

**REVISED JURISDICTIONAL DELINEATION  
OAK VALLEY NORTH COMMERCE CENTER PROJECT  
9950 AND 10300 CALIMESA BOULEVARD  
CITY OF CALIMESA, RIVERSIDE COUNTY, CALIFORNIA**

±109.52 Acre Property, ±8.13 Acre Offsites, ±117.65+ Acres Surveyed

APNs 413-260-018, 413-280-016, 413-280-018, 413-280-021, 413-280-030, 413-280-036, 413-280-037, and 413-280-043, plus offsite areas on portions of 413-260-014, 413-260-017, 413-260-019, 413-260-020, and 413-260-052, Calimesa, Sections 24 and 25, Township 2 South, Range 2 West, USGS El Casco 7.5' Topographic Quadrangle

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**Report Summary:**

The site is largely developed or disturbed agricultural land. There are small areas of scrub oak on the eastern portion of the site. None of the oaks occur within jurisdictional drainages. Seasonal ponds occupied by the common fairy shrimp are present no listed fairy shrimp are present. Federal Waters/Wetlands are not present, based on lack of connectivity and lack of hydric indicators. CDFW habitat is present, totaling 1.26 acres of streambeds and WoS of which 1.14 acres is subject to Section 6.1.2 of the MSHCP. Planned project related impacts are 1.26 acre of CDFW streambeds, WoS and 1.14 acres of MSHCP riverine habitat.

**Delineation Conducted By:** Leslie Nay Irish & Joshua Ball

**Delineation Conducted On:** March 8, 2022, April 5, 2022, May 17 & 31, 2022

**Report Date:** June 2023 Revised December 2023 & August 2024

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## ACRYONYMS

AMSL	Above Mean Sea Level
APN	Assessor's Parcel Number
BGEPA	Bald and Golden Eagle Protection Act
CASSA	Criteria Area Species Survey Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Commission
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
DBH	Diameter Breast Height
EO	CNDDDB Element Occurrence
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
IPaC	Information for Planning and Consultation
L&L	L&L Environmental, Inc.
MBTA	Migratory Bird Treaty Act
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
NEPA	National Environmental Policy Act
OHWM	Ordinary High Water Mark
PQP	Public Quasi-Public Conserved Lands
RAWS	Remote Automatic Weather Station
RCA	Western Riverside County Regional Conservation Authority
SAA	Streambed Alteration Agreement
RWQCB	Regional Water Quality Control Board
TTM	Tentative Tract Map
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator
WEAP	Workers Environmental Awareness Program
WGS84	World Geodetic System 1984
WoUS	Waters of the U.S.

## **MANAGEMENT SUMMARY**

At the request of Birtcher Development, LLC, L&L Environmental, Inc. (L&L) conducted a preliminary jurisdictional delineation on Birtcher Development's ±109.52-acre Oak Valley North Commerce Center Project (Project) located in the City of Calimesa in western Riverside County. The Project also includes ±8.13 acres of offsite impacts associated with road improvements.

The purpose of this delineation is to quantify that portion of the property subject to jurisdiction of the California Department of Fish and Wildlife (CDFW), the Regional Water Quality Control Board (RWQCB), the United States Army Corps of Engineers (USACE), and Section 6.1.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). A jurisdictional delineation is performed to map wetland and non-wetland features on the property that may be subject to regulation by state or federal agencies and may require permits prior to disturbance/construction.

L&L's regulatory analysts and wetland delineators Leslie Irish and Joshua Ball evaluated the site during a series of actions that included pre-survey research and data review followed by a field survey and mapping effort conducted on the property March 8, 2022, April 5, 2022, May 17, 2022, and May 31, 2022. Research consisted of a review of topographic maps, soils information, aerial photography and a field examination of vegetation, soils, and hydrology using definitions contained in the MSHCP. Post processing of data included a review of files collected and synthesized with topographic maps along with Google Earth files.

The project is located on large fenced agricultural parcels, almost entirely disturbed and regularly disced for weed abatement purposes. Present on the Project Site is one (1) unoccupied residence. The project borders a trailer park, rural residential housing, and Interstate-10. It is located between Calimesa Boulevard and Beckwith Avenue, with Singleton Road approximately 450 feet north of the northwest boundary. No mapped USGS blue-lines are present on the Property, though one is present to the north of the project along Singleton Road. There are small areas of scrub oak on the eastern portion of the site. None of the oaks occur within jurisdictional drainages.

CDFW habitat is present, totaling 1.26 acres of non-wetland CDFW streambeds, of which are non-wetland State Waters (WoS) subject to RWQCB and 1.14 acres is non-riparian riverine habitat subject to Section 6.1.2 of the MSHCP. Federal waters /wetlands are not present. The project will impact all streambeds, waters and riverine resources, and all impacts will be permanent. Mitigation for these impacts will be required as a condition of the approval process and any agreement or permits.

Seasonal ponds are present within along Calimesa Blvd and Beckwith Avenue within road ruts within the Project. Wet and Dry season protocol level focused surveys were conducted in 2023-

2024 and only the common *Branchinecta lindahli* species of fairy shrimp was identified. No other species of fairy shrimp have been identified and as a result, no mitigation is required.

## **1.0) INTRODUCTION**

The following report was prepared by L&L Environmental, Inc. (L&L) for Birtcher Development, LLC. It describes the results of a jurisdictional delineation conducted on the Oak Valley North Commerce Center project (Project) located in the City of Calimesa, Riverside County, California. The report was revised in October of 2023 to incorporate City of Calimesa comments.

The study area consists of Assessor Parcel Numbers (APNs) 413-260-018, 413-280-016, 413-280-018, 413-280-021, 413-280-043, 413-280-030, 413-280-036, and 413-280-037, totaling ±109.52 acres and offsite road improvements within portions of APNs 413-260-014, 413-260-017, 413-260-019, 413-260-020, and 413-260-052, totaling ±8.13 acres.

Section 401 and 404 of the federal Clean Water Act requires permitting of activities that will result in discharge of dredge or fill material into "Waters of the U. S." or adjacent wetlands. The RWQCB also issues Wastewater Discharge Permits (WDRs) under Porter Cologne. Federal policy directs "no net loss" of wetland habitats. Section 1602 of the California Fish and Game code requires a "Streambed Alteration Agreement" for projects that will alter a stream channel.

This report documents the presence of non-wetland State Streambeds subject to Section 1602 of the California Fish and Game Code within the Project Site. It also documents the presence of non-wetland State Waters (WoS) subject to control of the RWQCB and non-riparian riverine habitat subject to the MSHCP, Section 6.1.2. A Determination of Biological Equivalence or Superior Preservation (DBESP) has been prepared (L&L, 2022/Rev. 2024).

The proponent is advised that a CDFW Streambed Alteration Agreement (SAA) (1602) and a RWQCB Waste Discharge Report (WDR) under Porter Cologne will be required prior to any impacts to these resources. We recommend consultation with the Army Corps of Engineers to determine drainage onsite are not subject to Section 404 of the Clean Water Act or apply for an Approved Jurisdictional Delineation (AJD). If the USACE were to assert jurisdiction over any portion of the drainage within the impact area, a 404 permit (or Nationwide Permit) would be required. A required 404 permit would trigger 401 instead of a WDR.

All jurisdictional delineations conducted by consultants are considered preliminary and are subject to review by the regulatory agencies.

## **2.0) LOCATION**

The Project site address is 9950 and 10300 Calimesa Boulevard. The Project site is within the City of Calimesa in western Riverside County, California. It is generally located immediately northeast of Interstate 10 (I-10 freeway) on the northeast side of Calimesa Boulevard about 500 feet southeast of Singleton Road and about 0.4-mile northwest of Cherry Valley Boulevard. Existing portions of Beckwith Avenue are adjacent to the northeastern boundary of the site (Figure 1).

The site is situated within Township 2 South, Range 2 West, Sections 24 and 25 as shown on the U.S. Geological Survey (USGS) El Casco 7.5' series topographic quadrangle map (Figure 2). Offsite impact areas are also located within these sections.

The site is generally bounded as follows: to the southwest by Calimesa Boulevard and the I-10 freeway with vacant lands, residential developments, and San Timoteo Canyon, the Norton Younglove Reserve, and the Badlands beyond; to the northwest by vacant lands and Singleton Road with scattered commercial/industrial, mobile home park, and residential development beyond; to the northeast by Beckwith Avenue, vacant lands, and residential development with MSHCP conserved lands beyond; to the southeast by a mobile home park, vacant and agricultural lands, and commercial/industrial development with Cherry Valley Boulevard beyond (Figure 3).

### **2.1) Property Site Description**

Vegetation on the site consists of non-native grasslands and wildflower fields, disturbed/developed areas and ornamental plants, and pockets of native coastal sage – chaparral scrub and scrub oaks.

The site has been historically disturbed by residential and agricultural uses. Two unpaved driveways enter the site from Calimesa Boulevard. The northernmost driveway (identified as Roberts Road) leads to a vacant residence on a small hilltop, along with remnant foundations of other structures. The southernmost driveway (unnamed) leads to an area that previously had a number of structures (visible on 2006 aerial images) that no longer exist. Piles of old pipes and other debris are present, as well as remnants of old agricultural equipment and small structures. Fencing (mainly barbed wire) is present along portions of the site boundaries. Review of historic aerial images (Google Earth 2023, NETRonline 2023) shows that the site has been disturbed since at least 1959 and is regularly disked for weed abatement. Three (3) ephemeral drainages and one manmade roadside ditch along Calimesa Boulevard is present within the Project.

### **2.2) Proposed Project Description**

The proposed Project is identified as the Oak Valley North Commerce Center and consists of a ±95.6-acre business park and light industrial area with four (4) large warehouses and parking and

a high-density residential or church land use area of ±11.2 acres (up to 223 dwelling units). The balance of the acreage (3.4 acres) would be designated as roadway. An existing vacant residence and other remnant agricultural structures and equipment present on the site will be removed. The entire site will be impacted, and all impacts will be permanent (Figure 8).

The offsite impact areas consist of road improvements along Calimesa Boulevard and Beckwith Avenue adjacent to the southwest and northeast Project site boundaries, respectively. A portion of the western corner of the site and adjacent offsite areas along Calimesa Boulevard will be impacted by city road improvements that will be implemented prior to the construction of the Project (referred to in this report at the City Road Project Overlap Area).

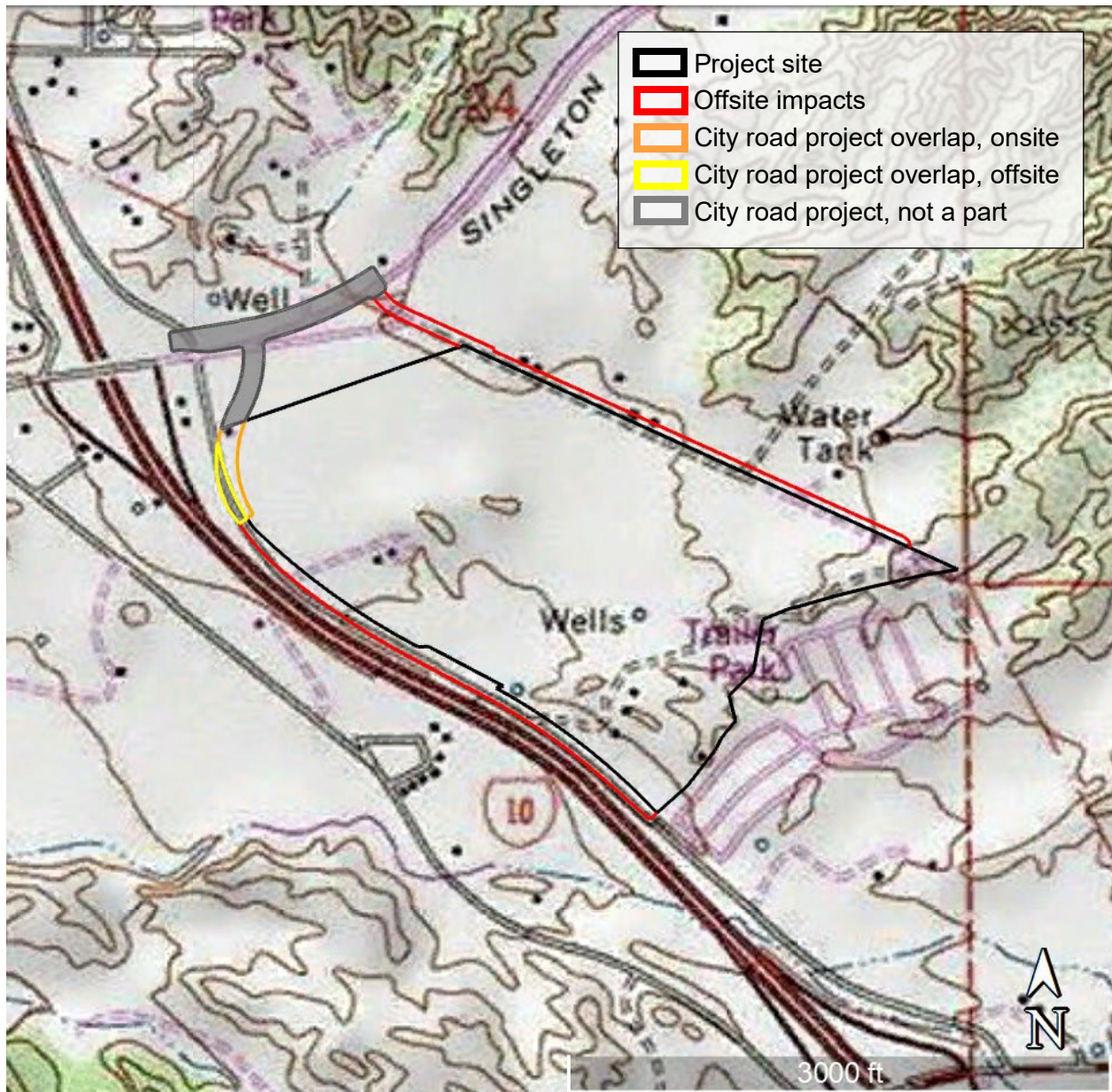


Oak Valley North Commerce Center  
City of Calimesa, Riverside County, California

## Project Vicinity

### Figure 1

(Aerial obtained from Google Earth, May 2022)

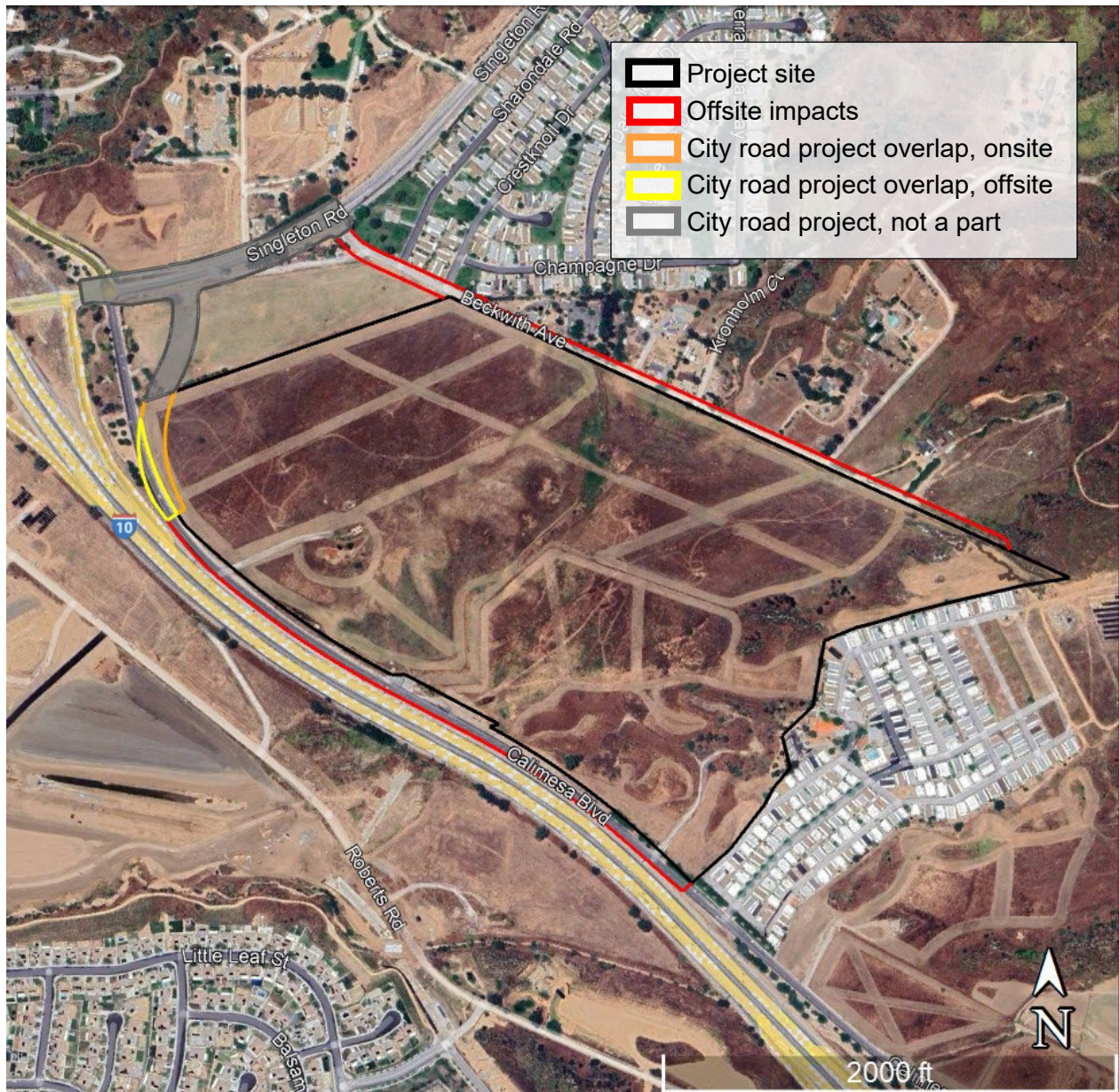


Oak Valley North Commerce Center  
City of Calimesa, Riverside County, California

## Project Location

### Figure 2

(USGS El Casco [2022] Quadrangle,  
Township 2 South, Range 2 West, Sections 24 and 25)



Oak Valley North Commerce Center  
City of Calimesa, Riverside County, California

### Aerial Image

### Figure 3

(Aerial obtained from Google Earth, May 2023)

### 3.0) METHODS

#### 3.1) Pre-Survey Research Methods and Purpose

A wealth of information is available online and is updated at regular intervals by agencies and universities. To ensure efficiency and greater accuracy in the field, areas of interest are identified during the research stage prior to conducting the field survey. Useful maps are uploaded to handheld GPS and applications are downloaded in preparation for real-time data inquiries and field data collection. The potential for jurisdictional features (riparian/riverine) to occur onsite is assessed via aerial photography, topographic mapping, soil types, trends to hydric conditions, area hydrology, and prior wetlands inventory mapping, etc. Finally, the potential condition of area drainages is forecast based on available rainfall data.

Online data sources include wildlife agencies, California Native Plant Society (CNPS), California Natural Diversity Database (CNDDB), WebSoil, GlobeXplorer, Google Earth, Arid West Regional Wetland Plant List, Natural Resources Conservation Service, University of California at Davis, Agriculture and Natural Resources, California Soil Resources Lab, U. S. Department of the Interior Geological Survey and the following web pages:

- <https://www.wunderground.com/dashboard/pws/KCAMONRO6> (Accessed March 2022)
- [http://wetland-plants.usace.army.mil/nwpl\\_static/v33/home/home.html](http://wetland-plants.usace.army.mil/nwpl_static/v33/home/home.html) (Accessed March 2022)
- <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx> (Accessed March 2022)
- <https://www.fws.gov/wetlands/Data/Mapper.html> (Accessed March 2022)
- <https://viewer.nationalmap.gov/basic/> (Accessed March 2022)
- <http://agacis.rcc-acis.org/?fips=06065> (Accessed March 2022)
- RIRMette Map (Accessed March 2022)
- <https://viewer.nationalmap.gov/basic/> (Accessed March 2022)
- [https://hdsc.nws.noaa.gov/hdsc/pfds/pfds\\_map\\_cont.html?bkmrk=ca](https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca) (Accessed March 2022)
- <https://msc.fema.gov/portal/search?AddressQuery=singleton%20road%20calimesa#searchresultsanchor>

##### 3.1.1) Standards

On December 30, 2022, the Environmental Protection Agency released its long-awaited rule to redefine the definition of “waters of the United States” (WoUS) under the CWA. Under this rule, jurisdictional waters are determined by using two main standards: Relatively Permanent is a test that provides important efficiencies and clarity for regulators and the public by readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters. To meet the relatively permanent standard, the waterbodies must be relatively permanent, standing, or

continuously flowing waters connected to paragraph (a)(1) waters or waters with a continuous surface connection to such relatively permanent waters or to paragraph (a)(1) waters. And the Significant Nexus: a test that clarifies if certain waterbodies, such as tributaries and wetlands, are subject to the Clean Water Act based on their connection to and effect on larger downstream waters that Congress fundamentally sought to protect. A significant nexus exists if the waterbody (alone or in combination) significantly affects the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters. The regulatory text defines “significantly affect” as more than speculative in nature.

### 3.1.2) SCOTUS-Alito

On May 25, 2023, SCOTUS-Alito defined USACE jurisdiction based on the assumption that exceedingly clear language is required with sufficient “definiteness” that ordinary people can understand what conduct is prohibited. Therefore, “waters the US are Navigable Waters with an Interstate Connection” and such waters encompass “only those relatively permanent, standing or continuously flowing bodies of water ‘forming geographical features that are described in ordinary parlance as ‘streams, oceans, rivers, and lakes.’” Wetlands that are separate from traditional navigable waters cannot be considered part of those waters, even if they are located nearby.” Therefore, the CWA extends to only those wetlands that are as a practical matter indistinguishable from waters of the United States. This requires the party asserting jurisdiction over adjacent wetlands must establish first, that the adjacent body of water constitutes waters of the United States (i.e., a relatively permanent body of water connected to traditional interstate navigable waters); and second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the ‘water’ ends, and the ‘wetland’ begins.

### 3.2) 2020 State Water Resources Control Board Policy

The mission of the SWRCB and the RWQCB (Water Boards) includes the preservation, enhancement, and restoration of the quality of California’s water resources for the protection of the environment and all beneficial uses for the benefit of present and future generations. In accordance with the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.), the Water Boards are authorized to regulate discharges of waste, which includes discharges of dredged or fill material, that may affect the quality of waters of the state.

#### 3.2.1) State Wetland Definition

The Water Boards define wetlands as (1) the area that has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes, or the area lacks vegetation.

The Water Code defines “waters of the state” broadly to include “any surface water or groundwater, including saline waters, within the boundaries of the state.” “Waters of the state” includes all “waters of the U.S.” The following wetlands are waters of the state:

1. Natural wetlands,
2. Wetlands created by modification of a surface water of the state, and
3. Artificial wetlands that meet any of the following criteria:
  - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
  - b. Specifically identified in a water quality control plan as a wetland or other water of the state;
  - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
  - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
    - i. Industrial or municipal wastewater treatment or disposal,
    - ii. Settling of sediment,
    - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
    - iv. Treatment of surface waters,
    - v. Agricultural crop irrigation or stock watering,
    - vi. Fire suppression,
    - vii. Industrial processing or cooling,
    - viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
    - ix. Log storage,
    - x. Treatment, storage, or distribution of recycled water, or
    - xi. Maximizing groundwater recharge (this does not include wetlands that have 69 incidental groundwater recharge benefits); or
    - xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

### 3.2.2) MSHCP Riparian Riverine Section 6.1.2

Riparian/riverine areas are defined within the MSHCP as:

“. . . lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.”

Vernal pools are defined within the MSHCP as:

“ . . . seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. . . ”

Further Section 6.1.2 defines riparian or riverine as an aquatic feature or stream with a hydrologic connection to downstream resources. Manmade features constructed in otherwise upland areas are not included in the definition, however, manmade features including ditches which replace, modify or otherwise located within a former drainage(s) is included in the definition.

### 3.3) Field Survey Methods and Purpose

Field work was conducted on March 8, 2022, April 5, 2022, May 17, 2022, and May 31, 2022 during which 16 person hours were expended. The project boundaries were investigated to identify areas where water is received onto the property or transmitted offsite to downstream resources. These areas were then walked, measured, and assessed via three (3) criteria to determine presence or absence of evidence of flow, hydrophilic vegetation, or hydric soil conditions.

Where evidence of flow is present, combined with or without hydrophytes, soils are examined for anoxic conditions. Soils identified as suitable for development of hydric conditions are given special attention. Soil color characteristics are evaluated using a “Munsell color chart” and all data are reported on appropriate Arid West Wetland Determination Data Forms (WD). The hydrology criterion is satisfied by the observation of standing or flowing water or two (2) or more secondary indicators. The soil condition is satisfied by the development of saturated soils with anoxic conditions. The vegetation criterion is satisfied if half or more of the dominant plant species within a feature are ranked as "obligate wetland," "facultative wetland," or "facultative" species (OBL, FACW, or FAC, respectively, see Table 1) for federal jurisdiction, presence of any of these species for state/local jurisdiction, or the presence of woody facultative species for MSHCP jurisdiction. A Wetland Data Point (WDP) is collected for each test pit location and a WD Form is completed.

Table 1. Summary of wetlands vegetation indicator categories.

Indicator Status	Symbol	Definitions
Obligate	OBL	Almost always occur in wetlands. With few exceptions, these plants (herbaceous or woody) are found in standing water or seasonally saturated soils (14 or more consecutive days) near the surface.
Facultative Wetland	FACW	Usually occur in wetlands but may occur in non-wetlands. These plants predominantly occur with hydric soils, often in geomorphic settings where water saturates the soils or floods the soil surface at least seasonally.
Facultative	FAC	Occur in wetlands and non-wetlands. These plants can grow in hydric, mesic, or xeric habitats. The occurrence of these plants in different habitats represents responses to a variety of environmental variables other than just hydrology, such as shade tolerance, soil pH, and elevation, and they have a wide tolerance of soil moisture conditions.
Facultative Upland	FACU	Usually occur in non-wetlands but may occur in wetlands. These plants predominantly occur on drier or more mesic sites in geomorphic settings where water rarely saturates the soils or floods the soil surface seasonally.
Upland	UPL	Almost never occur in wetlands. These plants occupy mesic to xeric non-wetland habitats. They almost never occur in standing water or saturated soils. Typical growth forms include herbaceous, shrubs, woody vines, and trees.

### Vernal Pools

During our investigation, the property was searched for vernal pools. To meet the definition of a vernal pool three (3) factors must be addressed: (1) suitable soil and soil conditions, (2) proper hydrology, and (3) one or more indicator species.

### Nomenclature Used

Terminology has changed over the years. Toward greater clarity and understanding, L&L uses terms in this report that follow USACE 1987 and Arid West manuals, CDFW 1602 Code, RWQCB State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, and MSHCP Section 6.1.2 guidelines both published and expressed. We also describe linear features or channels as Streambeds (CDFW) and State Waters (RWQCB) and Wetlands as habitat areas meeting any one (1) of the three (3) criteria of appropriate hydrology, hydric soils, or hydric vegetation. Within the MSHCP (Plan) area all naturally occurring state drainages are also considered riverine habitat and woody wetland vegetation is considered riparian, while manmade features in otherwise upland areas are not.

### Definition of "Waters of the U. S."

For the purposes of this report, we define WoUS as (1) all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; (2) all interstate waters including interstate

wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce (4) all impoundments of waters; (5) tributaries of waters (6) territorial seas; (7) wetlands adjacent to waters. Waters do not include prior converted cropland or waste treatment systems, ponds, or lagoons (other than cooling ponds).

The term **wetlands** mean those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, i.e. swamps, marshes, bogs, and similar areas.

The term **adjacent** means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by manmade dikes or barriers, natural river berms, beach dunes, and the like are “adjacent wetlands.”

The term **ordinary high-water mark** means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

The **limits of jurisdiction in non-tidal waters**: (1) in the absence of adjacent wetlands, jurisdiction extends to the ordinary high-water mark, or (2) when adjacent wetlands are present, jurisdiction extends beyond the ordinary high-water mark to the limit of the adjacent wetlands, or (3) when the water of the United States consists only of wetlands, jurisdiction extends to the limit of the wetland.

#### Definition of State Wetland and Waters

In 2019 the State Water Resources Control Board (State Water Board) adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures). The Procedures consist of four (4) major elements: 1) a wetland definition; 2) a framework for determining if a wetland feature is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

An area is a wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes, or the area lacks vegetation.

The Water Code defines “waters of the state” broadly to include “any surface water or groundwater, including saline waters, within the boundaries of the state.” “Waters of the state” includes all “waters of the U. S.”

All artificial wetlands that are less than one (1) acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

### Wetland Delineation Guidance

The permitting authority shall rely on any wetland area delineation from a final aquatic resource report verified by the U. S. Army Corps of Engineers (Corps) for the purposes of determining the extent of wetland waters of the U. S. A delineation of any wetland areas potentially impacted by the project that are not delineated in a final aquatic resource report verified by the Corps shall be performed using the methods described in the three (3) federal documents collectively referred to as “1987 Manual and Supplements” to determine whether the area meets the state definition of a wetland as defined above. As described in the 1987 Manual and Supplements, an area “lacks vegetation” if it has less than five (5) percent areal coverage of plants at the peak of the growing season. The methods shall be modified only to allow for the fact that the lack of vegetation does not preclude the determination of such an area that meets the definition of wetland. The Terms as defined in these Procedures shall be used if there is conflict with terms in the 1987 Manual and Supplements.

### Relevant Manual and Supplements

- Environmental Laboratory. 1987. U. S. Army Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U. S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- U. S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Ed. J. S. Wakeley, R. W. 91 Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U. S. Army Engineer Research and Development Center.
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## 4.0) RESULTS

### 4.1) Soils and Topography

Topographically, the site is a mixture of relatively flat areas and low-relief rolling hills, with elevations ranging from approximately 2,278 feet (694 meters) above mean sea level (amsl) to approximately 2,413 feet (735 meters) amsl.

Soils on the majority of the site are mapped as Hanford coarse sandy loam (2 to 8 percent slopes) and (8 to 15 percent slopes, eroded). Other soils present are Ramona sandy loam (8 to 15 percent slopes, severely eroded), Gorgonio gravelly loamy fine sand (2 to 15 percent slopes), Terrace escarpments, and Tujunga loamy sand (channeled, 0 to 8 percent slopes) (Figure 4).

The Hanford series consists of very deep, well drained soils that formed in moderately coarse textured alluvium dominantly from granite. Hanford soils are on stream bottoms, floodplains and alluvial fans at elevations of 150 to 3,500 feet and have slopes of 0 to 15 percent. Vegetation in uncultivated areas is mainly annual grasses and associated herbaceous plants (NRCS 2023).

Ramona soil is well drained and found on terraces and fans at elevations of 250 to 3,500 feet. They formed in alluvium derived mostly from granitic and related rock sources. Uncultivated areas have a cover of annual grasses, forbs, chamise, or chaparral (NRCS 2023).

Gorgonio soil is somewhat excessively drained and found on alluvial fans at elevations of 20 to 3,000 feet. They formed in coarse textured alluvium derived from granite, granodiorite, schist, and related rocks. Principal native plants are annual grasses and forbs with a few scattered oak trees (NRCS 2023).

The Tujunga soil is very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas. Uncultivated areas have a cover of shrubs, annual grasses, and forbs (NRCS 2023).

Terrace escarpments are stratified sand and gravel in narrow steeply sloping areas between one terrace and another or between a terrace and the bottom lands.

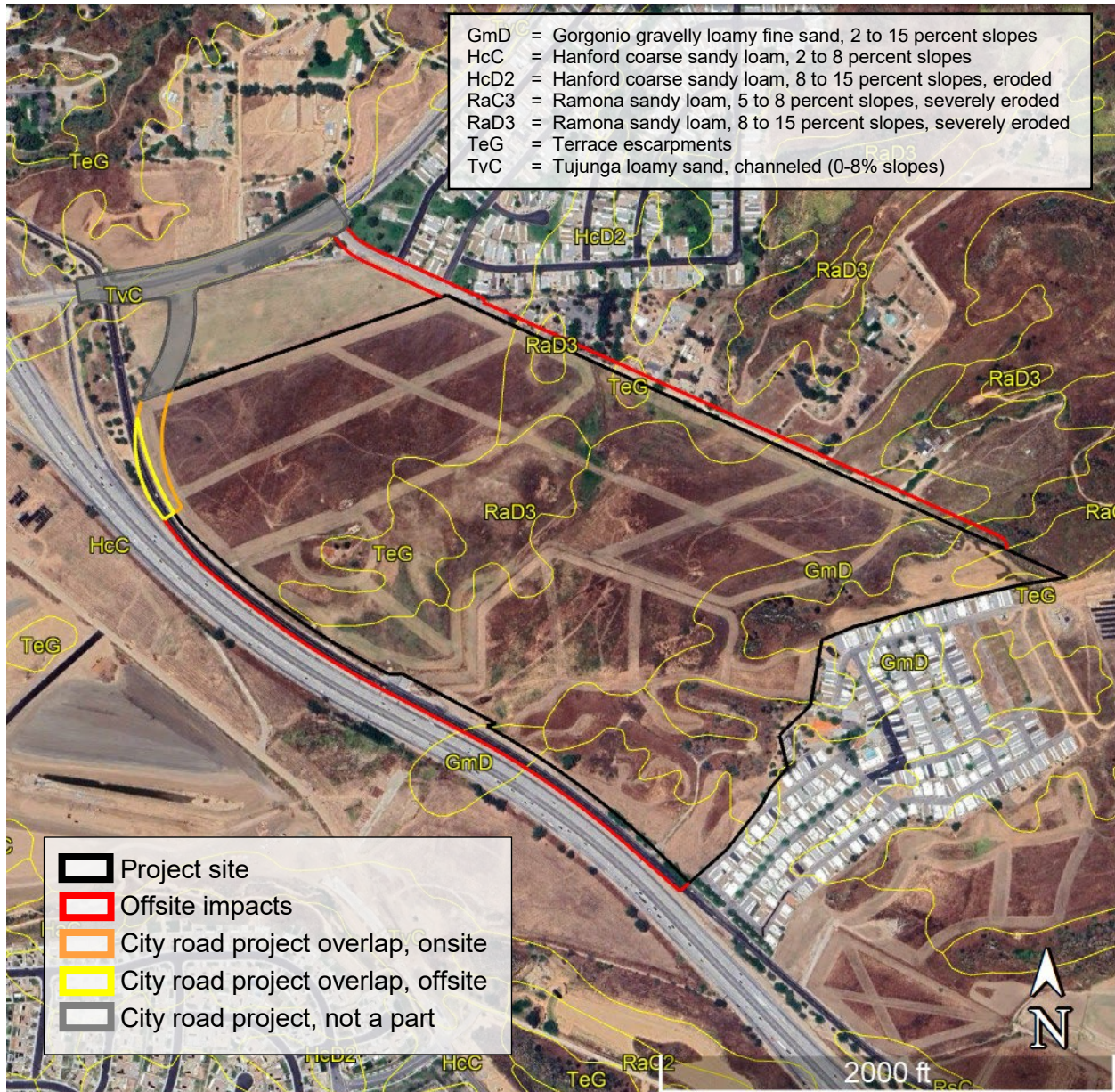
Topographically, the site is a mixture of flatlands and low relief rolling hills, with elevation onsite ranging between 2,305 to 2,403 feet above mean sea level. Elevation onsite varies, but generally slopes downward from east to west. Soil Survey Geographic (SSURGO) Database shapefiles and Web-Soils identify soils onsite as sandy loams, with a few small areas of terrace escarpments (Figure 4). All soils mapped on the property have a hydric rating of zero, with the exception of Tujunga loamy sand (TvC) that has a rating of 10 (Table 2).

Table 2. Mapped soils.

Map unit symbol	Map unit name	Hydric Rating
GmD	Gorgonio gravelly loamy fine sand, 2 to 15 percent slopes	0
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	0
HcD2	Hanford coarse sandy loam, 8 to 15 percent slopes	0
RaD3	Ramona sandy loam, 8 to 15 percent slopes, severely eroded	0
RaC3	Ramona sandy loam, 5 to 8 percent slopes, severely eroded	0
TeG	Terrace escarpments	0
TvC	Tujunga loamy sand, channeled (0-8% slopes)	10

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support growth and reproduction of hydrophytic vegetation. (<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>)

The NTCHS definition identifies general soil properties that are associated with wetness. To determine whether a specific soil is a hydric soil or nonhydric soil more specific information, such as the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff 1999), "Keys to Soil Taxonomy" (Soil Survey Staff 2014), and the



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## Soils Map

### Figure 4

(Aerial obtained from Google Earth, May 2023; data from NRCS [2023])

"Soil Survey Manual" (Soil Survey Division Staff 2017).

If soils are wet for long enough to be considered hydric, they should exhibit certain properties easily observed in the field. These visible properties are indicators of hydric soils and are specified in "Field Indicators of Hydric Soils in the United States" (Vasilas, Hurt, and Noble 2010). Where appropriate, soils are examined in the field via test pit. Test pits were excavated by Joshua Ball under the direction of Leslie Irish on July 22, 2022. The Project Site had 0.45 inch of rain in April and 0.03 inch of rain in May. Cumulative rainfall from September 2021 through May 2022 totaled 9.82 inches.

Soils on the surface of the ground were drained and no water was observed in the test pits on the days of field work. Test pits were located at the lowest point of the drainage or depression near to an inlet structure if present or where other surface indicators are present. No hydric soils or undisturbed vegetation was present in any of the streambeds. All of the test pits excavated in the streambeds/waters stopped at a depth of 10-12 inches where an impervious layer was encountered.

#### 4.2) Vegetation

The site has been recently and historically (+45 years) utilized for residential, and agricultural purposes. Disturbed open fields are present throughout the majority of the site. Much of the site is developed or previously disturbed (roads, residences, foundations, disking/tilling, grazing, etc.). Vegetation on the site and offsite areas consists of non-native grasslands and wildflower fields, disturbed/developed areas with ornamental plants, and pockets of native coastal sage – chaparral scrub. There are no riparian or other sensitive vegetation communities present.

During the field survey period for the delineation the annual growing season had passed and most plants were desiccated, with the exception of mature landscape plantings along fence lines and surrounding residential buildings. Away from the disturbed agricultural fields (along slopes) patchy native upland vegetation (*Artemisia californica* and *Eriogonum fasciculatum*) is present interspaced with individual scrub oak (*Quercus berberidifolia*). Due to mostly non-native weedy annual plant species inhabiting the site and native plant diversity onsite is considered to be low.

Vegetation in the drainages is consistent with the disturbed areas of the site or in some places contains ornamental vegetation.

Non-native trees and other ornamental landscape shrubs are present in association with the residential structure and along margins, fence lines, driveways, streets, or boundaries of the former agriculture fields. Non-native trees observed on or nearby the property site include ornamental pine (*Pinus* species), Peruvian pepper tree (*Schinus molle*), almond tree (*Prunus dulcis*), common privet (*Ligustrum vulgare*), deodar cedar (*Cedrus deodara*), Russian olive (*Olea*

*europaea*), Brazilian pepper (*Schinus terebinthifolia*), Aleppo pine (*Pinus halepensis*), and juniper (*Juniperus* sp.)

#### 4.2.1) Vernal Pools

Soil types are not consistent with an alkali playa nor a vernal pool complex. However, late season heavy rains resulted in pooling within road ruts and potholes along Calimesa Road and Beckwith Avenue.

Vernal pools are defined as:

“ . . . seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season.

Pools or depressions characteristic of vernal habitat were not observed on the site and no wetland or vernal pool plant species were present. Pooled water was observed in offsite areas along Calimesa Boulevard and Beckwith Avenue during 2023 surveys.

No MSHCP species listed for protection associated with riparian/riverine areas and vernal pools were observed. No listed fairy shrimp were present during a 2023-24 wet and dry focused protocol survey.

#### 4.3) Site Specific Hydrology

The U. S. Geological Survey (USGS) the U. S. Fish and Wildlife Service (USFWS) Wetland Mapper shows one (1) Riverine feature running some distance away and parallel to the northwestern boundary of the Project Site, adjacent to Singleton Road. A second unnamed blue-line and Riverine feature is located to the east and flows southwest adjacent to Cherry Valley Boulevard. Flows from within and surrounding the parcel are tributary to San Timoteo Canyon, near Cienega Canyon Preserve.

Geologically, the Project falls within old and young alluvial valley deposits between the San Bernardino Mountains and the San Timoteo Badlands (above Redlands and below Banning Pass). The project contains low profile disturbed and rerouted erosional feature channels within (Qa) Alluvial sand, gravel, and clay of level areas, covered by residual soil (Holocene), (Qoa) Alluvial gravel and sand, light reddish brown and of granitic and gneissic detritus of San Bernardino Mountains in north areas, brownish gray in south area; top surface slopes slightly from source terrains (Pleistocene/Holocene) (QTsg); Conglomerate/fanglomerate, brownish gray, crudely bedded, of poorly sorted subrounded clasts of granitic and gneissic detritus in sandy

matrix, base unexposed, overlain by older alluvium; probably proximal facies of upper part (QTst); exposed adjacent to Banning fault (Pliocene/Pleistocene) (QTst) Upper part, sandstone, light gray to tan, fine to coarse grained arkosic and minor conglomerate of mostly granitic detritus, some gneissic and quartzitic detritus; includes thin layers of soft greenish to light reddish silty claystone, overlain by older alluvium (Pliocene/Pleistocene). The geology of the area is a result of conditions caused by faulting that reversed and filled former streambeds.

### Received Flows

Currently flow is received onto the property at four (4) locations. Two (2) from culverts under the road from the north, one (1) manmade roadside ditch from the southeast corner, and one (1) sheet flow condition from the northeast corner of the project.

Water is transported off the Project in three (3) locations, all via storm drain inlets along Calimesa Road.

### Source of Received Flows

Flows received onto the Project are generated in the foothills of the San Bernardino Mountains located to the north. These flows originate within tributaries below the ridgeline just south of and parallel to Kehl Canyon. This topography is oriented in a southwestern direction which directs and controls the flows as well. The area tributary to the Project includes lands south of the ridgeline ( $\pm 3,000$  ft. amsl), west of Roberts Street and north of Calimesa/Cherry Valley Boulevard ( $\pm 2,500$  ft. amsl). Flows from Kehl Canyon skirt the Project further east along what is now Singleton Road which at the point closest to the Project is located at an elevation of  $\pm 2,800$  ft. amsl.

Locally, surface hydrology and tributary features have been truncated and rerouted by development upstream. Where once eroded features of the alluvial fan would have funneled water through the Project it is now routed through a development to the northeast and confined into side yard ditches to be picked up in storm water systems connected subsurface beneath Singleton Road.

## 4.4) Precipitation Data and Analysis

### 4.4.1) Climate and Growing Season

The City of Calimesa and surrounding areas experience seasonal variation in monthly rainfall. The rainy season lasts for five (5) months on average, between November 7 to April 7. Recordings indicate that the most rainfall (1.9 in.) occurs during the 31 days centered around February. The typical growing season in Calimesa lasts from March 19 to November 29, totaling 255 days. Average rainfall for the City of Calimesa is 21.8 inches per year.

(<https://weatherspark.com/y/1929/Average-Weather-in-Calimesa-California-United-States-Year-Round>).

#### 4.4.2) Precipitation

Information is available from Natural Resources Conservation Service Wetlands Climate Tables (NRCS WETS) for Riverside County, from neighboring City of Beaumont 2.1 ESE, CA (CoCoRaHS). During the study period of March, April, and May the project experience 1.93 inches of rain. The Project had an additional 1.01 inches of rain in the 28 days before the study period. Total rainfall in 2022 leading up to the study period was 3.1 inches. The preceding year (in 2021) total rainfall in the project area was 13.38 inches. L&L delineators concluded from this information that if hydric conditions were to exist onsite some form of evidence would be present during the field surveys (<http://agacis.rcc-acis.org/?fips=06065>, (accessed 5/10/22)).

Table 3a. Precipitation and NRCS WETS. Climatological Data for BEAUMONT 2.1 ESE, CA (CoCoRaHS) – 2022.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2018	M	M	M	M	0.55	0.00	0.68	0.11	0.00	1.06	2.31	2.21	M
2019	3.92	9.80	2.34	0.79	2.89	0.00	0.00	0.00	0.19	0.00	3.46	3.55	26.94
2020	0.42	0.99	5.50	4.37	0.03	0.17	0.00	0.08	0.00	0.00	0.58	1.47	13.61
2021	2.52	0.33	2.45	0.67	0.05	0.05	0.59	T	0.08	1.02	0.00	5.62	13.38
2022	0.16	1.01	1.45	0.45	0.03	M	0.00	M	M	M	M	M	M
Mean	1.76	3.03	2.93	1.57	0.71	0.06	0.25	0.05	0.07	0.52	1.59	3.21	17.98

#### 4.5) Description of Streambeds and Wetlands

##### 4.5.1) Drainage 1/Riverine 1

Drainage 1 (D1)(R1) is a (0.59 acre) non-wetland, non-riparian drainage that enters the Project at Beckwith Avenue via an excavated ditch and extends southward. (D1)(R1) is primarily unvegetated or contains isolated upland vegetation and is regularly disturbed. It is poorly defined away from its northern origins. Portions are compacted or recently tilled. Dominant vegetation is non-native grasses, mustard, and *Amsinckia*. Water was not present on the days of surveys. (D1)(R1) qualifies as state streambed, WoS and MSHCP riverine habitat (Tables 4a and 4b).

#### 4.5.2) Drainage 2/Riverine 2

Drainage 2 (D2)(R2) is 0.14 acre non-wetland, non-riparian drainage that enters the Project at Beckwith Avenue via a swale and extends southward for a short distance, where it joins with (D1)(R1). (D2)(R2) is unvegetated or contains upland vegetation. It is poorly defined away from the northern origins. (D2)(R2) is regularly disturbed by discing or tilling of the soils. Dominant vegetation includes mustard, *Amsinckia*, ornamental and non-native trees (almond and tree of heaven). Water was not present on the day of the surveys. (D2)(R2) is a state streambed, WoS and MSHCP riverine habitat (Tables 4a and 4b).

#### 4.5.3) Drainage 3

Drainage 3 (D3) is a roadside ditch parallel to Calimesa Boulevard near the southwestern corner of the project and adjacent to a row of ornamental trees. D3 is a manmade excavated soft bottom feature measuring 0.12 acre. D3 is unvegetated or contains non-native ornamental/non-native trees (Figure 9). No water was present on the days of the surveys. D3 qualifies as a state Streambed and WoS but is not considered MSHCP riparian/riverine, as it is manmade in an otherwise upland area (Tables 4a and 4b).

#### 4.5.4) Drainage 4/Riverine 4

Drainage 4 (D4)(R4) is 0.41 acre non-wetland, non-riparian drainage originating at the northeast corner of the property, running in a westward direction parallel to Beckwith Avenue then curving and flowing southward towards Calimesa Blvd. (D4)(R4) is unvegetated or contains upland species with compacted soils and poorly defined beds and banks the entire length. Dominant vegetation is non-native grasses, *Amsinckia* and *Artemisia californica-Erigonum fasciculatum* (Figure 10). Water was not present on the days of the surveys. (D4)(R4) qualifies as state streambed, WoS and MSHCP riverine habitat (Tables 4a and 4b).

#### 4.5.5) Watershed

An analysis of the received watershed informs the discussion of Drainage 3 (Figure 6), combined with topographical information (Figure 2) and historic areal analysis, it appears that Drainage 3 is not present until 2006, when the excavation is visible on Google Earth imagery. As a manmade feature perpendicular to the natural flow, D3 is not considered a naturally occurring streambed and has not been included as MSHCP Section 6.1.2 riverine calculations.

Table 4a. Streambeds/State Waters.

Name	Square Feet (acres)	Type of Waters	Lat/Long	HGM Code	Comment
D 1	0.59	Riverine Streambed	33°58'41.96"N 117° 2'28.59"W	Riverine	
D 2	0.14	Riverine Streambed	33°58'41.02"N 117° 2'25.47"W	Riverine	
D 3	0.12	Roadside Ditch	33°58'22.18"N 117° 2'27.19"W		Excavated Roadside Ditch
D 4	0.41	Riverine Streambed	33°58'32.81"N 117° 2'5.52"W	Riverine	
<b>Total</b>	<b>1.26</b>				
Impacted	1.26				

All streambeds and WoS will be impacted, and all impacts will be permanent.

Table 4b. Riparian/Riverine.

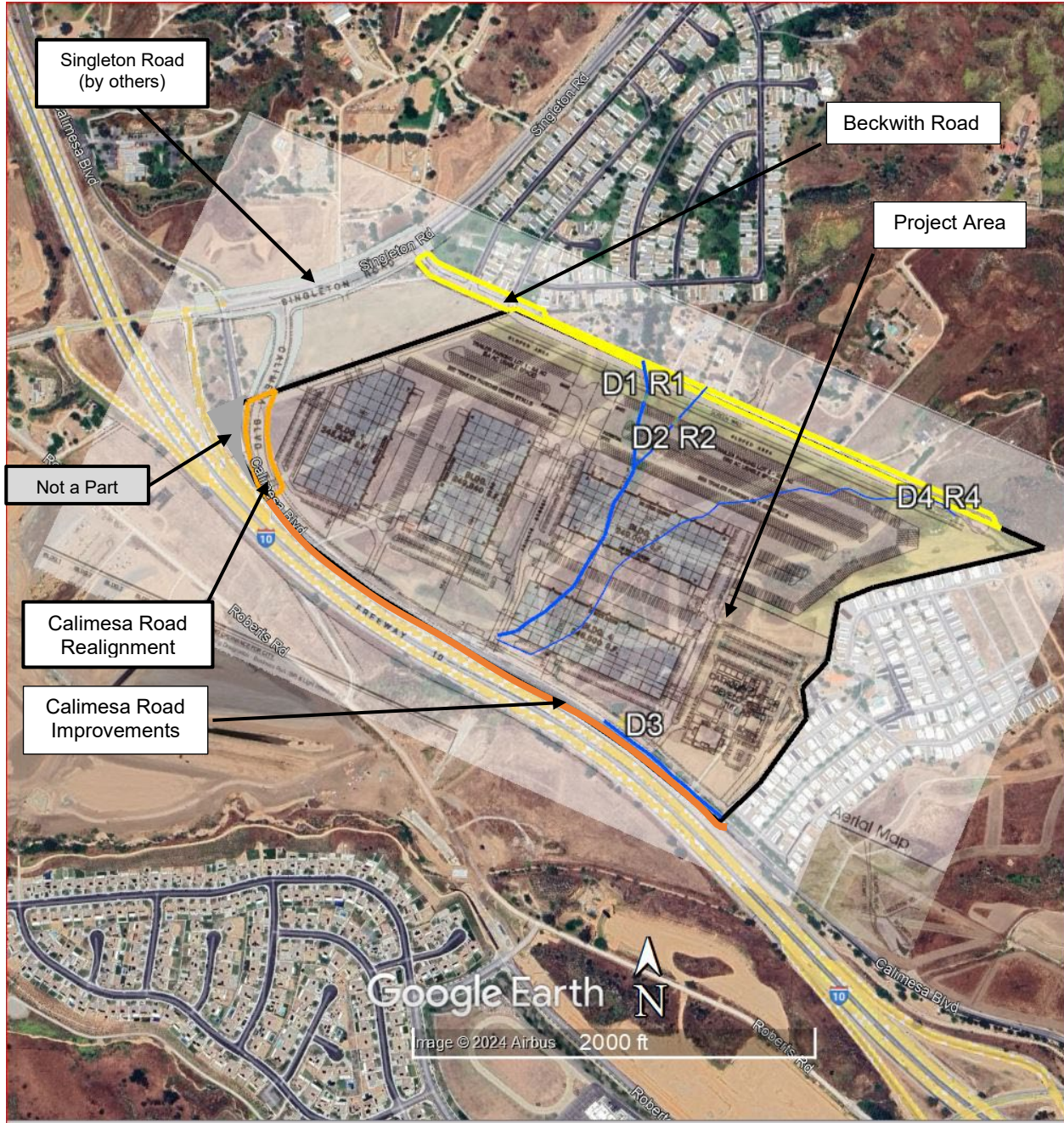
Name	Present Square Feet (acres)	Type of Waters	Lat/Long	HGM Code	Comment
R1	0.59	Riverine	33°58'41.96"N 117° 2'28.59"W	Riverine	
R2	0.14	Riverine	33°58'41.02"N 117° 2'25.47"W	Riverine	
R4	0.41	Riverine	33°58'32.81"N 117° 2'5.52"W	Riverine	
<b>Total</b>	<b>1.14</b>				
Impacted	1.14				

All MSHCP Section 6.1.2 riparian/riverine resources will be impacted and all impacts will be permanent.



Oak Valley North Commerce Center  
City of Calimesa, Riverside County, California  
**CDFW / State Waters Delineation**  
**Figure 7**

(Aerial obtained from Google Earth, June 2023)



Oak Valley North Commerce Center  
City of Calimesa, Riverside County, California  
**CDFW / State Water Impacts**  
**Figure 8**  
(Aerial obtained from Google Earth, June 2023)

## 5.0) CONCLUSIONS

L&L found jurisdictional non-wetland non-riparian “waters of the state” present within the Project Site. “Waters of the state” means any surface water or groundwater, including saline waters, within the boundaries of the state (Water Code Section 13050[e]). These features are also streambeds which fall under CDFW jurisdiction under 1602 of the Fish and Game Code. Of the four (4) drainages, three (3) qualify as MSHCP Riverine habitat subject to Section 6.1.2. The remaining drainage is a roadside ditch constructed in an otherwise upland area and is not subject to the MSHCP. Due to a lack of connectivity, L&L did not find federal waters present on the property. However, due to the level of change in the regulatory environment, we recommend consultation with the USACE to determine current jurisdiction.

Wetland areas within or adjacent to drainages are regulated by the State of California where they exhibit any one (1) of the three (3) parameters (water modified soils, facultative vegetation, or surface or subsurface water). The USACE requires the presence of all three (3) parameters to qualify as federal wetlands. Neither state nor federal wetlands are present on the Project.

### Fairy Shrimp

Soil types mapped on the site are not consistent with an alkali playa or naturally occurring vernal pool complex (Bauder et al 2011). Pools or depressions characteristic of natural vernal habitat were not observed on the site and no wetland or vernal pool plant species were present. Seasonal ponding is present in the form of cracked soils, tire ruts, etc. and a focused protocol level wet and dry season survey was performed in 2023-24 which found the common or versatile Lindahl fairy shrimp present along Calimesa Boulevard and Beckwith Avenue. No listed species of fairy shrimp was found to be present.

### Riparian Birds

No riparian habitat is present within the Project.

### Total Resources

L&L found 1.26 acres of non-wetland CDFW streambeds and Wos of which 1.14 acre is subject to Section 6.1.2 of the MSHCP. No federal waters or wetlands are present. No vernal pools or vernal pool species are present.

### Project Impacts

All streambeds and riverine areas within the Project will be impacted and all impacts will be permanent.

## Recommendations

Recent guidance from the RWQCB indicates that the RWQCB will take control over any federal waters and define that as the ordinary high-water mark (OHWM) plus any wetlands. Where absent, RWQCB will take control over state waters under Porter Cologne.

The proponent is advised that:

- a 1602 Streambed Alteration Agreement (SAA) from the California Department of Fish and Wildlife will be required prior to any project related disturbances onsite.
- a Waste Discharge Report (WDR) from the Santa Ana Region of Water Quality Control Board / State Water Quality Control Board.
- compliance with the Determination of Biological Equivalent or Superior Preservation (DBESP) process will be required by the city of Calimesa as a signature to the Western Riverside Multiple Species Conservation Plan (MSHCP) and the joint Wildlife Agencies.
- consultation with the Army Corps of Engineers to confirm absence of WoUS, is recommended.

All jurisdictional delineations are considered preliminary until verified by the agencies.

Table 5. Locations and Characteristics of Jurisdictional Drainages.

Drainage	Lat. / Long.	Cowardin Code	HGM Code	Dominant Vegetation
1	33°58'41.96"N 117° 2'28.59"W	RIVERINE	R6	Non-native grass and mustard; Disturbed
2	33°58'41.02"N 117° 2'25.47"W	RIVERINE	R6	Non-native grasses, Ornamental/non-native trees
3	33°58'22.18"N 117° 2'27.19"W			Ornamental, non-native grass/trees
4	33°58'32.81"N 117° 2'5.52"W	RIVERINE	R6	California sagebrush-California buckwheat scrub; Disturbed

### APPENDIX A – Site Photos



Southern Property Site boundary photo taken facing southeast.



Central area of the Project Site taken facing northeast near the southern boundary.



Central area of the Project Site facing southeast, viewed is the disturbed agricultural field.



Northeastern portion of D1 at the point of entry to the Project Site.



Upstream (offsite) view of D1 entrance to under road crossing and adjacent residential property.



Northern portion of D1 looking south towards the central area of the Project Site.



D1 facing southwest near the terminus.



D1 facing southwest at the terminus.



Northern portion of D2 facing south at Beckwith Avenue as it enters the Project Site.



Portion of underground pipe, D4 facing southwest.

Date & Time: Tue, Apr 05, 2022, 10:17:23 PDT  
Position: +033.976345° / -117.035883° (±15.7ft)  
Altitude: 2386ft (±10.9ft)  
Datum: WGS-84  
Azimuth/Bearing: 123° S57E 2187mils True (±12°)  
Elevation Angle: -04.5°  
Horizon Angle: -00.8°  
Zoom: 0.5X



D4 facing east and upstream.

Date & Time: Tue, Apr 05, 2022, 10:18:23 PDT  
Position: +033.976329° / -117.035982° (±15.6ft)  
Altitude: 2380ft (±10.9ft)  
Datum: WGS-84  
Azimuth/Bearing: 217° S37W 3858mils True (±12°)  
Elevation Angle: -24.1°  
Horizon Angle: +01.5°  
Zoom: 0.5X



D4 facing southwest and downstream.

Date & Time: Tue, May 17, 2022, 13:45:06 PDT  
Position: +033.976540° / -117.039118° (±15.5ft)  
Altitude: 2332ft (±11.1ft)  
Datum: WGS-84  
Azimuth/Bearing: 266° S86W 4729mils True (±12°)  
Elevation Angle: -08.8°  
Horizon Angle: +01.9°  
Zoom: 0.5X



Project Site facing southwest.

Date & Time: Tue, May 31, 2022, 08:28:39 PDT  
Position: +033.975987° / -117.042791° (±11.6ft)  
Altitude: 2304ft (±9.8ft)  
Datum: WGS-84  
Azimuth/Bearing: 311° N49W 5529mils True (±12°)  
Elevation Angle: +01.5°  
Horizon Angle: +01.1°  
Zoom: 0.5X



Project Site facing northwest.



Manmade ditch (D3) facing southeast leading to under road crossing.



Inlet Structure (D3) facing southeast leading to under road crossing.



Upstream offsite excavated channel on residential property leading to D2 above the northern site boundary.

**APPENDIX B – Certification**

Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: August 25, 2024 SIGNED:   
Leslie Irish, Principal, L&L Environmental, Inc.  
909-335-9897

1) Fieldwork Performed By:

Leslie Irish  
Name

2) Fieldwork Performed By:

Joshua Ball  
Name

**APPENDIX C – Literature Citations and References**

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