbler
Parulidae	*Oreothlypis celata*	Orange-crowned warbler
Passereliidae	*Passerculus sandwichensis*	Savannah sparrow
Passerellidae	*Melospiza melodia*	Song sparrow
Passerellidae	*Melozone crissalis*	California towhee
Passerellidae	*Zonotrichia leucophrys*	White-crowned sparrow
Passeridae*	*Passer domesticus*	House sparrow
Picidae	*Picoides nuttallii*	Nuttall's woodpecker
Sturnidae*	*Sturnus vulgaris*	European starling
Trochillidae	*Selasphorus sasin*	Allen's hummingbird
Trochillidae	*Calypte anna*	Anna's hummingbird
Troglodytidae	*Troglodytes aedon*	House wren

Turdidae	*Sialia Mexicana*	Western bluebird
Tyrannidae	*Tyrannus vociferous*	Cassin's kingbird
Tyrannidae	*Sayornis saya*	Say's phoebe

APPENDIX D

9th & VINEYARD DEVELOPMENT PROJECT

JURISDICTIONAL DELINEATION REPORT

ROCKS
BIOLOGICAL CONSULTING



9th & VINEYARD DEVELOPMENT PROJECT JURISDICTIONAL DELINEATION REPORT

San Bernardino County, California

November 21, 2019

Prepared for:
CP Logistics Vineyard LLC
2442 Dupont Drive
Irvine, CA 92612
(949) 296-2989

Prepared by:
Rocks Biological Consulting
2621 Denver Street, Ste. B
San Diego, CA 92110
(619) 701-6798

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1 INTRODUCTION

Rocks Biological Consulting (RBC) conducted a formal jurisdictional delineation for the 9th and Vineyard Development Project (project) on behalf of CP Logistics Vineyard LLC (project applicant) to identify areas anticipated to be jurisdictional under the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act; the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Act; and streambed and riparian habitats under California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code (§1602). This information is necessary to evaluate potential jurisdictional impacts and permit requirements associated with the project, can be used by the agencies to assess project conformance with state and federal regulations, and serves as a request for the Corps to complete an Approved Jurisdictional Determination (AJD) based on the information provided in this report. Furthermore, Appendix A provides a checklist of the information contained in this report in compliance with the Corps Los Angeles District's *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* (Corps 2017).

1.1 PROJECT LOCATION

The 47.07-acre project site for the proposed project is located south of East 9th Street and directly west of Vineyard Avenue within the City of Rancho Cucamonga, in San Bernardino County, California (Figure 1). The project site is located approximately 1.4 miles north of Interstate 10 (I-10) and Vineyard Avenue, 2.9 miles south of State Route 210 (SR-210) and Carnelian Street, and approximately 2.3 miles east of State Route 83 (SR-83).

The latitude and longitude of the approximate center of the site is 34.093888, -117.615244. The project site sits on Township 1 South, Range 7 West, Cucamonga Landgrant lands within the Guasti and Ontario 7.5-minute quadrangles, as mapped by the U.S. Geological Survey (USGS; Figure 2).

1.2 PROJECT DESCRIPTION

The project proposes to construct three warehouse buildings with associated parking on the project site. The project also proposes to install an approximately 66 to 78-inch wide storm drain pipe along the southern boundary of the project area with a new outfall structure to connect the storm drain system to the concrete-lined Cucamonga Creek. Note that this portion of Cucamonga Creek was constructed as part of the Corps' permanent flood control project to confine and control Cucamonga Creek.

1.3 REGULATORY BACKGROUND

Several regulations have been established by federal, state, and local agencies to protect and conserve aquatic resources. The descriptions below provide a brief overview of agency regulations that may be applicable to the project. Regulatory agencies make the final determination of whether a project requires authorization pursuant to these regulations.

1.3.1 APPLICABLE AQUATIC RESOURCE PROTECTION REGULATIONS

Clean Water Act

Pursuant to Section 404 of the Clean Water Act (33 USC § 1251 et seq.; CWA), the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 Code of Federal Regulations (CFR) 328.3 (as amended at 80 Federal Register (FR) 37104, June 29, 2015). The Corps, with oversight from the U.S. Environmental Protection Agency (USEPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts to waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The RWQCB, a division of the State Water Resources Control Board, provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis. The RWQCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCB regulates discharges to surface waters under the federal CWA. In addition, the RWQCB is responsible for administering the Porter-Cologne Water Quality Control Act.

Pursuant to the Porter-Cologne Water Quality Control Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 is not required for the activity. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

California Fish and Game Code Section 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the California Fish and Game Code (CFGC), CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Notification of Lake or Streambed Alteration must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river,

stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses and wetland habitats supported by a river, lake, or stream. Jurisdictional waters are delineated by the outer edge of riparian vegetation (i.e., drip line) or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and applicant is the Lake or Streambed Alteration Agreement.

1.4 CONTACT INFORMATION

Applicant and Property Owner:

Michael Sizemore

CP Logistics Vineyard LLC

2442 Dupont Drive

Irvine, CA 92612

MSizemore@panattoni.com

949-296-2989

Agent:

Shanti Santulli

Rocks Biological Consulting

2621 Denver Street, Suite B

San Diego, CA 92110

shanti@rocksbio.com

619-674-8067

Agency access to the project site can be coordinated with the applicant and/or agent upon request.

2 METHODS

Prior to the on-site delineation, field maps were created using a Geographic Information System (GIS) and a color aerial photograph at a 1:100 scale. RBC staff also reviewed U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) and topography data (Figure 2) and U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data (Figure 4) to further determine the potential locations of jurisdictional aquatic resources. Google Earth was also utilized to assess current and historic presence or absence of flow in the project area.

Shanti Santulli and Sarah Krejca of Rocks Biological Consulting (RBC) conducted the jurisdictional delineation field visit on April 9, 2019 from 0945 to 1200. Field conditions at the beginning of the field visit were 66°F with 0% cloud cover and winds at approximately 1 to 3 miles per hour (mph). Field conditions at the end of the field visit were 72°F with 1% cloud cover

and winds at approximately 1 to 3 mph. The project survey area included the proposed project area with a 50-foot buffer for a total of approximately 59 acres. Areas with depressions, drainage patterns, and/or wetland vegetation within the project impact area were evaluated for potential jurisdictional status, with focus on the presence of defined channels and/or wetland vegetation, soils, and hydrology. Field staff examined potential jurisdictional wetland areas using the routine determination methods set forth in Part IV, Section D, Subsection 2 of the Corps 1987 *Wetland Delineation Manual* (Wetland Manual) (Environmental Laboratory 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (Arid West Supplement) (Corps 2008a).

Lateral limits of potential non-wetland waters of the U.S./State for the Corps and RWQCB were identified using field indicators of an ordinary high-water mark (OHWM) as described in *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (Corps 2008b). For each feature exhibiting the potential presence of an OHWM, RBC completed a 2010 Arid West Ephemeral and Intermittent Streams OHWM Datasheet (OHWM Datasheet) following the guidance provided in the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Corps 2010). Given the nature of the concrete-lined Cucamonga Creek, RBC also used hydrology data provided by the project hydrologist to assist in determining areas considered jurisdictional by the agencies (Appendix H).

CDFW potential jurisdictional boundaries were determined based on the presence of streambed and associated riparian habitat and/or wetland areas. Streambeds considered within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation" (Title 14, Section 1.72). Riparian habitat refers to vegetation and habitat associated with a stream. The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream.

While in the field, potentially jurisdictional features were recorded using a hand-held Global Positioning System (GPS) unit with a level of accuracy ranging from four to 12 feet. RBC staff refined the data using aerial photographs and topo maps with two-foot contours to ensure accuracy. Plants were identified according to The Jepson Manual 2nd edition (Baldwin et al. 2012). RBC staff used the vegetation community classifications mapped by RBC biologists during a March 12, 2019 biological constraints survey (RBC 2019). The vegetation community classifications follow Holland (1986) and nomenclature follows Jepson eFlora (Jepson Flora Project 2019). All figures generated for this jurisdictional delineation report follow the Corps' Updated Map and Drawing Standards for the South Pacific Division Regulatory Program (Corps 2016).

3 RESULTS

3.1 TOPOGRAPHY

The proposed project site is primarily flat with elevations ranging from approximately 1110 to 1160 feet (Figure 2).

3.2 WATERSHED

The proposed project site is within the Santa Ana Hydrologic Unit Code [HUC] 8 (18070203), Chino Creek HUC 10 (1807020307), and Upper Cucamonga Creek HUC 12 (180702030704) watersheds (Figure 3).

The headwaters of the Santa Ana River originate in the San Bernardino Mountains and flow 100 miles before discharging into the Pacific Ocean (SAWPA 2013). The Santa Ana River Watershed is home to more than 6 million people and drains the largest coastal stream system in southern California (SAWPA 2013). The Chino Creek HUC 10 encompasses nearly 232 square miles; the Upper Cucamonga Creek HUC 12 encompasses nearly 57 square miles (UCD SIG n.d.).

3.3 HYDROLOGY

USGS NHD maps the concrete-lined Cucamonga Creek as a "blue-line stream" directly to the east of the project boundary (Figure 2). USFWS NWI also maps Cucamonga Creek with a designation of "Riverine" (Figure 4).

The known hydrologic sources for the observed on-site drainages, discussed further below, are direct precipitation and surrounding and upstream commercial, industrial, and residential uses. Based on review of the USGS NHD web map, Cucamonga Creek is an intermittent stream which generally flows to the south where it becomes a natural (not concrete-lined) intermittent stream approximately 10.3 miles downstream of the project survey area before continuing into Mill Creek, then Chino Creek, then the Santa Ana River, which ultimately connects to the Pacific Ocean (USGS 2018). None of the other observed on-site areas with drainage patterns appeared to flow off-site.

RBC accessed Wetlands (WETS) Climate Tables data through the Natural Resources Conservation Service (NRCS) Agricultural Applied Climate Information System (AgACIS) database for the Redlands, California National Weather Service (NWS) station in San Bernardino County (NRCS 2019). Appendix B and Table 1 utilize the Redlands, California station (as opposed to the closer Ontario International Airport and Chino Airport data stations) due to its comprehensive historical data and proximity to the project site (i.e., approximately 25 miles southeast). WETS tables are utilized to define the range of normal precipitation and growing season for NWS stations. WETS tables define the "normal" range or precipitation at the 30th and 70th percentiles of all the data in the precipitation record for that station. Additionally, WETS tables define the growing season to be the approximate period of time between the last and first dates with a 50% likelihood of a 32ºF frost (Corps 2000). RBC requested data for the past 30 years (1988-2019) to provide the pertinent pre-site visit precipitation data.

Table 1. WETS Table

WETS Station: REDLANDS, CA

Requested years: 1988 - 2019

Month	Avg. Max Temp	Avg. Min Temp	Avg. Mean Temp	Avg. Precip	30% chance precip less than	30% chance precip more than	Avg. number days precip 0.10 or more	Avg. Snowfall
Jan	67.4	41.5	54.5	2.73	0.83	3.24	5	0.0
Feb	67.3	43.1	55.2	2.98	1.26	3.55	5	0.0
Mar	71.9	46.0	58.9	1.72	0.67	2.03	3	0.0
Apr	75.6	48.7	62.1	0.88	0.25	0.94	2	0.0
May	81.1	53.4	67.3	0.33	0.08	0.32	1	0.0
Jun	88.0	57.3	72.6	0.10	0.00	0.03	0	0.0
Jul	94.6	62.9	78.7	0.13	0.00	0.09	1	0.0
Aug	95.7	63.4	79.5	0.09	0.00	0.05	0	0.0
Sep	92.2	60.5	76.4	0.15	0.00	0.06	0	0.0
Oct	82.5	53.6	68.0	0.52	0.11	0.45	1	0.0
Nov	74.0	45.8	59.9	0.75	0.30	0.86	2	0.0
Dec	66.2	40.9	53.6	1.89	0.55	2.09	3	0.0
Annual					8.70	14.29		
Average	79.7	51.4	65.6	-	-	-	-	-
Total	-	-	-	12.25			23	0.0

GROWING SEASON DATES

Years with missing data:	24 deg = 8	28 deg = 9	32 deg = 9
Years with no occurrence:	24 deg = 24	28 deg = 22	32 deg = 6
Data years used:	24 deg = 24	28 deg = 23	32 deg = 23
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent*	No occurrence	No occurrence	1/8 to 12/28: 354 days
70 percent*	No occurrence	No occurrence	12/17 to 1/20: 399 days

*Percentage chance of the growing season occurring at the Beginning and Ending dates.

Appendix B and Table 1 indicate that the field survey date of April 9, 2019 occurred after a year of normal precipitation for 2018, after a normal precipitation period for the month of January 2019, and after a higher than normal precipitation period for the months of March and February 2019 at the Redlands, California NWS station. The total annual precipitation for 2018 of 9.74 inches was within the normal precipitation range of annual precipitation for the past 30 years, which is between 8.70 and 14.29 inches. The January 2019 total precipitation of 3.17 inches was within the normal precipitation range for the month of January for the past 30 years, which was between 0.83 and 3.24 inches. The February 2019 total precipitation of 5.66 inches was 2.11 inches above the normal range of precipitation for the month of February for the past 30 years, which is between 1.26 and 3.55 inches. The March 2019 total precipitation of 2.24 inches was 0.21 inch above the normal range of precipitation for the month of March for the past 30 years, which is between 0.67 to 2.03 inches. Additionally, the field survey date occurred during the growing season for the Redlands, California NWS station, which the NRCS calculated as 354 days, occurring from January 8 to December 28.

3.4 SOILS

Based on the NRCS map of the proposed project site (Figure 4), the following soils occur within the project site boundary and are described below per the USDA's Official Soil Series Description and Series Classification database (NRCS n.d. a):

Soboba stony loamy sand, 2 to 9 percent slopes - The Soboba series consists of deep, excessively drained soils that formed in alluvium from predominantly granitic rock sources. These soils are found primarily on alluvial fans and flood plains and primarily used for pasture. The NRCS does not list Soboba stony loamy sand, 2 to 9 percent slopes, which occurs on site, as hydric.

Tujunga gravelly loamy sand, 0 to 9 percent slopes - The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. These soils are found primarily on alluvial fans and floodplains and are primarily used for grazing, citrus, grapes, and urban residential or commercial development. The NRCS lists Tujunga gravelly loamy sand, 0 to 9 percent slopes, which occurs on site, as hydric under Criteria 2, meaning this soil map unit contains "components in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, or Andic, Cumulic, Pachic, or Vitrandic subgroups that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b). The NRCS also lists Tujunga gravelly loamy sand, 0 to 9 percent slopes as hydric under Criteria 4, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

Tujunga loamy sand, 0 to 5 percent slopes - The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. These soils are found primarily on alluvial fans and floodplains and are primarily used for grazing, citrus,

grapes, and urban residential or commercial development. The NRCS does not list Tujunga loamy sand, 0 to 5 percent slopes, which occurs on site, as hydric.

As stated in the Arid West Supplement, RBC used the hydric soils list as a tool and made final hydric soils determinations based on field-collected data at representative wetland delineation sample points deemed appropriate on site as recorded on the attached Arid West Wetland Delineation Form (Appendix C) discussed further below.

3.5 FEATURES OBSERVED

The survey area consists of primarily flat non-native grassland and disturbed land with some developed areas. Within the eastern portion of the survey area, there was one western sycamore (*Platanus racemosa*), which has an indicator of FAC and several scattered Fremont cottonwood (*Populus fremontii*), which are generally associated with riparian habitat but are unlisted in the *Arid West 2016 Regional Wetland Plant List* (Lichvar et al. 2016) and therefore considered UPL for wetland delineation purposes. RBC investigated one representative wetland sampling point (WSP 1) adjacent to the single western sycamore and within an area with mapped hydric soils to determine the presence or absence of federally jurisdictional wetlands (Figure 5; Appendix C). RBC only completed one Arid West Delineation Form since conditions on site were not indicative of supporting a wetland (i.e., no evidence of wetland hydrology indicators within upland landscape/position). RBC completed one Arid West Ephemeral and Intermittent Streams OHWM Datasheet (OHWM Datasheet) at the off-site concrete-lined Cucamonga Creek (Figure 5; Appendix C).

Appendix D provides site photographs of the each of the observed features (Cucamonga Creek, Ditch 1, and Ditch 2), Figure 7 displays representative photo points, and Appendix F includes the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet.

Cucamonga Creek

Cucamonga Creek is a concrete-lined channel with vertical banks. The OHWM measures approximately 76 feet wide (OHWM 1) extending to the vertical banks of the channel. Flows travel in a northwest to southeast direction. Note that this portion of Cucamonga Creek was constructed as part of a Corps permanent flood control project to confine and control Cucamonga Creek.

Ditch 1

Ditch 1 occurs in the eastern portion of the project area, initiating on site at two points and flowing west to east/northeast for approximately 350 feet along the northern segment and approximately 430 feet along the southern segment before the two segments converge then continue flowing for approximately 200 feet before terminating on site (i.e., does not contribute flows outside of the project area or to another aquatic features). Ditch 1 is largely unvegetated, surrounded by non-native grassland, and measures approximately two to three feet wide. Although located within an area mapped by NRCS as having hydric soils, WSP 1 taken within Ditch 1 did not meet the hydrophytic vegetation, hydric soil, or wetland hydrology parameters (Appendix C, Figure 5). RBC did not observe any indicators of an OHWM at Ditch 1 (i.e., no break in slope and no bed and bank). Ditch 1 initially appeared to be an erosional swale-like

feature when observed in the field; however, based on a review of Google Earth aerial imagery (Attachment G) and observations in the field, Ditch 1 appears to be a ditch created in uplands that occurs along a manmade berm to direct flows away from the adjacent developed area. Based on the aerial imagery, It appears that the ditch was created sometime between February 2016 and March 2017.

Ditch 2

Ditch 2 is approximately three feet wide and appears to be a manmade ditch within the project survey area buffer. The feature drains west to east and travels along the northern portion of the off-site railroad tracks for approximately 1,822 feet. RBC staff did not observe any drainage patterns, OHWM, and/or streambed within Ditch 2. The ditch was sparsely vegetated with non-native grasses. Based on a review of Google Earth, NetrOnline Historic Aerials, and the University of California – Santa Barbara database it was difficult to confirm when the ditch was created since available historic aerials only date back to 1938 (i.e., after the railroad was constructed). Yet, based on RBC staff's best professional judgement and observations in the field, Ditch 2 appears to be a ditch created in uplands to convey flows from the adjacent railroad tracks.

In addition to the features discussed above, the project area also included an under-road culvert east of Vineyard Avenue which directed flows from under Vineyard Avenue from west to east for approximately 435 feet to a storm drain just west of Cucamonga Creek. RBC staff did not observe any drainage patterns, OHWM, and/or streambed within this manmade stormwater conveyance feature.

3.6 JURISDICTIONAL RESOURCES AND ANALYSES

Cucamonga Creek is a non-wetland water of the U.S./State jurisdictional by the Corps and RWQCB and an intermittent streambed jurisdictional by the CDFW. Specifically, Cucamonga Creek meets the Corps' criteria per 33 CFR 328.3(a)(5) as a tributary water. The Corps' jurisdictional extent of Cucamonga Creek is based on the flat nature of the channel and the mapped extent of the 10-year flow event which occurs within the full extent of the channel. The project hydrologist provided additional hydrology information to support this determination, including initial calculations for the 5- to 10-year peak flow rates at an 80-foot wide portion of Cucamonga Creek located just south of OHWM 1 at the intersection of the railroad and 8th Street (Appendix H). The 5-year and 10-year peak flow rates were determined to extend the full width of Cucamonga Creek with a 5-year peak flow rate of approximately 7,975 cubic feet per second (cfs) with a depth of flow at approximately 3.28 feet and with a 10-year peak flow rate of approximately 9,715 cfs with a depth of flow at approximately 3.71 feet.

Table 2 provides additional information regarding Cucamonga Creek including acreage, linear feet, and average width. Table 3 provides vegetation community acreages within the project survey area based on vegetation mapping conducted by RBC biologists on March 12, 2019 (Figure 6).

Table 2. Corps, RWQCB, and CDFW Jurisdictional Resources in the Survey Area

Feature Name	Acreage	Linear Feet	Cowardin Code	Presence of OHWM/Average Width (feet)	Wetland Presence	Dominant Vegetation	Location (lat/long)
Cucamonga Creek	0.40	234	R4	Yes/76	No	Developed (Concrete-lined Channel)	34.092655, -117.609324
Total	0.40	234					

Table 3. Vegetation Communities within the Survey Area

Habitat Type	Acreage
Developed	25.75
Developed (Concrete-lined Channel)	0.40
Disturbed Habitat	6.50
Eucalyptus Woodland	0.95
Fremont's Cottonwood (*Populus fremontii*)	0.02
Non-native Grassland	25.27
Riversidean Sage Scrub – Disturbed	0.46
Sycamore (*Platanus racemosa*)	0.01
Total	59.35

** Acreages rounded to the hundredths based on raw numbers provided during GIS analysis, which are available upon request.

3.7 NON-JURISDICTIONAL RESOURCES AND ANALYSES

Ditch 1 and Ditch 2 were primarily unvegetated and did not display evidence of hydrology. More specifically, none of the delineated ditches displayed an observable OHWM or bed and bank and instead Ditch 1 appeared excavated to route flows from the adjacent developed area and Ditch 2 appeared excavated to route flows from the adjacent railroad. Neither of the ditches conveyed flows into Cucamonga Creek per field observation or aerial photograph review. Ditch 1 was entirely localized to the project site area and Ditch 2 was located within the 50-foot buffer of the project survey area.

Given the above rationale, RBC does not expect Ditch 1 or Ditch 2 would be considered jurisdictional by the regulatory agencies as these features appear to be man-made ditches excavated wholly in and draining only uplands for runoff-conveyance purposes that do not show indicators of an OHWM, federal wetland parameters, or a bed and bank. Per Corps regulations

specifically, Ditch 1 and Ditch 2 should be considered "ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary" per 33 CFR 328.3(b)(3)(i) and "ditches that do not flow, either directly or through another water," into a 33 CFR 328.3 (a)(1)-(a)(3) water per 33 CFR 328.3(b)(3)(iii).

Table 4. Corps, RWQCB, and CDFW Non-Jurisdictional Resources in the Survey Area

Feature Name	Acreage	Linear Feet	Cowardin Code	Location (lat/long)
Ditch 1	0.06	980	UPL	34.093889, -117.613029
Ditch 2	0.13	1,822	UPL	34.002656, -117.616751
Total	**0.19**	**2,802**		

4 CONCLUSION

Approximately 0.40 acre (234 linear feet) of a concrete-lined portion of Cucamonga Creek occurs within the survey area for the proposed project and is expected to be considered jurisdictional by the Corps, RWQCB, and CDFW as shown in Table 2. Ditch 1 and Ditch 2 (Table 4) are not expected to be considered jurisdictional by the Corps, RWQCB, and CDFW as these features appear to be man-made ditches excavated wholly in and draining only uplands for localized runoff-conveyance purposes (i.e., do not appear to connect to Cucamonga Creek) with ephemeral flow and are not relocated natural drainages or excavated tributaries.

RBC expects the proposed project will require a Section 404 authorization from the Corps, a Section 401 water quality certification from the RWQCB, and a Streambed Alteration Agreement from CDFW for impacts to Cucamonga Creek. Furthermore, impacts on the Cucamonga Creek would require authorization under Section 408 (33 USC § 408) from the Corps because the channel is a Corps-constructed public works project. Note that the Corps must first provide permission under Section 408 prior to issuing a Section 404 permit.

Please note that the applicable agencies will make final jurisdictional determinations. RBC recommends early coordination with the resource agencies to determine the final jurisdictional boundaries, applicable permitting processes, compensatory mitigation requirements, and other potential permitting issues specific to the proposed project. Agency representatives may request to access the site to field-verify the results of this jurisdictional delineation report with the project applicant, or a designated representative.

The information provided in this report should remain valid for up to five years from the date of the field effort for the jurisdictional delineation unless site conditions change substantially, or a regulatory agency requires an updated report.

5 REFERENCES

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, and T.J. Rosatti (eds). 2012. The Jepson Manual: Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded. University of California Press, Berkeley, California. 1400 pp.

California Environmental Protection Agency. n.d. Water Boards' Structure. Accessed on April 4, 2018. https://www.waterboards.ca.gov/sandiego/about_us/water_boards_structure/

Chattel Architecture, Planning & Preservation. 2010. City of Rancho Cucamonga Historic Context Statement. March 24.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 100 pp. with Appendices.

Google Earth Pro V 7.3.2.5776. 2018. Rancho Cucamonga, San Bernardino County, California. 32°05'35.50"N, 117°36'54.99"W. Eye alt 3491 feet. Image Google. Accessed on April 8, 2019.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, State of California, Department of Fish and Game, Sacramento. October.

Jepson Flora Project (eds.) 2019. Jepson eFlora. http://ucjeps.berkeley.edu/eflora/

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. Arid West 2016 Regional Wetland Plant List. April 28.

Natural Resources Conservation Service (NRCS), United States Department of Agriculture. 2019. Agricultural Applied Climate Information System (AgACIS) Database. WETS Table for Redlands, CA, 1988 - 2019. Accessed on April 8, 2019 and April 25, 2019. http://agacis.rcc-acis.org/?fips=06025

Natural Resources Conservation Service (NRCS), United States Department of Agriculture. n.d. a. Official Soil Series Descriptions. Accessed on April 5, 2019. https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053587

Natural Resources Conservation Service (NRCS), United States Department of Agriculture. n.d. b. Soil Data Access (SDA) Hydric Soils List. Accessed on April 5, 2019. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html

NetrOnline Historic Aerials. 1959-2014. City of Rancho Cucamonga, San Bernardino County, California. 34.093888, -117.615244. Accessed on May 2, 2019. https://www.historicaerials.com/viewer

Rebman, J.P. and M.G. Simpson. 2014. Checklist of the Vascular Plants of San Diego County. 5th edition. 130pp.

Rocks Biological Consulting (RBC). 2019. Biological Constraints Report for Panattoni E 9th Street and Vineyard Avenue Project, Rancho Cucamonga, California. April 1.

Santa Ana Watershed Project Authority (SAWPA). 2013. Watershed Setting. Accessed on April 30, 2019. www.sawpa.org/wp-content/uploads/2014/01/3.0-Watershed-Setting_tc_11-20-2013_FINAL1.pdf

U.S. Army Corps of Engineers (Corps). 2017. USACE Los Angeles District's Minimum Standards for Acceptance of Aquatic Resources Delineation Reports.

U.S. Army Corps of Engineers (Corps). 2017. Special Public Notice. Reissuance of the Nationwide Permits and Issuance of Final Regional Conditions for the Los Angeles District. March 22.

U.S. Army Corps of Engineers (Corps). 2016. Updated Map and Drawing Standards for the South Pacific Division Regulatory Program. February 10.

U.S. Army Corps of Engineers (Corps). 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. K.E. Curtis and R.W. Lichvar. EDRC/CRREL TN-10-1. Hanover, NH: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers (Corps). 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Eds. J.S. Wakely, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers (Corps). 2008b. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual. R.W. Lichvar, and S.M. McColley. ERDC/CRREL TR-08-12. Hanover, NH: U.S. Army Engineer Research and Development Center.

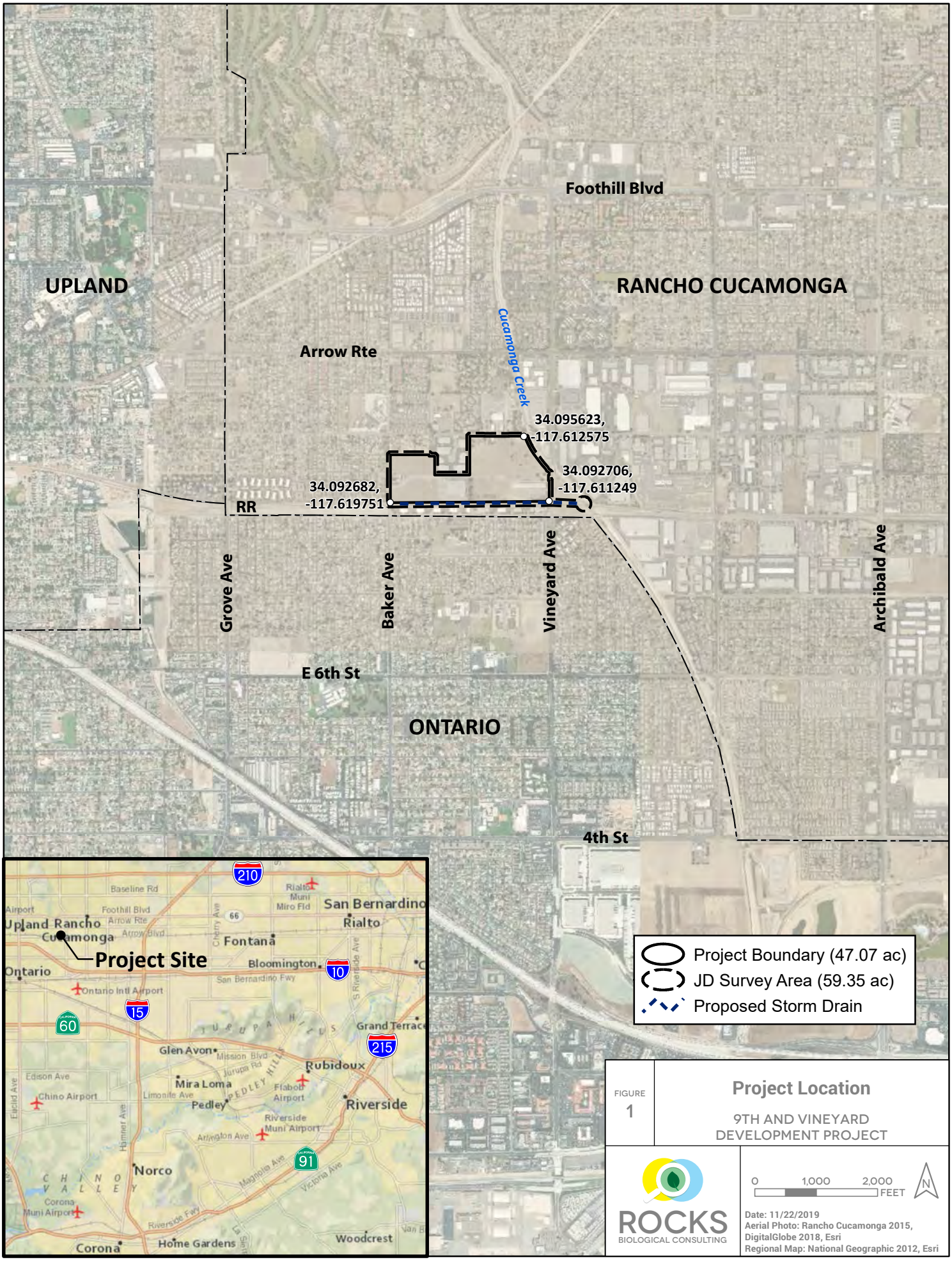
U.S. Army Corps of Engineers (Corps). 2000. Accessing and Using Meteorological Data to Evaluate Wetland Hydrology. S. W. Sprecher and A. G. Warne. EDRC/EL TR-WRAP-00-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Department of Agriculture (USDA), Soil Conservation Service. 1980. Soil Survey of Riverside County, California, Coachella Valley Area.

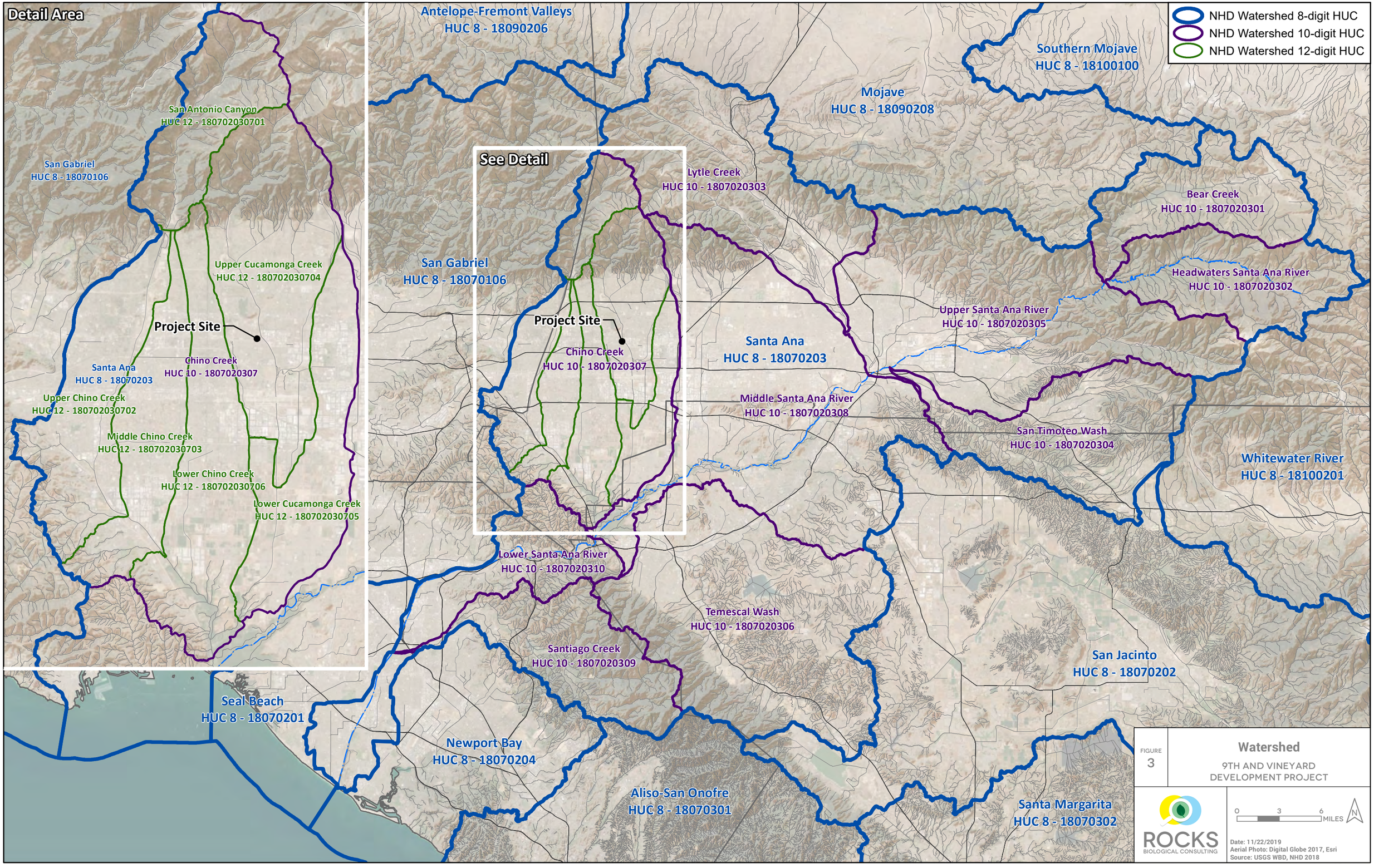
U.S. Geological Survey (USGS). 2018. The National Map. Accessed on April 5, 2019. https://viewer.nationalmap.gov/advanced-viewer/

University of California Davis Sustainability Indicators Group (UCD SIG). n.d. Upper Cucamonga Creek. Accessed on April 30, 2019. https://indicators.ucdavis.edu/water/regions/180702030704

University of California Santa Barbara (UCSB). n.d. Aerial Photography Collections. Accessed on May 3, 2019. http://mil.library.ucsb.edu/ap_indexes/FrameFinder/


Foothill Blvd
UPLAND
RANCHO CUCAMONGA
Cucamonga Creek
Arrow Rte
34.095623,
-117.612575
34.092706,
-117.611249
34.092682,
-117.619751
RR
Grove Ave
Baker Ave
Vineyard Ave
Archibald Ave
E 6th St
ONTARIO
4th St
Project Site
Project Boundary (47.07 ac)
JD Survey Area (59.35 ac)
Proposed Storm Drain
FIGURE
1
Project Location
9TH AND VINEYARD
DEVELOPMENT PROJECT
ROCKS
BIOLOGICAL CONSULTING
0 1,000 2,000
FEET
N
Date: 11/22/2019
Aerial Photo: Rancho Cucamonga 2015,
DigitalGlobe 2018, Esri
Regional Map: National Geographic 2012, Esri


34.095623,
-117.612575
34.092682,
-117.619751
34.092706,
-117.611249
Los Amigos
Jr H S
9TH
GRANT
BDY
8TH
6TH
Seventh Day Adventist
Sch
UPPER
MWD
Vineyard Park
1240
1200
1166
1140
1120
1070
Project Boundary
JD Survey Area
Proposed Storm Drain
National Hydrography Dataset (NHD)
Stream/River
FIGURE
2
USGS Topo and NHD
9TH AND VINEYARD
DEVELOPMENT PROJECT
ROCKS
BIOLOGICAL CONSULTING
0
400
800
FEET
N
Date: 11/22/2019
Base Map: USGS 7.5' Quads (Guasti, Ontario) 2013, Esri
Source: USGS National Hydrography Dataset (NHD) 2018
PLSS: T 01S, R 07W, Cucamonga Landgrant


Detail Area
Antelope-Fremont Valleys
HUC 8 - 18090206
Southern Mojave
HUC 8 - 18100100
Mojave
HUC 8 - 18090208
NHD Watershed 8-digit HUC
NHD Watershed 10-digit HUC
NHD Watershed 12-digit HUC
San Antonio Canyon
HUC 12 - 180702030701
San Gabriel
HUC 8 - 18070106
See Detail
Lytle Creek
HUC 10 - 1807020303
Bear Creek
HUC 10 - 1807020301
Headwaters Santa Ana River
HUC 10 - 1807020302
Upper Cucamonga Creek
HUC 12 - 180702030704
Project Site
Upper Santa Ana River
HUC 10 - 1807020305
Chino Creek
HUC 10 - 1807020307
Santa Ana
HUC 8 - 18070203
Middle Santa Ana River
HUC 10 - 1807020308
Upper Chino Creek
HUC 12 - 180702030702
San Timoteo Wash
HUC 10 - 1807020304
Whitewater River
HUC 8 - 18100201
Middle Chino Creek
HUC 12 - 180702030703
Lower Chino Creek
HUC 12 - 180702030706
Lower Cucamonga Creek
HUC 12 - 180702030705
Lower Santa Ana River
HUC 10 - 1807020310
Temescal Wash
HUC 10 - 1807020306
Santiago Creek
HUC 10 - 1807020309
San Jacinto
HUC 8 - 18070202
Seal Beach
HUC 8 - 18070201
Newport Bay
HUC 8 - 18070204
Aliso-San Onofre
HUC 8 - 18070301
Santa Margarita
HUC 8 - 18070302
FIGURE
3
Watershed
9TH AND VINEYARD
DEVELOPMENT PROJECT
ROCKS
BIOLOGICAL CONSULTING
0 3 6 MILES
N
Date: 11/22/2019
Aerial Photo: Digital Globe 2017, Esri
Source: USGS WBD, NHD 2018

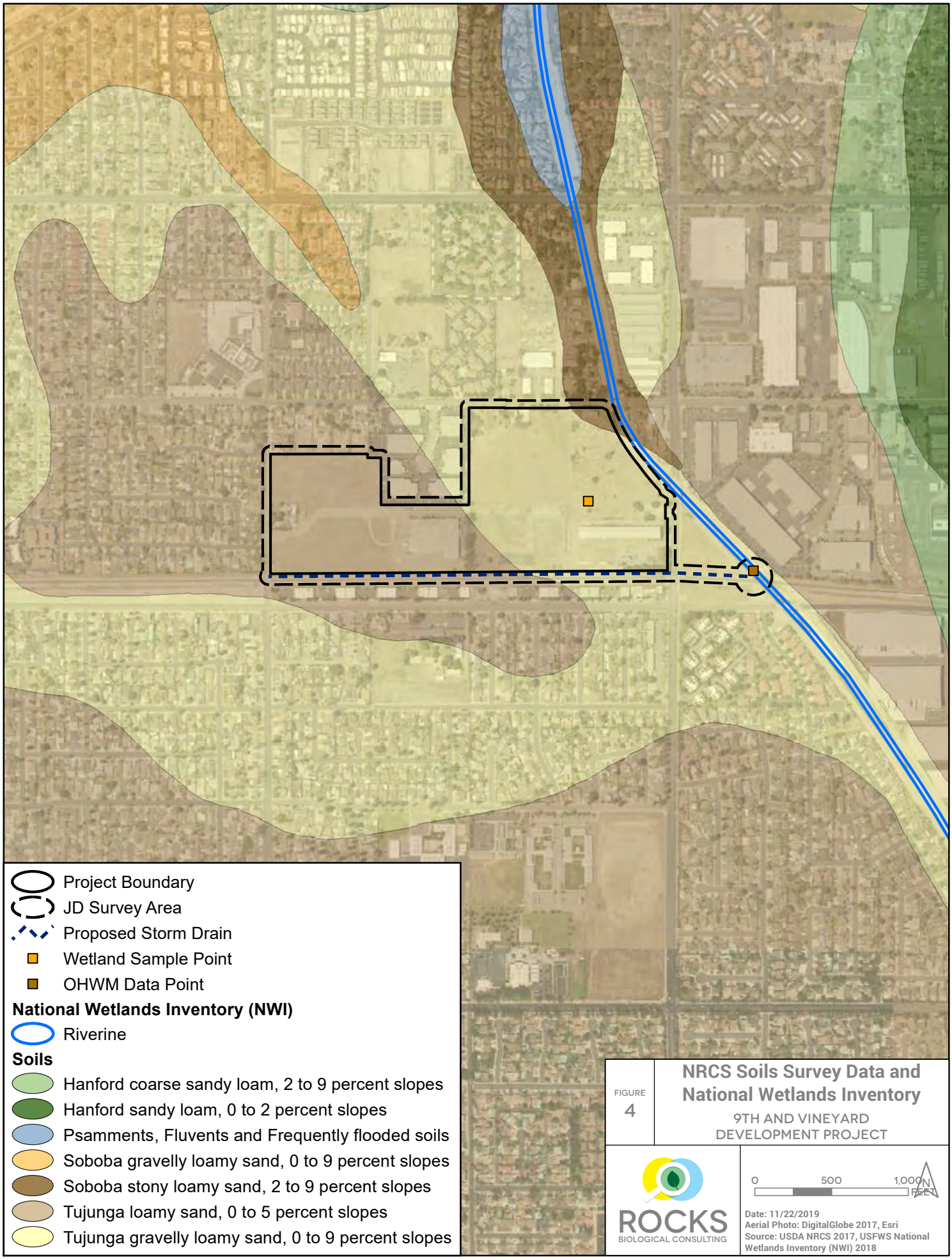


FIGURE 4

NRCS Soils Survey Data and National Wetlands Inventory

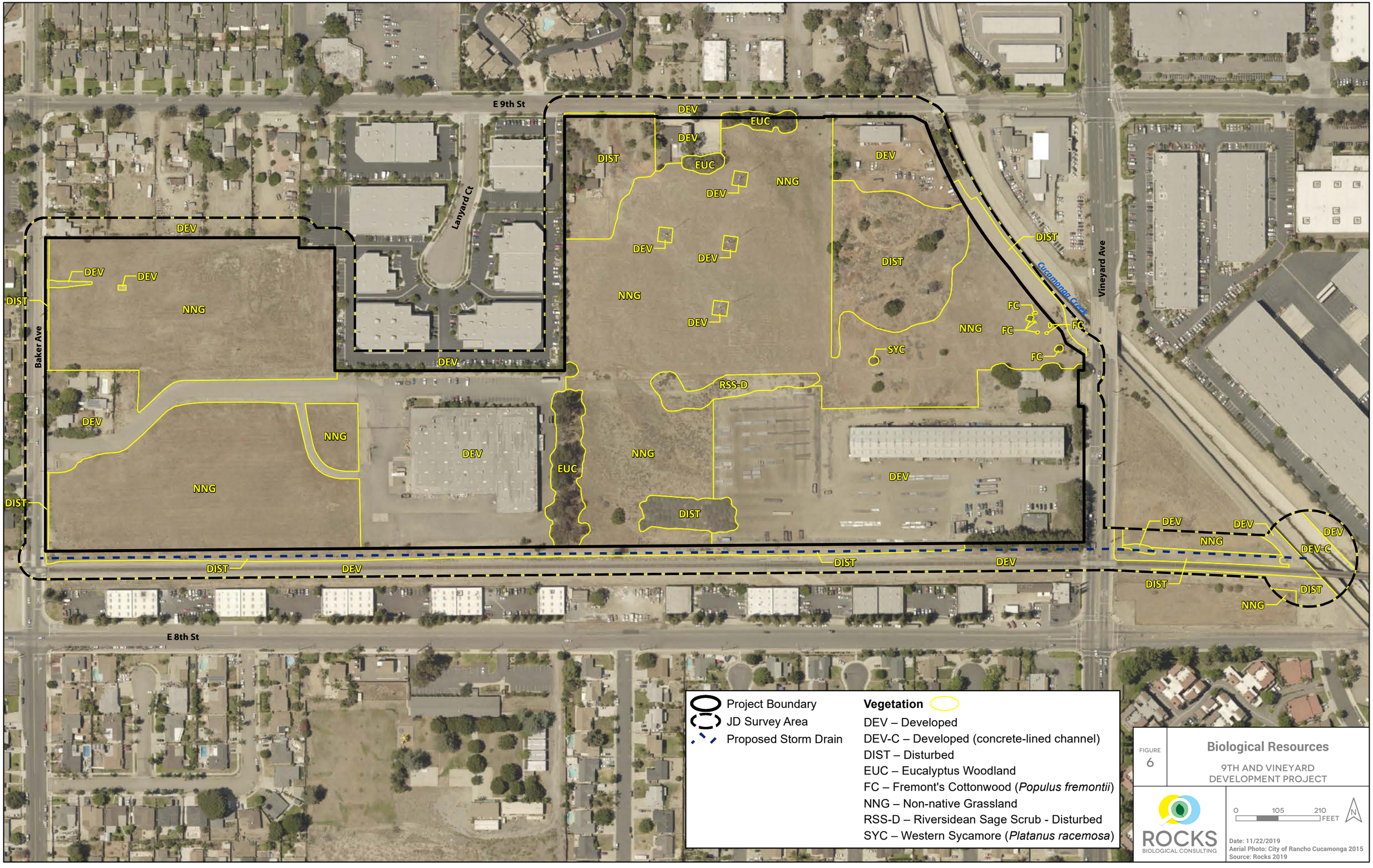
9TH AND VINEYARD DEVELOPMENT PROJECT

ROCKS BIOLOGICAL CONSULTING

0 500 1,000 FEET

Date: 11/22/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: USDA NRCS 2017, USFWS National Wetlands Inventory (NWI) 2018


E 9th St
Lanyard Ct
Baker Ave
Vineyard Ave
Cucamonga Creek
WSP1
Ditch 1
3'
3'
2'
Cucamonga Creek
OHWM 1
3'
Ditch 2
E 8th St
Project Boundary (47.07 ac)
JD Survey Area (59.35 ac)
Proposed Storm Drain
Wetland Sample Point
OHWM Data Point
Culvert
Storm Drain
Flow Direction
Corps/RWQCB/CDFW Jurisdictional Features
Concrete-lined Channel (0.40 ac)
Corps/RWQCB/CDFW Non-Jurisdictional Features
Upland Ditch (0.18 ac)
FIGURE 5
Jurisdictional Delineation
9TH AND VINEYARD DEVELOPMENT PROJECT
ROCKS BIOLOGICAL CONSULTING
1 INCH = 210 FEET
0 105 210 FEET
N
Date: 11/22/2019
Aerial Photo: City of Rancho Cucamonga 2015


E 9th St
E 8th St
Baker Ave
Lanyard Ct
Vineyard Ave
Cucamonga Creek
DEV
DIST
NNG
EUC
RSS-D
SYC
FC
DEV-C
Project Boundary
JD Survey Area
Proposed Storm Drain
Vegetation
DEV – Developed
DEV-C – Developed (concrete-lined channel)
DIST – Disturbed
EUC – Eucalyptus Woodland
FC – Fremont's Cottonwood (Populus fremontii)
NNG – Non-native Grassland
RSS-D – Riversidean Sage Scrub - Disturbed
SYC – Western Sycamore (Platanus racemosa)
FIGURE 6
Biological Resources
9TH AND VINEYARD DEVELOPMENT PROJECT
ROCKS BIOLOGICAL CONSULTING
0 105 210 FEET
N
Date: 11/22/2019
Aerial Photo: City of Rancho Cucamonga 2015
Source: Rocks 2019


E 9th St
Lanyard Ct
Baker Ave
Vineyard Ave
Cucamonga Creek
WSP1
Ditch 1
3'
3'
2'
1
2
3
4
5
6
9
Ditch 2
3'
Cucamonga Creek
OHWM 1
7
8
E 8th St
Project Boundary (47.07 ac)
JD Survey Area (59.35 ac)
Proposed Storm Drain
Photo Locations
Wetland Sample Point
OHWM Data Point
Culvert
Storm Drain
Flow Direction
Corps/RWQCB/CDFW Jurisdictional Features
Concrete-lined Channel (0.40 ac)
Corps/RWQCB/CDFW Non-Jurisdictional Features
Upland Ditch (0.18 ac)
FIGURE 7
Photo Locations
9TH AND VINEYARD DEVELOPMENT PROJECT
ROCKS BIOLOGICAL CONSULTING
1 INCH = 210 FEET
0 105 210 FEET
N
Date: 11/22/2019
Aerial Photo: City of Rancho Cucamonga 2015

APPENDIX A

CHECKLIST: MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS, LOS ANGELES DISTRICT REGULATORY DIVISION, CORPS

CHECKLIST: MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS, LOS ANGELES DISTRICT REGULATORY DIVISION, USACE, MARCH 16, 2017

REPORT SECTION/ PAGE NUMBER	MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS	ADDITIONAL NOTES
Cover Letter	JD REQUEST AND FORMS: A cover letter indicating whether you are requesting a jurisdictional determination (JD). If you are requesting a JD, you must complete, sign, and return the Request for Corps Jurisdictional Determination (JD) sheet. For preliminary jurisdictional determinations the Preliminary Jurisdictional Determination Form must be signed and submitted.	
Section 1.4	CONTACT INFORMATION: Contact information for the applicant(s), property owner(s), and agent(s).	
N/A	SITE ACCESS: If the property owner or their representatives will not accompany the Corps to the site, a signed statement from the property owner(s) allowing Corps personnel to enter the property and to collect samples during normal business hours. If the property lacks direct access by public roads (in other words, access requires passage through private property not owned by the applicant), the owner or proponent must obtain permission from the adjacent property owner(s) to provide access for Corps personnel.	Property owner and/or representatives will accompany the Corps for a site visit upon request.
Section 1.1	LOCATION: Directions to the survey area, an address (if available) and one or more set of geographic coordinates expressed in decimal degrees.	
Section 2, Paragraphs 2 and 3	DELINEATION MANUAL CONFIRMATION: A statement confirming the delineation has been conducted in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and applicable regional supplement(s). The regional supplement(s) used must be identified. For OHWM delineations, a statement must be included confirming the use of the OHWM field guide or that it is not applicable.	
Section 3.5	AQUATIC RESOURCE(S) DESCRIPTION: A narrative describing all aquatic resources on-site and an explanation of the mapped boundaries and any complex transition zones. If the site contains resources that only meet one or two of the three wetland criteria or do not exhibit a clear OHWM, describe the rationale for their inclusion or exclusion from the delineation. Also explain if any erosional features, upland swales, ditches and other potential aquatic features were considered but not included in the delineation.	
Figure 5, Tables 2 and 4	AQUATIC RESOURCE MAPPING AND ACREAGE: Map the outside survey boundary, total extent of aquatic and proposed non-aquatic features, type of feature(s) (waters of the United States or wetland), and include the total acreage for each polygon.	
Section 2, Paragraph 2	FIELD WORK DATES: Date(s) field work was completed.	
Tables 2 and 4	AQUATIC RESOURCE TABLE: A table listing all aquatic resources. The table must include the name of each aquatic resource (actual or arbitrary), its Cowardin type, acreage, summary of OHWM/wetland presence, dominant vegetation for each, and location (latitude/longitude in decimal degrees). For linear features, the table must show both acreage and linear feet as well as channel measurements (active channel width).	
Section 1.1 and 2; Appendix B	FIELD CONDITIONS: A description of existing field conditions, including current land use, normal conditions, flood/drought conditions, irrigation practices, past or recent manipulation to the site, and	

ROCKS BIOLOGICAL CONSULTING

	characteristics considered atypical (for criteria see OHWM and wetland supplement guides). Include WETS tables or pre-site visit precipitation data as appropriate: https://www.wcc.nrcs.usda.gov/climate/wets_doc.html.	
Section 3.3	HYDROLOGY: A discussion of the hydrology at the site, including all known surface or subsurface sources, drainage gradients, downstream connections to the nearest traditional navigable waterway or interstate water, and any influence from manmade water sources such as irrigation.	
N/A	REMOTE SENSING: If remote sensing was used in the delineation, provide an explanation of how it was used and include the name, date and source of the tools and data used and copies of the maps/photographs.	
Section 3.4; Figure 4; Appendix D	SOILS: Soil descriptions, soil map(s), soil photos, and a discussion of hydric soils (for wetland delineations only).	
Figure 2	USGS QUADRANGLE: A site location map on a 7.5-minute USGS quadrangle. The map must provide the name of the USGS quadrangle, Section, Township, Range, and the latitude and longitude in decimal degree format.	
Appendix F	BULK UPLOAD FORM: For sites with 3 or more separate aquatic features a completed copy of the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet must be submitted.	
Figure 5	FIGURES: Map(s) of all delineated aquatic resources in accordance with the Final Map and Drawing Standards for the South Pacific Division Regulatory Program, available at: http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/	
Figure 7 and Appendix D	SITE PHOTOGRAPHS: Ground photographs showing representative aquatic resource sites (or lack of), as well as an accompanying map of photo-points and table of photographic information (see Final Map and Drawing Standards for the South Pacific Division Regulatory Program item no. 8 a-c).	
Appendix C	DATA FORMS: Completed data forms including all essential information to make a jurisdictional determination [e.g. 2006 Wetland Determination Data Form -- Arid West Supplement; 2010 Arid West Ephemeral and Intermittent Streams OHWM Datasheet].	
Section 2	METHODS: A description of the methods used to survey the aquatic resource boundaries. If GPS data is used, the level of accuracy must be included. Ideally, the GPS equipment should have the capability of sub-meter (<=1 meter) level horizontal accuracy.	
Appendix I	GIS DATA: Digital data for the site, aquatic resource boundaries, and data point locations must be provided in a geographic information system (GIS) format, preferably either ESRI shapefiles or Geodatabase format, but GoogleEarth KMZ or KML files may be acceptable non-complex projects. Each GIS data file must be accompanied by a metadata file containing the appropriate geographic coordinate system, projection, datum, and labeling description. If GIS data is unavailable or otherwise cannot be produced and the Corps determines a site visit is necessary, the aquatic resource boundaries should be physically marked with numbered flags or stakes to facilitate verification by the Corps.	

APPENDIX B

NRCS WETS TABLE

WETS Table

WETS Station: REDLANDS, CA								
Requested years: 1988 - 2019								
Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0.10 or more	Avg Snowfall
Jan	67.4	41.5	54.5	2.73	0.83	3.24	5	0.0
Feb	67.3	43.1	55.2	2.98	1.26	3.55	5	0.0
Mar	71.9	46.0	58.9	1.72	0.67	2.03	3	0.0
Apr	75.6	48.7	62.1	0.88	0.25	0.94	2	0.0
May	81.1	53.4	67.3	0.33	0.08	0.32	1	0.0
Jun	88.0	57.3	72.6	0.10	0.00	0.03	0	0.0
Jul	94.6	62.9	78.7	0.13	0.00	0.09	1	0.0
Aug	95.7	63.4	79.5	0.09	0.00	0.05	0	0.0
Sep	92.2	60.5	76.4	0.15	0.00	0.06	0	0.0
Oct	82.5	53.6	68.0	0.52	0.11	0.45	1	0.0
Nov	74.0	45.8	59.9	0.75	0.30	0.86	2	0.0
Dec	66.2	40.9	53.6	1.89	0.55	2.09	3	0.0
Annual:					8.70	14.29		
Average	79.7	51.4	65.6	-	-	-	-	-
Total	-	-	-	12.25			23	0.0

GROWING SEASON DATES

Years with missing data:	24 deg = 8	28 deg = 9	32 deg = 9
Years with no occurrence:	24 deg = 24	28 deg = 22	32 deg = 6
Data years used:	24 deg = 24	28 deg = 23	32 deg = 23
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent *	No occurrence	No occurrence	1/8 to 12/28: 354 days
70 percent *	No occurrence	No occurrence	12/17 to 1/20: 399 days
* Percent chance of the growing season occurring between the Beginning and Ending dates.			

STATS TABLE - total precipitation (inches)

Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1898				M0.32	1.67	MT		T	0.01	0.01	0.25	0.40	2.66
1899		0.71	1.50	0.08	0.24	0.87	0.00	0.04	0.05	0.65	1.28	0.46	5.88
1900	M1.23	T	0.78	2.03	1.41	0.00	0.04		0.50	0.53	3.88	0.00	10.40
1901	2.25	3.79	0.46	MT	1.62	0.04	0.00	0.00		0.92	0.09	T	9.17
1902	1.64	M2.60	2.82	0.36	0.08	0.31	0.07	0.00	0.00	0.06	1.40	M0.90	10.24
1903	1.16	1.41	5.86	3.88	0.48	0.00	0.00	0.21	0.54	0.06	0.00	0.00	13.60
1904	0.29	1.50	4.55	0.82	0.48	0.00	0.00	0.18	0.00	0.26	0.00	0.24	8.32
1905	6.15	6.74	5.53	0.27	1.16	0.00	0.00	0.00	0.00		2.38	1.29	23.52

1906	1.48	M3.04	6.15	1.30	0.79	0.14	0.00	0.04	0.19	0.00	2.72	5.21	21.06
1907	5.90	2.03	4.30	0.47	0.38	0.61	0.00	0.00	0.00	3.37	0.24	0.77	18.07
1908	4.44	3.12	1.56	0.52	0.30	0.04	T	0.22	1.31	0.96	0.02	0.98	13.47
1909	5.06	2.87	2.25	0.16	0.57	0.07	T	0.19	0.06	0.05	1.67	4.43	17.38
1910	1.99	0.19	1.57	0.25	0.00	0.07	0.38	MT	0.20	0.51	0.48	0.67	6.31
1911	4.44	3.88	2.24	0.68	0.45	T	T	T	1.03	0.71	0.34	1.35	15.12
1912	0.37	0.00	5.87	M3.35	M1.68	0.00	0.16	T	0.03	1.11	0.34	0.01	12.92
1913	1.10	M4.14	0.56	0.50	0.30	0.21	0.12	0.35	0.00	0.00	2.82	0.67	10.77
1914	7.37	4.26	1.65	2.94	0.09	0.17	0.00	0.00	0.00	0.73	0.33	2.27	19.81
1915	5.18	4.87	1.57	2.73	1.89			0.29	0.02		0.86	3.13	20.54
1916	10.64	1.10	1.65	0.12	0.39	0.00	M0.03	0.34	M1.82	1.68	M0.03	2.07	19.87
1917	M3.00	M2.82	M0.25	M1.21	0.82		M0.65	M0.04			M0.25		9.04
1918	M0.57	2.48	7.22	M0.14	M0.53	M0.02	M0.08	0.64	M0.07	0.82	1.13	M2.03	15.73
1919	M0.59	2.70	M2.45	0.82	M0.89			M0.09	M1.62	M0.36	1.70	M0.77	11.99
1920	M0.68	M4.26	M4.84	M0.89	0.61	0.00	0.00	0.00	0.21	1.30	0.22	1.07	14.08
1921	3.51	1.21	2.77	0.23	2.77		T	M0.09	0.30	1.82	0.15	M10.09	22.94
1922	5.80	2.66	2.39	0.85	1.35	0.00	T	0.00	0.00	0.37	1.43	3.01	17.86
1923	2.14	1.13	0.91	2.32	0.00	0.00	MT	0.03	M0.25	0.26	1.97	2.54	11.55
1924	M0.15		3.03	M2.92	0.00	0.00	0.00	0.00	0.00	0.51	1.53	M2.01	10.15
1925	0.18	0.42	M2.06	1.81	0.31	0.82	0.03	0.28	0.00	2.86	1.38	1.23	11.38
1926	0.82	2.73	0.24	8.30	0.64	0.00	0.00	0.03	0.00	0.04	M1.77	2.45	17.02
1927	0.86	8.41	3.23	0.45	0.22	0.04	0.05	0.00	0.00	2.41	1.43	3.19	20.29
1928	0.33	2.13	1.22	0.13	1.59	0.04	0.00	0.00	0.00	0.88	1.12	1.74	9.18
1929	1.74	1.63	1.26	2.48	T	0.04	0.00	0.10	0.59	T	0.00	0.00	7.84
1930	5.57	1.00	4.43	0.98	4.13	0.00	0.00	0.00	0.00	2.18	1.25	0.00	19.54
1931	2.00	4.51	0.53	2.22	0.86	0.24	0.00	0.24	0.28	1.91	3.04	3.84	19.67
1932	1.04	6.72	0.21	0.95	T	0.64	0.00	0.00	0.00	0.52	0.00	3.52	13.60
1933	5.08	0.16	0.22	1.72	0.67	0.08	0.00	0.02	0.00	0.13	0.29	3.32	11.69
1934	1.75	1.90	0.07	0.06	0.00	0.41	0.00	0.37	0.15	2.15	0.71	3.28	10.85
1935	2.81	3.10	2.23	1.30	0.00	0.00	0.00	1.78	0.10	0.12	0.51	0.52	12.47
1936	T	7.55	1.65	0.71	0.00	0.00	0.03	0.00	0.00	5.49	0.10	6.63	22.16
1937	2.46	5.88	5.08	0.48	0.40	0.02	0.00	0.00	0.00	0.00	0.07	2.14	16.53
1938	1.89	4.39	7.30	1.29	0.47	T	0.07	0.00	0.04	0.55	0.00	4.13	20.13
1939	2.32	1.66	1.77	1.85	0.05	0.00	T	0.00	3.45	0.34	1.34	0.42	13.20

1940	3.40	3.70	1.31	2.16	0.00	T	0.00	0.00	0.00	1.37	0.92	5.70	18.56
1941	1.33	4.51	7.46	2.95	0.27	0.04	0.00	0.70	0.00	2.52	0.50	3.85	24.13
1942	0.33	0.84	1.12	2.46	0.00	0.00	0.00	0.52	0.00	0.81	0.25	1.31	7.64
1943	8.20	3.44	4.63	2.36	0.00	0.00	0.00	0.00	0.00	0.92	0.03	5.35	24.93
1944	0.94	7.12	1.81	1.57	0.02	0.06	0.00	0.00	0.00	0.00	4.52	0.93	16.97
1945	0.32	2.43	3.98	0.20	0.00	0.03	0.00	1.11	0.42	0.38	0.18	3.91	12.96
1946	0.08	0.62	2.35	0.77	0.01	0.00	0.28	0.00	0.20	1.13	5.38	2.71	13.53
1947	0.21	0.99	1.12	0.83	0.14	0.00	0.00	0.05	0.18	0.03	0.04	1.67	5.26
1948	0.00	2.01	1.60	0.74	0.10	0.93	0.00	0.00	0.00	1.29	0.00	2.20	8.87
1949	3.85	1.83	1.14	0.05	1.19	0.00	0.00	0.00	0.00	0.14	M1.74	1.56	11.50
1950	1.33	2.59	0.97	0.77	0.25	0.03	0.00	0.00	0.33	0.00	1.35	0.00	7.62
1951	2.46	0.64	0.55	1.81	0.62	0.00	0.28	0.10	0.55	0.53	0.99	5.22	13.75
1952	5.62	0.16	5.04	3.06	T	0.00	0.00	0.00	1.37	0.00	M3.41	3.10	21.76
1953	1.57	0.45	1.28	1.73	0.34	0.04	0.00	0.00	0.00	0.00	0.82	0.00	6.23
1954	5.30	1.78	4.43	0.18	0.08	0.05	0.06	0.00	0.00	0.00	2.42	0.68	14.98
1955	3.37	1.29	0.20	0.40	1.41	0.06	0.03	0.05	0.00	0.00	1.02	1.24	9.07
1956	4.48	0.47	0.01	1.85	0.54	0.00	0.00	0.00	0.00	0.20	0.00	0.42	7.97
1957	4.73	0.77	1.17	1.77	1.70	0.18	M0.90	0.00	0.00	2.15	M0.32	1.93	15.62
1958	1.32	3.51	4.58	3.30	0.23	0.01	0.00	0.01	0.79	0.70	0.29	0.00	14.74
1959	0.84	2.98	0.00	0.12	0.12	0.01	T	T	0.08	0.30	0.71	2.57	7.73
1960	2.42	2.15	0.67	1.01	0.24	0.00	0.00	0.00	0.44	0.36	1.25	0.16	8.70
1961	0.66	T	1.03	0.05	0.09	0.00	T	0.02	0.01	T	1.13	1.87	4.86
1962	2.36	5.33	1.52	0.05	0.52	M0.03	0.00	0.00	0.00	0.11	T	T	9.92
1963	0.38	2.55	2.25	1.81	0.00	0.31	0.00	0.14	2.96	1.25	2.08	0.05	13.78
1964	1.63	0.23	2.27	0.84	0.30	0.09	0.19	T	0.10	0.18	1.57	0.97	8.37
1965	0.38	0.36	1.82	4.74	0.14	0.07	0.09	0.20	0.62	0.00	7.64	3.07	19.13
1966	1.10	1.11	0.38	0.05	0.10	T	0.02	0.00	0.27	0.52	0.70	8.07	12.32
1967	2.85	0.00	1.99	2.60	0.33	0.17	0.00	0.51	0.32	0.00	3.00	1.92	13.69
1968	0.59	0.41	1.78	1.11	0.30	0.09	0.48	0.04	0.00	0.16	0.49	1.04	6.49
1969	9.76	9.91	1.36	0.84	1.14	0.11	0.07	0.00	0.31	0.03	1.30	0.06	24.89
1970	1.06	1.12	3.70	0.22	0.02	0.02	0.00	0.69	0.00	0.02	2.63	3.47	12.95
1971	0.67	0.52	0.54	0.74	1.30	0.04	0.00	0.00	0.00	0.00	0.16	4.47	8.44
1972	0.00	0.11	0.01	0.07	0.13	0.49	0.00	0.11	0.17	0.84	2.14	1.64	5.71
1973		4.55	3.96	0.12	0.10	0.00	0.00	0.02	0.00	0.05	1.58	0.06	10.44

1974	5.57	0.06	2.70	0.46	0.00	0.00	0.04	0.00	0.00	0.68	0.14	2.10	11.75
1975	0.43	1.32	3.52	1.56	0.15	0.16	T		0.00	0.43	0.73	0.45	8.75
1976	0.00	5.38	0.75	1.48	0.35	0.11	0.01	0.00	3.81	0.84		0.45	13.18
1977	2.39	0.76	1.08	0.00	3.11	0.00	0.00	2.29	0.00	0.04			9.67
1978	6.78	6.24	6.66	1.76	0.02	0.00	0.00	0.42	0.62	0.23	2.01	2.26	27.00
1979	4.77	2.87	4.59	0.02	0.74	0.09	0.78	0.02	0.00	1.27	0.09	0.16	15.40
1980	7.73		3.89	1.20	0.46	0.05	0.00	0.00	0.00	0.06	0.00	M0.21	13.60
1981	1.41	2.01	M2.03	0.46	0.27	0.00	0.00	0.00	0.00	1.22	0.82	1.23	9.45
1982	4.29		4.55	1.18	0.59	0.05	0.00	0.27	2.41	0.22	3.18	1.37	18.11
1983	5.02	3.64	2.86	3.19	0.11	0.00	0.00	2.55	1.04	0.96	2.68	2.29	24.34
1984	0.12	0.31	0.24	0.25	0.01	0.03	0.59	0.06	0.42	0.14	1.33	5.13	8.63
1985	1.14	1.05	1.04	0.09	0.00	0.00	0.04	0.00	0.46	0.54	2.82	0.41	7.59
1986	0.80	2.45	3.05		0.00	0.00	0.14	0.00	0.46	0.62	0.97	2.20	10.69
1987	1.91	2.00	1.74	0.28	0.07	0.12	0.04	0.11	0.04	2.66	1.61	1.85	12.43
1988	1.61	0.81	0.69	3.37	0.09	0.04	0.00	0.02	0.06	M0.00	0.55	2.56	9.80
1989	1.06	2.69	0.94	0.10	0.30	0.00	0.00	0.00	0.66	0.28	0.23	0.00	6.26
1990	1.93	2.40	0.69	0.82	0.66	0.12	0.41	0.10	0.01	M0.06	0.26	0.04	7.50
1991	2.15	3.41	M7.56	0.04	0.03	T	0.16	0.00	0.04	0.48	0.14	1.37	15.38
1992	2.83	4.89	5.34	0.22	0.25	0.00	M0.48	0.00	0.00	0.90	0.00	4.77	19.68
1993	11.69	7.55	1.95	0.00	M0.04	1.09	0.00	0.00	M0.00	0.20	1.18	1.20	24.90
1994	0.79	3.87	3.32	0.98	0.51	0.00	0.03	T	0.00	0.30	0.44	1.00	11.24
1995	9.20	1.79	6.59	0.80	0.49	0.97	0.05	0.05	0.01	0.00	0.08	0.51	20.54
1996	1.39	4.47	1.36	0.38	0.00	0.00	0.10	0.02	0.01	0.91		1.75	10.39
1997	6.21	0.00	0.00	0.03	0.00	0.07	0.01	0.00	1.12	0.26	1.48	2.35	11.53
1998	2.82	12.10	2.51	1.19	2.70	0.03	0.00	0.56	1.15	0.25	0.61	0.33	24.25
1999	1.16	0.62	0.27	2.25	0.09	0.47	0.05	0.00	0.00	0.00	0.04	0.02	4.97
2000	0.86	3.64	2.14	1.05	0.06	0.00	0.00	0.03	0.05	0.64	0.07	0.07	8.61
2001	2.90	3.49	1.58	1.42	0.06	0.00	0.02	0.00	0.00	0.05	1.12	0.85	11.49
2002	0.27	0.04	0.78	0.44	0.01	0.00	0.00	0.00	0.02	0.00	1.56	2.37	5.49
2003	0.01	5.43	3.00	2.57	0.73	0.10	0.14	0.00	0.00	0.00	1.64	1.16	14.78
2004	0.39	4.29	0.80	0.96	0.03	0.00	0.00	0.05	0.09	6.16	1.06	2.80	16.63
2005	6.17	6.84	0.95	0.66	0.47	0.05		T	0.18	1.63	0.00	0.17	17.12
2006	1.05	2.19		3.02	0.12	0.00	0.05		0.00	0.08	0.08	0.61	7.20
2007	1.27	0.48	0.48	0.88	0.00	0.00	T	0.00	0.07	0.11	1.99	2.04	7.32

2008	3.37	2.12	0.11	0.00	1.06	0.00	0.00	0.00	0.00	0.00	1.92	3.40	11.98
2009	0.20	2.91	0.08	0.10	0.00	0.01	0.00	0.00	0.01	0.03	0.43	2.77	6.54
2010	7.48	2.69	0.70	1.35	0.00	0.00	0.00	0.00	0.00	0.69	1.18	12.60	26.69
2011	1.13	2.82	1.83	0.19	0.50	0.01	0.31	0.00	0.05	0.43	1.19	0.31	8.77
2012	0.53	0.53	1.95	1.58	0.16	0.00	0.20	0.34	0.00	0.06	0.71	2.95	9.01
2013	1.28	1.43	0.92	0.02	0.24	0.00	0.20	0.11	0.00	0.59	1.33	0.31	6.43
2014	0.03	1.91	0.48	1.13	0.01	0.00	0.00	1.25	0.00	0.00	0.39	3.97	9.17
2015	0.53	0.93	0.51	0.53	0.80	0.00	1.66	0.00	0.98	0.35	0.24	1.00	7.53
2016	3.40	0.23	1.41	1.11	0.08	0.00	0.00	0.00	0.01	0.82	1.39	M3.89	12.34
2017	7.02	2.61	0.10	0.01	0.27	0.00	0.00	0.19	0.01	0.01	0.05	0.00	10.27
2018	3.40	0.40	2.06	0.00	0.37	0.00	0.11	0.00	0.00	0.87	1.10	1.43	9.74
2019	3.17	5.66	2.24										11.07

Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2016-07-22

APPENDIX C

ARID WEST WETLAND DELINEATION AND EPHEMERAL AND INTERMITTENT STREAMS ORDINARY HIGH WATER MARK (OHWM) DATASHEETS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 9th & Vineyard Development Project City/County: Rancho Cucamonga/San Bernardino Sampling Date: April 9, 2019

Applicant/Owner: Panattoni Development Company, Inc. State: CA Sampling Point: 1

Investigator(s): Shanti Santulli, Sarah Krejca Section, Township, Range: T 1S, R 7W, Cucamonga Landgrant lands

Landform (hillslope, terrace, etc.): upland Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): LRR - C Lat: 34.093974 Long: -117.612952 Datum: WGS84

Soil Map Unit Name: Tujunga gravelly loamy sand, 0 to 9 percent slope NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Site adjacent to industrial area. Area mapped as hydric soils and presence of single sycamore (Platanus racemosa)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. Platanus racemosa	30	Y	FAC
2.			
3.			
4.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 10')			
1. Amsinckia menziesii	60	Y	NL
2. Brassica nigra	10	N	NL
3. Raphanus sativus	1	N	NL
4.			
5.			
6.			
7.			
8.			
	71 = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. N/A			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 30	x 3 =	90
FACU species	x 4 =	
UPL species 71	x 5 =	355
Column Totals: 101 (A)		445 (B)

Prevalence Index = B/A = 4.4059

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Site dominated by non-native vegetation and 1 large sycamore.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10 YR 3/2	100	N/A				loamy sanc	uniform color

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✔

Remarks:

Uniform color present in soils - no redox or layers observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): ___

Water Table Present? Yes ___ No ✔ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No indicators observed.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: 9th & Vineyard Development Project
Project Number:
Stream: OHWM 1
Investigator(s): Shanti Santulli, Sarah Krejca

Date: April 9, 2019 **Time:** 1135
Town: Rancho Cucamonga **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: **Datum:** WGS 84
Coordinates: See data below

Potential anthropogenic influences on the channel system:

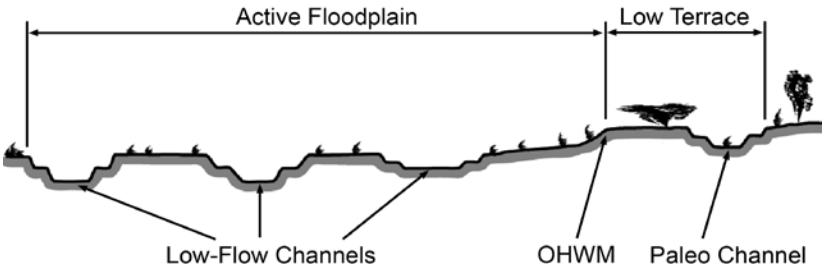
Brief site description:

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

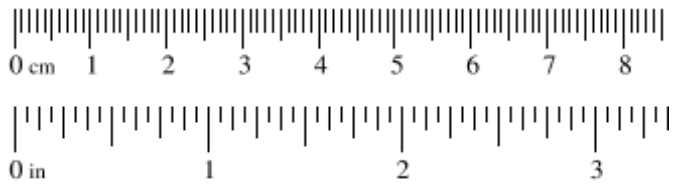


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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:

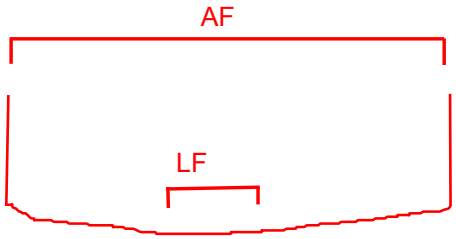
Wentworth Size Classes

Inches (in)	Millimeters (mm)	Wentworth size class	
10.08	256	Boulder	Gravel
2.56	64	Cobble	Gravel
0.157	4	Pebble	Gravel
0.079	2.00	Granule	Gravel
0.039	1.00	Very coarse sand	Sand
0.020	0.50	Coarse sand	Sand
1/2 0.0098	0.25	Medium sand	Sand
1/4 0.005	0.125	Fine sand	Sand
1/8 0.0025	0.0625	Very fine sand	Sand
1/16 0.0012	0.031	Coarse silt	Silt
1/32 0.00061	0.0156	Medium silt	Silt
1/64 0.00031	0.0078	Fine silt	Silt
1/128 0.00015	0.0039	Very fine silt	Silt
		Clay	Mud



Project ID: 9th & Vineyard D **Cross section ID:** OHWM 1 **Date:** April 9, 2019 **Time:** 1135

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: _____

Total veg cover: _____ % 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:

Ten-foot wide low-flow channel estimated by presence of flowing water and staining.

Project ID: 9th & Vineyard D **Cross section ID:** OHWM 1 **Date:** April 9, 2019 **Time:** 1135

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

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % 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:

76-foot wide active floodplain extending to vertical banks of concrete-line channel, based on 5- and 10-year flows.

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

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % 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:

APPENDIX D

SITE PHOTOGRAPHS

Appendix D – Site Photographs*

9th & Vineyard Development Project Jurisdictional Delineation

April 10, 2019

Photo 1. Overview of southwestern portion of project site looking west.

Photo 2. Overview of northwestern portion of project site looking northwest.

*See Corresponding Figure 7 for Photo Point Locations.

Photo 3. Beginning of evidence of flows for Ditch 1.

Photo 4. Overview of Ditch 1 looking east-southeast. Evidence of general drainage patterns but no defined bed or bank or break in slope. Ditch 1 appeared to be a ditch created in uplands that occurs along a manmade berm to direct flows away from the adjacent developed area.

Photo 5. Upstream view of Ditch 1 showing location of Wetland Sampling Point (WSP) 1. WSP 1 was taken within an area mapped as containing hydric soils and under the canopy of a western sycamore (*Platanus racemosa*) (indicator status of FAC). WSP1 did not meet the hydrophytic vegetation, hydric soil, or wetland hydrology parameters.

Photo 6. End of evidence of flows for Ditch 1.

Photo 7. Upstream view of Ordinary High Water Mark data point 1 (OHWM 1) taken within the concrete-lined Cucamonga Creek located just east of the project boundary and survey area. Ten-foot wide low-flow channel estimated by presence of flowing water and staining. 76-foot wide active floodplain estimated based on the flat channel bottom and 5- and 10-year flow events that occur within the full extent of the channel.

Photo 8. Downstream view of OHWM 1 facing southeast.

Photo 9. Approximately three-foot wide manmade ditch along railroad tracks (Ditch 2) within 100-foot buffer south of project site boundary and north of East 8th Street. (Ditch 2 is shown on the left side of the fence in the above photo). Ditch 2 displayed no evidence of drainage patterns, an OHWM, and/or streambed and appeared to be a ditch created in uplands to for localized runoff-conveyance purposes.

APPENDIX E

JD REQUEST FORM

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: District Name Here

- I am requesting a JD on property located at: Southwest of East 9th Street and Vineyard Ave.
  (Street Address)
  City/Township/Parish: Rancho Cucamonga County: San Bernardino State: CA
  Acreage of Parcel/Review Area for JD: 47.07 acres
  Section: Landgrant Township: 1 South Range: 7 West
  Latitude (decimal degrees): 34.093888 Longitude (decimal degrees): -117.615244
  (For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- ✓ I currently own this property. * ✓ I plan to purchase this property. *
  ___ I am an agent/consultant acting on behalf of the requestor.
  ___ Other (please explain): _____.
- Reason for request: (check as many as applicable)
  ___ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
  ___ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
  ___ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
  ___ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
  ___ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
  ___ A Corps JD is required in order to obtain my local/state authorization.
  ✓ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
  ___ I believe that the site may be comprised entirely of dry land.
  ___ Other: _____
- Type of determination being requested:
  ✓ I am requesting an approved JD.
  ___ I am requesting a preliminary JD.
  ___ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
  ___ I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: See Attached Signature Page Date: _____

- Typed or printed name: William Bullen
  Company name: CP Logistics Vineyard LLC
  Address: 2442 Dupont Drive
  Irvine, CA 92612
  Daytime phone no.: 949-296-2989
  Email address: MSizemore@panattoni.com

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

*Approx. 36 acres owned; 11 acres in escrow

SIGNATURE PAGE
Appendix 1 – Request for ACOE Jurisdictional Delineation (JD)
9th & Vineyard
November 20, 2019

CP LOGISTICS VINEYARD LLC,
a Delaware limited liability company

By: **CP LOGISTICS PLATFORM, LLC,**
a Delaware limited liability company,
its Sole Member

By: **PANATTONI CLP, LLC,**
a Delaware limited liability company,
its Administrator

By: **PANATTONI CLP OPERATOR, LLC,**
a Delaware limited liability company,
its Manager

By: DocuSigned by: _____
William Bullen,
Vice President

APPENDIX F

ORM BULK UPLOAD AQUATIC RESOURCES OR CONSOLIDATED EXCEL SPREADSHEET

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude
Cucamonga Creek	CALIFORNIA	R4		Area	0.3997	ACRE	DELINEATE	34.092655	-117.609324
Ditch 1	CALIFORNIA	U		Area	0.0582	ACRE	DELINEATE	34.093889	-117.613029
Ditch 2	CALIFORNIA	U		Area	0.1255	ACRE	DELINEATE	34.092646	-117.616751

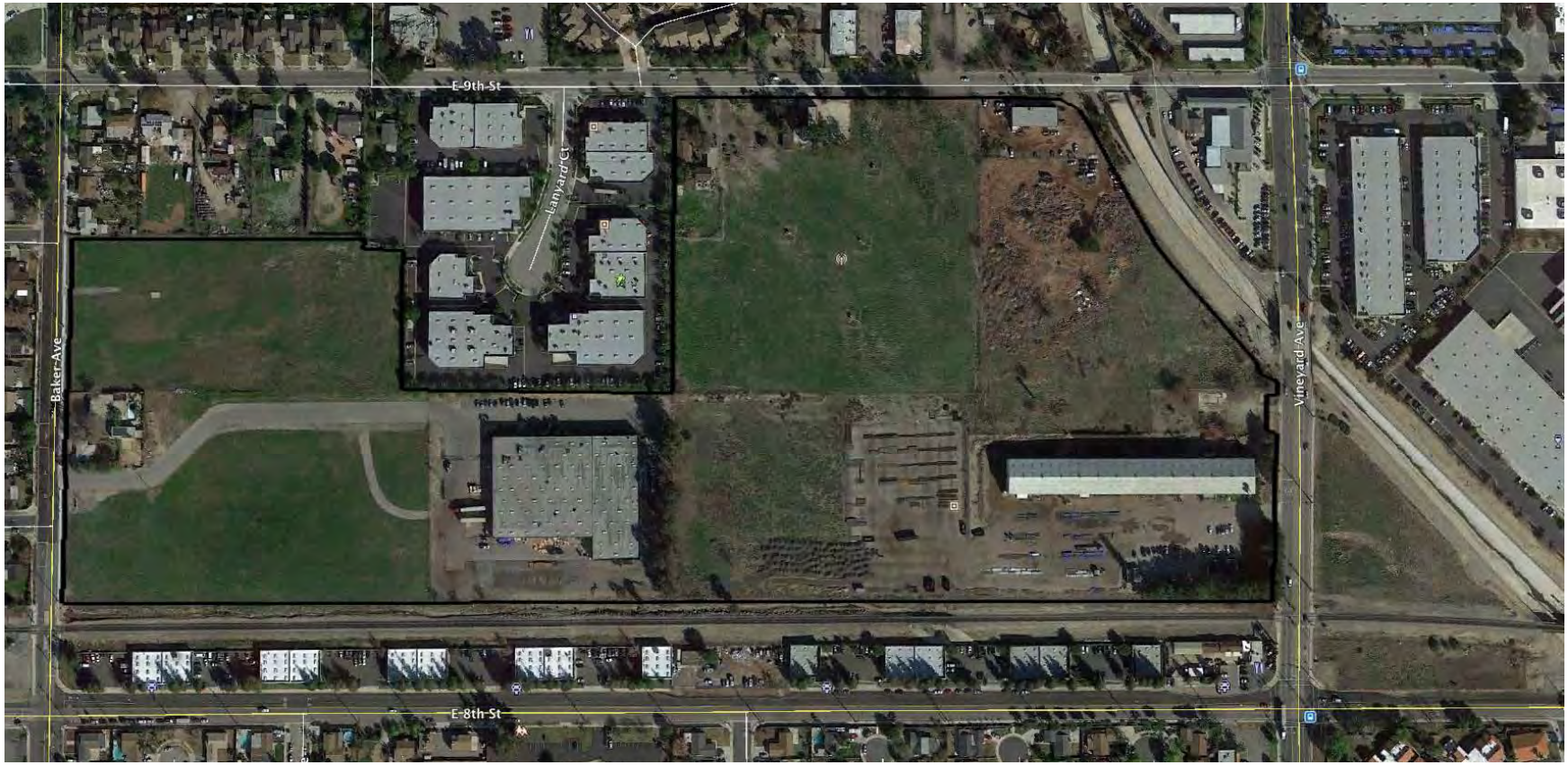
APPENDIX G

AERIAL IMAGERY ANALYSIS

Appendix G – Aerial Imagery Analysis

9th & Vineyard Development Project Jurisdictional Delineation

Sources: Google Earth



February 2016

Appendix G – Aerial Imagery Analysis

Sources: Google Earth

March 2017

Appendix G – Aerial Imagery Analysis

Sources: Google Earth

August 2018

APPENDIX H

HYDROLOGY INFORMATION

RE: [EXTERNAL] Re: 9th & Vineyard: JD Site Visit Follow-up

From: Brian Weil (Brianw@thieneseng.com)

To: MSizemore@panattoni.com; shanti@rocksbio.com

Cc: Briant@thieneseng.com; Michael@thieneseng.com

Date: Tuesday, April 30, 2019, 12:42 PM PDT

I was able to piece together some numbers for the requested 5- and 10-year storm events based on a few assumptions. I have the Corps of Engineers hydrology study for Cucamonga Creek dated January 1973. This study includes various peak flow rates in Cucamonga Creek near the project site. There is a confluence upstream of the project site near Foothill Blvd (concentration point 111) that has peak flow values for the Standard Project Flood (SPF), the 100-year and 50-year. From the report, the respective peak flow rates are 19,500 cfs, 14,500 cfs and 10,500 cfs. There is no storm event associated with the SPF, but it's obviously higher than the 100-year event. There is no mention of 5- or 10-year peak flow rates in the report.

To determine an estimate for the 5- and 10-year peak flow rates, I used a ratio of intensities for these events, since in the simplest form a peak flow rate can be expressed as Q=CIA, where C is a constant, I is the intensity and A is the area. I used NOAA Atlas 14 values for the area of the project site, which does include 5-, 10-, 50- and 100-year intensities. I compared various durations (1 hour, 3-hour and 24-hour) and found that the intensity for the 5-year event is about 62% of the 50-year and about 55% of the 100-year. The 10-year ratio is about 74% of the 50-year and about 67% of the 100-year. Using the ratio to the 100-year intensities (the higher of the two values) I get a 5-year peak flow rate of about 7975 cfs and a 10-year of 9715 cfs.

Next, I put these values in a program that will calculate a depth of flow in the channel, based on a section of the channel and a slope. From the Channel plans, the bottom width of the channel varies from 45' wide (near 9th street) to 80' wide at the railroad and 8th street. Depths of flow vary from 4.86' deep to 5.53' deep at the 45' wide section (5- and 10-year respectively) and 3.28' deep to 3.71' deep at the 80' wide section.

Let me know if you need anything else.

From: Michael Sizemore [mailto:MSizemore@panattoni.com]
Sent: Monday, April 22, 2019 10:30 AM
To: Brian Thienes <Briant@thieneseng.com>; Michael Roberts <Michael@thieneseng.com>
Cc: Sarah Krejca <sarah@rocksbio.com>; Karina Fiddler <Karina.Fidler@kimley-horn.com>; Jacob LeBlanc <jleblanc@panattoni.com>; 'Shanti Santulli' <shanti@rocksbio.com>
Subject: RE: [EXTERNAL] Re: 9th & Vineyard: JD Site Visit Follow-up

Good Morning Brian/Michael,

Please see below email regarding our storm drain connection to the Cucamonga Creek channel for our 9th & Vineyard project in Rancho Cucamonga. Are you at a point yet where you are able to provide the information requested by our consultant in her email below?

Thanks.

From: Shanti Santulli [mailto:shanti@rocksbio.com]
Sent: Monday, April 22, 2019 10:27 AM
To: Michael Sizemore
Cc: Sarah Krejca; Karina Fiddler; Jacob LeBlanc
Subject: Re: [EXTERNAL] Re: 9th & Vineyard: JD Site Visit Follow-up

Good morning,

Per our conversation last week, we've been doing some research into the extent of the Corps' 404 jurisdiction on the Cucamonga Channel. For these large concrete-lined channels, it isn't uncommon to use estimated stream flows for the 5-year and/or 10-year flow events to assist in defining the Corps' jurisdictional boundaries. Kimley-Horn was able to pull information for a project they worked on approximately 3 miles downstream of the 9th and Vineyard project site, for which the Corps asserted jurisdiction over the either width of the channel based on the extent of the 10-year flows.

It would be ideal to use similar justification for this JD, but we do not have the hydrology specifics for this segment of the Cucamonga Channel. Would your engineers be able to provide us this information (i.e., 5-year and 10-year recurrence intervals within the Cucamonga Channel)?

If easier, please feel free to call me to discuss.

Thank you,

Shanti

Shanti Santulli, PWS

Lead Regulatory Specialist

Rocks Biological Consulting

2621 Denver Street, Suite B

APPENDIX I

GIS DATA (PROVIDED ELECTRONICALLY TO AGENCIES)

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CALIFORNIA 90017

May 14, 2020

SUBJECT: Approved Jurisdictional Determination

Michael Sizemore
CP Logistics Vineyard LLC
2442 Dupont Drive
Irvine, California 92612

Dear Mr. Sizemore:

I am responding to your request (File No. SPL-2019-00928-SLP) dated November 21, 2019, for an approved Department of the Army jurisdictional determination (JD) for the 9th and Vineyard Development Project site. The project is located within the city of Rancho Cucamonga, San Bernardino County, California (lat. 34.093888°N, long. -117.615244°W).

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether or not the proposed project is located within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act. This evaluation pertains only to geographic jurisdiction.

Based on available information, I have determined there are waters of the United States on the project site, as well as non-jurisdictional aquatic resources, in the locations depicted on the enclosed figure. The basis for our determination can be found in the enclosed Approved Jurisdictional Determination (JD) form.

This letter includes an approved jurisdictional determination for the 9th and Vineyard Development Project site. If you wish to submit new information regarding this jurisdictional determination, please do so within 60 days. We will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. If you object to this or any revised or reissued jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) and Request for Appeal (RFA) form. If you wish to appeal this decision, you must submit a completed RFA form within 60 days of the date on the NAP to the Corps South Pacific Division Office at the following address:

Tom Cavanaugh
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division, CESPD-PDO
450 Golden Gate Ave.
San Francisco, CA 94102

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5 (see below), and that it has been received by the Division Office by July 13, 2020.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular project site identified in your request, and is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact me at (213) 452-3412 or via e-mail at Shannon.L.Pankratz@usace.army.mil. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

Shannon Pankratz
Senior Project Manager
L.A. & San Bernardino Section
North Coast Branch
Regulatory Division

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL		
Applicant: CP Logistics Vineyard LLC	File Number: SPL-2019-00928-SLP	Date: MAY 14, 2020
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/cecw/pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or p information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps w days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of E Administrative Appeal Process by completing Section II of this form and sending the form to the divisio This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps reg preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (whicl appealed), by contacting the Corps district for further instruction. Also you may provide new information fo consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your o an initial proffered permit in clear concise statements. You may attach additional information to this form to where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps ma information or analyses to the record. However, you may provide additional information to clarify the locat information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Shannon Pankratz
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Boulevard, Suite 930
Los Angeles, California 90017
Phone: (213) 452-3412
Email: Shannon.L.Pankratz@usace.army.mil

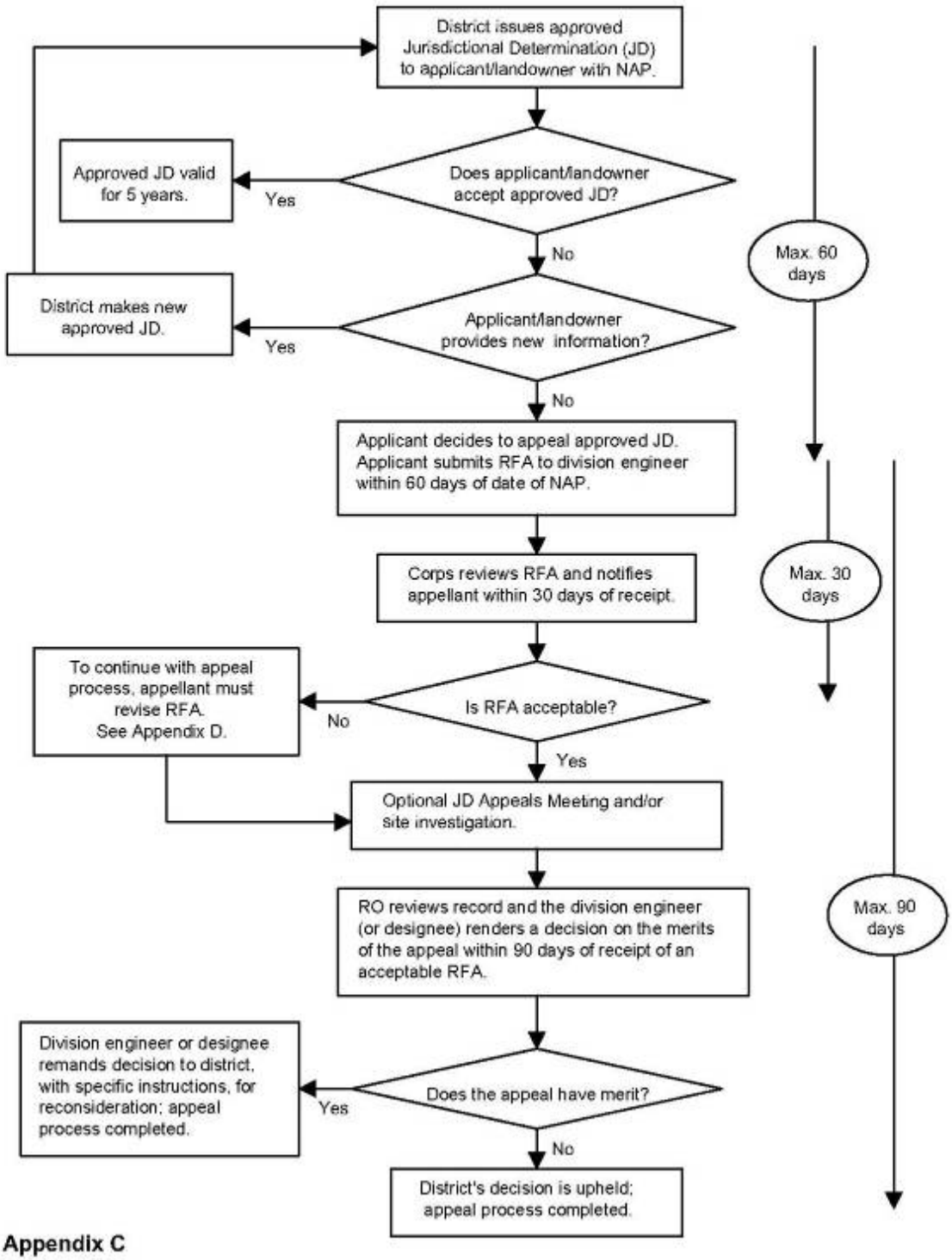
If you only have questions regarding the appea you may also contact:

Thomas J. Cavanaugh
Administrative Appeal Review Of
U.S. Army Corps of Engineers
South Pacific Division
450 Golden Gate Ave.
San Francisco, CA 94102
Phone: (415) 503-6574 Fax: (415)
Email: thomas.j.cavanaugh@usace

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and a government consultants, to conduct investigations of the project site during the course of the appeal process. be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone nu

Administrative Appeal Process for Approved Jurisdictional Determinations



Appendix C

§ 331.5 Criteria.

(a) *Criteria for appeal* —(1) *Submission of RFA.* The appellant must submit a completed RFA (as defined at §331.2) to the appropriate division office in order to appeal an approved JD, a permit denial, or a declined permit. An individual permit that has been signed by the applicant, and subsequently unilaterally modified by the district engineer pursuant to 33 CFR 325.7, may be appealed under this process, provided that the applicant has not started work in waters of the United States authorized by the permit. The RFA must be received by the division engineer within 60 days of the date of the NAP.

(2) *Reasons for appeal.* The reason(s) for requesting an appeal of an approved JD, a permit denial, or a declined permit must be specifically stated in the RFA and must be more than a simple request for appeal because the affected party did not like the approved JD, permit decision, or the permit conditions. Examples of reasons for appeals include, but are not limited to, the following: A procedural error; an incorrect application of law, regulation or officially promulgated policy; omission of material fact; incorrect application of the current regulatory criteria and associated guidance for identifying and delineating wetlands; incorrect application of the Section 404(b)(1) Guidelines (see 40 CFR Part 230); or use of incorrect data. The reasons for appealing a permit denial or a declined permit may include jurisdiction issues, whether or not a previous approved JD was appealed.

(b) *Actions not appealable.* An action or decision is not subject to an administrative appeal under this part if it falls into one or more of the following categories:

(1) An individual permit decision (including a letter of permission or a standard permit with special conditions), where the permit has been accepted and signed by the permittee. By signing the permit, the applicant waives all rights to appeal the terms and conditions of the permit, unless the authorized work has not started in waters of the United States and that issued permit is subsequently modified by the district engineer pursuant to 33 CFR 325.7;

(2) Any site-specific matter that has been the subject of a final decision of the Federal courts;

(3) A final Corps decision that has resulted from additional analysis and evaluation, as directed by a final appeal decision;

(4) A permit denial without prejudice or a declined permit, where the controlling factor cannot be changed by the Corps decision maker (e.g., the requirements of a binding statute, regulation, state Section 401 water quality certification, state coastal zone management disapproval, etc. (See 33 CFR 320.4(j));

(5) A permit denial case where the applicant has subsequently modified the proposed project, because this would constitute an amended application that would require a new public interest review, rather than an appeal of the existing record and decision;

(6) Any request for the appeal of an approved JD, a denied permit, or a declined permit where the RFA has not been received by the division engineer within 60 days of the date of the NAP;

(7) A previously approved JD that has been superceded by another approved JD based on new information or data submitted by the applicant. The new approved JD is an appealable action;

(8) An approved JD associated with an individual permit where the permit has been accepted and signed by the permittee;

(9) A preliminary JD; or

(10) A JD associated with unauthorized activities except as provided in §331.11.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 5/14/2020

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Los Angeles District, 9th and Vineyard Development Project, SPL-2019-00928-SLP

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: California County/parish/borough: San Bernardino County City: Rancho Cucamonga
Center coordinates of site (lat/long in degree decimal format): Lat. 34.093888° **N**, Long. -117.615244° **W**.
Universal Transverse Mercator: Zone 11
Name of nearest waterbody: Cucamonga Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Pacific Ocean
Name of watershed or Hydrologic Unit Code (HUC): Santa Ana HUC 8 (18070203)

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: 5/14/2020
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Pick List** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: 234 linear feet: 76 width (ft) and/or 0.40 acres.
      Wetlands: n/a acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Established by OHWM.**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **In addition to the jurisdictional Cucamonga Creek channel discussed above in Section B.1.a, the project site contains two other ephemeral aquatic features designated as "Ditch 1" and "Ditch 2". These aquatic features: do not carry relatively permanent flows, were constructed wholly in uplands for the purpose of draining developed area**

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

runoff, do not replace a pre-existing natural drainage feature, do not connect an upstream natural drainage feature to a downstream tributary, do not intersect the groundwater table during normal rainfall years, and are not part of a ditch system that replaces the functions of a tributary.

Ditch 1 occurs in the eastern portion of the project area, initiating on site at two points and flowing west to east/northeast for approximately 350 feet along the northern segment and approximately 430 feet along the southern segment before the two segments converge then continue flowing for approximately 200 feet before terminating on site (i.e., does not contribute flows outside of the project area or to another aquatic features). Ditch 1 is largely unvegetated, surrounded by non-native grassland, and is approximately 2-3 feet wide. Ditch 1 does not exhibit any OHWM indicators. Moreover, based on Google Earth aerial imagery and field observations, Ditch 1 appears to be a ditch created in uplands that occurs along a manmade berm to direct flows away from the adjacent developed area. The drainge ditch was constructed in uplands sometime between February 2016 and March 2017.

Ditch 2 is approximately 3 feet wide and also appears to be a manmade ditch within the project survey area buffer. The feature drains west to east and travels along the northern portion of the off-site railroad tracks for approximately 1,822 feet. No drainage patterns or OHWM indicators were observed within Ditch 2. The ditch is sparsely vegetated with non-native grasses. Based on a review of Google Earth, NetrOnline Historic Aerials, and the University of California – Santa Barbara database it was difficult for the consultant to confirm when the ditch was created since available historic aerials only date back to 1938 (i.e., after the railroad was constructed). Yet, based on the available information and field observations, the resource designated as Ditch 2 appears to be a drainage ditch created in uplands to convey flows from the adjacent railroad tracks.

In the preamble of 33 Code of Federal Regulations (C.F.R.) 328.3 (a), (c), and (e) (from 1986 and 1988), the USACE and U.S. Environmental Protection Agency, respectively, stated they do not consider non-tidal drainage and irrigation ditches excavated on dry land to be waters of the U.S. (51 Federal Register 41217, November 13, 1986; 53 FR 20764, June 6, 1988). RGL 07-02 and the 2007 USACE JD Form Instructional Guidebook provided similar guidance regarding drainage ditches. Per 2008 Rapanos guidance, it is further stated jurisdiction is not generally asserted over "Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water." (Clean Water Act Jurisdiction Following the Supreme Court's Decision in Rapanos v. United States and Carabell v. United States (December 2, 2008). In summary, aquatic features/drainage ditches constructed wholly within uplands, that provide limited (non-RPW) unidirectional flows solely from uplands into a downstream water, are not regulated waters of the U.S.

Based upon the above, the aquatic features designated as "Ditch 1" and "Ditch 2" meet all criteria as drainage ditches. Therefore, Ditch 1 and Ditch 2 are non-jurisdictional and are not waters of the U.S.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: .
Tributary stream order, if known: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: As discussed on pages 9-10 of the 9th & Vineyard Development Project JD Report submitted, the jurisdictional extent of Cucamonga Creek was determined based on the mapped extent of the 10-year flow event and 5-year and 10-year peak flow rates (JD Report, Appendix H). Field observations indicated intermittent flows are likely throughout Cucamonga Creek, especially with the hydrologic influence from the channel's outfalls contributing flows from the urban surroundings to

portions of the channel; other areas of the channel were absent of flows (JD Report, Appendix D, Photo 8). Additionally, a review of recent historic aerials revealed years where Cucamonga Creek did not appear to sustain perrenial flows, but may have flows more than three months per year (JD Report, Appendix G).

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: **234** linear feet **76** width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs[8] that flow directly or indirectly into TNWs.
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.[9]
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☒ Other: (explain, if not covered above): **See above Section II (B)(2) for an explanation regarding Ditch 1 and Ditch 2.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: "9th & Vineyard Development Project, Jurisdictional Delineation Report" (dated 11/21/2019, prepared by Rocks Biological Consulting).
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☒ U.S. Geological Survey Hydrologic Atlas: JD Report, Figure 2 and Figure 3.
☒ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: JD Report, Figure 2 (1:800 scale; Guasti and Ontario quads).
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: JD Report, Figure 4 (USDA NRCS 2017).
☒ National wetlands inventory map(s). Cite name: JD Report, Figure 4 (USFWS NWI 2018).
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): JD Report, Figure 1 and Figure 5 (DigitalGlobe2018, Esri & City of Rancho Cucamonga 2015).
or ☒ Other (Name & Date): JD Report, Figure 7 and Appendix D.
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: See above Section II (B)(2) for an explanation .


E 9th St
Lanyard Ct
Baker Ave
Vineyard Ave
Cucamonga Creek
WSP1
Ditch 1
3'
3'
2'
1
2
3
4
5
6
9
Ditch 2
3'
Cucamonga Creek
OHWM 1
7
8
E 8th St
Project Boundary (47.07 ac)
JD Survey Area (59.35 ac)
Proposed Storm Drain
Photo Locations
Wetland Sample Point
OHWM Data Point
Culvert
Storm Drain
Flow Direction
Corps/RWQCB/CDFW Jurisdictional Features
Concrete-lined Channel (0.40 ac)
Corps/RWQCB/CDFW Non-Jurisdictional Features
Upland Ditch (0.18 ac)
FIGURE 7
Photo Locations
9TH AND VINEYARD DEVELOPMENT PROJECT
ROCKS BIOLOGICAL CONSULTING
1 INCH = 210 FEET
0 105 210 FEET
N
Date: 11/22/2019
Aerial Photo: City of Rancho Cucamonga 2015