L&L ENVIRONMENTAL, INC.
REGULATORY SERVICES
BIOLOGICAL & CULTURAL INVESTIGATIONS & MONITORING

JURISDICTIONAL DELINEATION
841 ALPINE MEADOWS LANE, TPM 38174,
CITY OF RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA

±5.74 Acre Property, ±5.74 Acres Surveyed

APN 243-230-027, TPM 38174, City of Riverside, Section 13, Township 3 South, Range 5 West, USGS *Riverside East, CA* 7.5' Topographic Quadrangle Map

Prepared For:

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Report Summary:

Within the project footprint one (1) jurisdictional drainage was identified. The drainage does not include any USGS mapped blue-line streambed. The nearest mapped ephemeral blue-line stream is approximately 450 feet south of the site. Jurisdictional areas on the project site include 20,222 sq. ft. (0.46 acre) of state streambed and 20,222 sq. ft. (0.46 acre) of MSHCP riverine habitat. Of this, 3,834 sq. ft. (0.088 acre) comprise federal jurisdictional drainages or "waters of the U. S." No state or federal wetlands or MSHCP riparian habitat were identified onsite. One willow is located upstream, offsite. No vernal pool, fairy shrimp, or potential fairy shrimp habitat was found. Development plans submitted to L&L indicate no direct impacts to state streambed, federal "waters of the U. S.," or MSHCP vegetation. L&L recommends appropriate BMPs to ensure grading on slopes above drainage areas does not result in debris entering the drainage.

Delineation Conducted By: Leslie Nay Irish, Joshua Ball
Delineation Conducted On: September 07, 2021
Report Date: July 28, 2022

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MANAGEMENT SUMMARY

At the request of Robert Quintero of Landbuild, L&L Environmental, Inc. (L&L) conducted a preliminary jurisdictional delineation on ±5.74 acres identified as APN 243-230-027 (TPM 38174) in the City of Riverside, Riverside County, California. The purpose of this delineation is to quantify that portion of the property subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB) and subject to Section 6.1.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). A jurisdictional determination 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. All jurisdictional delineations are considered preliminary until verified and accepted by the agencies.

Due to changes in regulatory guidelines, multiple reports are now required for permit application submittal packages. This report has been written for the lead agency to support the CEQA process and includes combined agency information. At the regulatory permit submittal stage, this report will be reformatted into the following: 1) a federal level document intended for use with the U. S. Army Corps of Engineers (USACE); 2) a Regional Water Quality Control Board (RWQCB) appropriate document suitable under Section 401 of the Clean Water Act, including a Least Environmentally Damaging Practicable Alternative (LEDPA) Analysis or Porter Cologne Analysis to support a Waste Discharge Permit; 3) a State of California level document intended for use with the CDFW under the 1600 Code; and 4) a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Section 6.1.2 document, that defines riparian/riverine and vernal pool resources. This report is not intended to be appropriate for submittal to the regulatory agencies for state or federal level jurisdictional permits.

L&L's regulatory analysts and wetland delineator 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 September 7th 2021. The research consisted of a review of topographic maps, soils information, and aerial photography and a field examination of vegetation, soils, and hydrology using definitions contained in the Arid West Guidelines. Post processing of data included a review of files collected with along with topographic maps and Google Earth.

The project is located on a 5.74-acre fenced parcel at 841 Alpine Meadows Lane. The majority of the property is disturbed by regular tilling for weed abatement purposes. A single residence is

present within the westernmost portion of the parcel and ornamental trees are located along Alpine Meadows Lane. Riversidean Sage Scrub is located on steeper slopes not included in regular weed abatement tilling.

L&L identified 20,222 sf (0.46 acre) of CDFW combined streambeds and MSHCP riparian habitat present on the Project Site. Of this, 3,834 sq. ft. (0.088 acre) may comprise federal jurisdictional drainages or "waters of the U. S." No state or federal wetlands or MSHCP riparian habitat were identified onsite. No vernal pool, fairy shrimp, or potential fairy shrimp habitat was found. Development plans submitted to L&L indicate no direct impacts to state streambed, federal "waters of the U. S.," or MSHCP habitat. L&L recommends appropriate BMPs to ensure grading on slopes above drainage areas does not result in debris entering the drainage.

1.0) INTRODUCTION

The following report was prepared by L&L Environmental, Inc. (L&L) for Landbuild. It describes the results of a jurisdictional delineation conducted on a proposed development site in the City of Riverside in Riverside County, California. The study area consists of Assessor Parcel Number (APN) 243-230-027 (TPM 38174), totaling ±5.74 acres.

Section 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 Regional Board is in the process of expanding state laws beyond federal levels. 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 state streambeds subject to Section 1600 of the California Fish and Game Code present on the Project Site. It also documents presence of drainages subject to control of the Regional Water Quality Control Board and riverine habitat subject to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), Section 6.1.2. The proponent is advised the drainage may be subject to Section 404 of the Clean Water Act and the Army Corps of Engineers. Consultation with the USACE would determine which of the various jurisdictional rules will be implemented during the life of the project, however because no impact to the drainage is planned this will not be necessary.

All jurisdictional delineations conducted by consultants are considered preliminary until verified and accepted or acted upon by the agencies.

2.0) PROPERTY LOCATION

The study area includes the parcel and offsite improvements located at 841 Alpine Meadows Lane in the City of Riverside in Riverside County, California (Figure 1). Specifically, the site is located just southwest of the intersection of Alpine Meadows Lane and Kingdom Drive. The site is located within Section 13 of Township 3 South, Range 5 West, as shown on a portion of the USGS Riverside East 7.5' topographic quadrangle (Figure 2). The parcel can be accessed by taking the 91 Freeway to Madison Street (Exit 60), turn south and follow the street to Victoria Avenue. Turn northeast on Victoria Avenue and proceed to Washington Street. Follow Washington Street to Bradley Street and turn east. Follow Bradley Street to Harbart Drive and turn north. At the first opportunity turn west on Alpine Meadows Lane and the parcel is the second house/parcel on the right (south side of the street). The site is generally bounded as follows: to the west by a residential structure, with disturbed open space, Prenda Dam, and tract home developments, and Washington Street beyond; to the east by Kingdom Drive, a mixture of relatively undisturbed and disturbed open space, residential areas, with I-215 beyond; to the north by Alpine Meadows Lane, homes associated with Solitude Court, with a mixture of disturbed open space and relatively undisturbed lands and Muirfield Road beyond; and to the south by disturbed open space and a mapped blue-line stream, with residential areas (some still under construction) along Horizon View Drive and Kingdom Drive, with a mixture of disturbed open space and relatively undisturbed areas beyond (Figure 3).

2.1) Property Site Description

The subject property contains evidence of previous disturbance including past clearing, off-road vehicle (ORV) activity and pedestrian use, and the introduction of ornamental trees and other invasive non-native vegetation in association with an onsite residence. An associated unpaved road is present on the eastern portion of the site. No mapped blueline stream (riparian/riverine area) is present on the site. Two (2) mapped blue-line streams are present near the site to the northwest and south.

2.2) Proposed Project Description

The project is described as Tentative Parcel Map 38174, a division of a single parcel into four (4) lots. The westernmost lot already has a house built on it and the parcel map shows houses to be constructed on Lots 2, 3, and 4 (see Figure 4). The southern area of the parcels to be created are shown avoided within jurisdictional drainage areas.

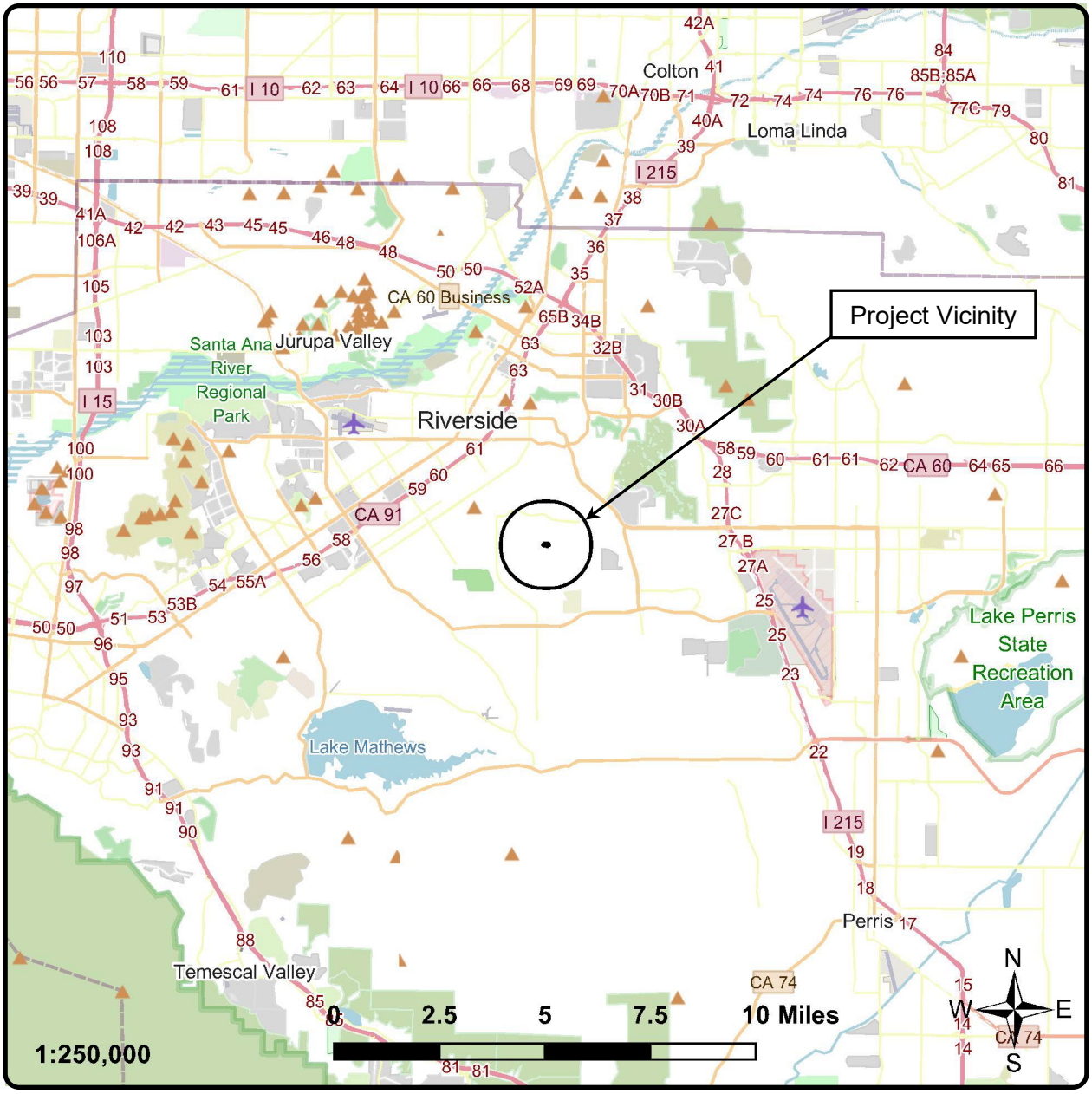

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Figure 1

Project Vicinity Map

Alpine Meadows Lane, City of Riverside
Riverside County, California

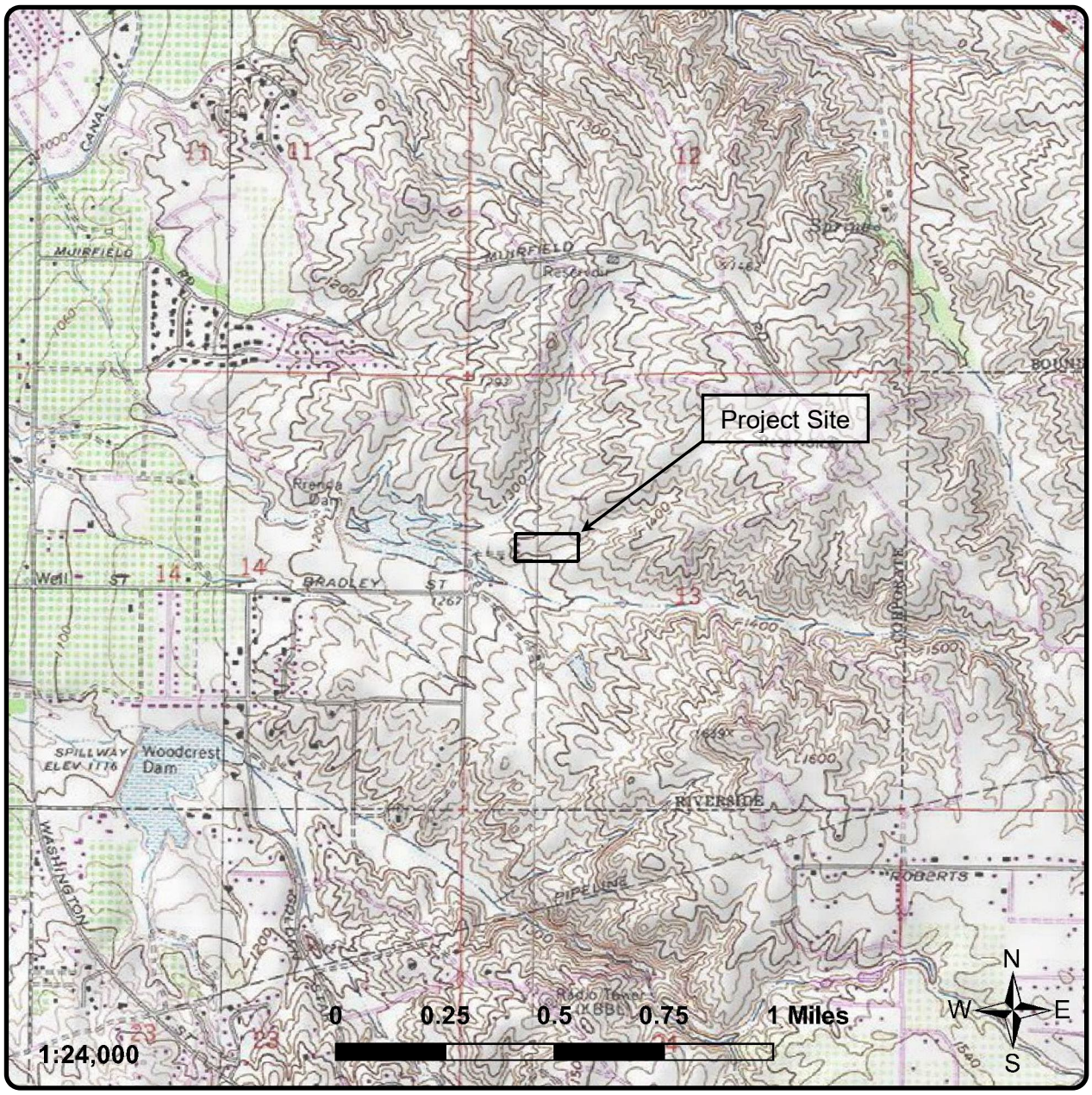

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Figure 2

Project Location Map
(USGS Riverside East [1980] quadrangle,
Section 13, Township 3 South, Range 5 West)

Alpine Meadows Lane, City of Riverside
Riverside County, California

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Figure 3

Aerial Photograph
(Aerial obtained from Google Earth, August 2018)

Alpine Meadows Lane, City of Riverside
Riverside County, California

3.0) METHODS

3.1) Pre-Survey Research Methods and Purpose

In this report, the "Project" or "Project Site" refers to the ±5.74-acre parcel. A report prepared by L&L in 2006 (L&L 2006) was examined for comparison with current conditions onsite. 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 were identified during the research stage prior to conducting the field survey. Useful maps were uploaded to handheld GPS and applications were downloaded in preparation for real-time data inquiries. Potential for jurisdictional features and riparian/riverine habitat to occur onsite was assessed via aerial photography, topographic mapping, soil types, trends to hydric conditions, area hydrology, and prior wetlands inventory mapping, etc. Finally, condition of area drainages was 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, 2016 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:

- http://wetland-plants.usace.army.mil/nwpl_static/v33/home/home.html
- http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
- https://www.fws.gov/wetlands/Data/Mapper.html
- https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019.pdf
- https://viewer.nationalmap.gov/basic/
- http://agacis.rcc-acis.org/
- RIRMette Map
- https://viewer.nationalmap.gov/basic/
- https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca
- https://msc.fema.gov/portal/search?AddressQuery=

3.2) Field Survey Methods and Purpose

Field work was conducted on September 7th, 2021, by Leslie Irish and Joshua Ball, during which three (3) person hours were expended. 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 were examined for anoxic conditions. Soils identified as suitable for development of hydric conditions were given special attention. Soil color characteristics were 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. 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.

During our analysis, L&L personnel used the following indicators of wetlands vegetation:

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 CDFW, RWQCB, and MSHCP 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 state drainages are also considered riverine habitat and woody wetland vegetation is considered riparian.

4.0) RESULTS

4.1) Soils

Topographically, the site is hilly and generally slopes downward from northeast to southwest. The northwestern portion of the site and the southeastern corner are relatively flat, sloping downward towards the drainage present onsite. The elevation onsite ranges from 1279 feet (390 meters) above mean sea level (AMSL) in the southwest corner to 1334 feet (407 meters) AMSL in the northeast corner. An area of lower elevation between the eastern corners of the parcel contains the onsite drainage feature.

Soil Survey Geographic (SSURGO) Database shapefiles and Web-Soils identify soils onsite as Buren fine sandy loam, Cieneba rocky sandy loam, Hanford coarse sandy loam, and Terrace escarpments (Figure 5). All soils mapped on the property have a hydric rating of zero (Table 2).

Table 2. Mapped soils.

Map Unit Symbol	Map Unit Name	Hydric Rating
BuD2	Buren fine sandy loam, 8 to 15 percent slopes, eroded	0
CkF2	Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded	0
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	0
TeG	Terrace escarpments	0

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 (accessed 10/11/2019).

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

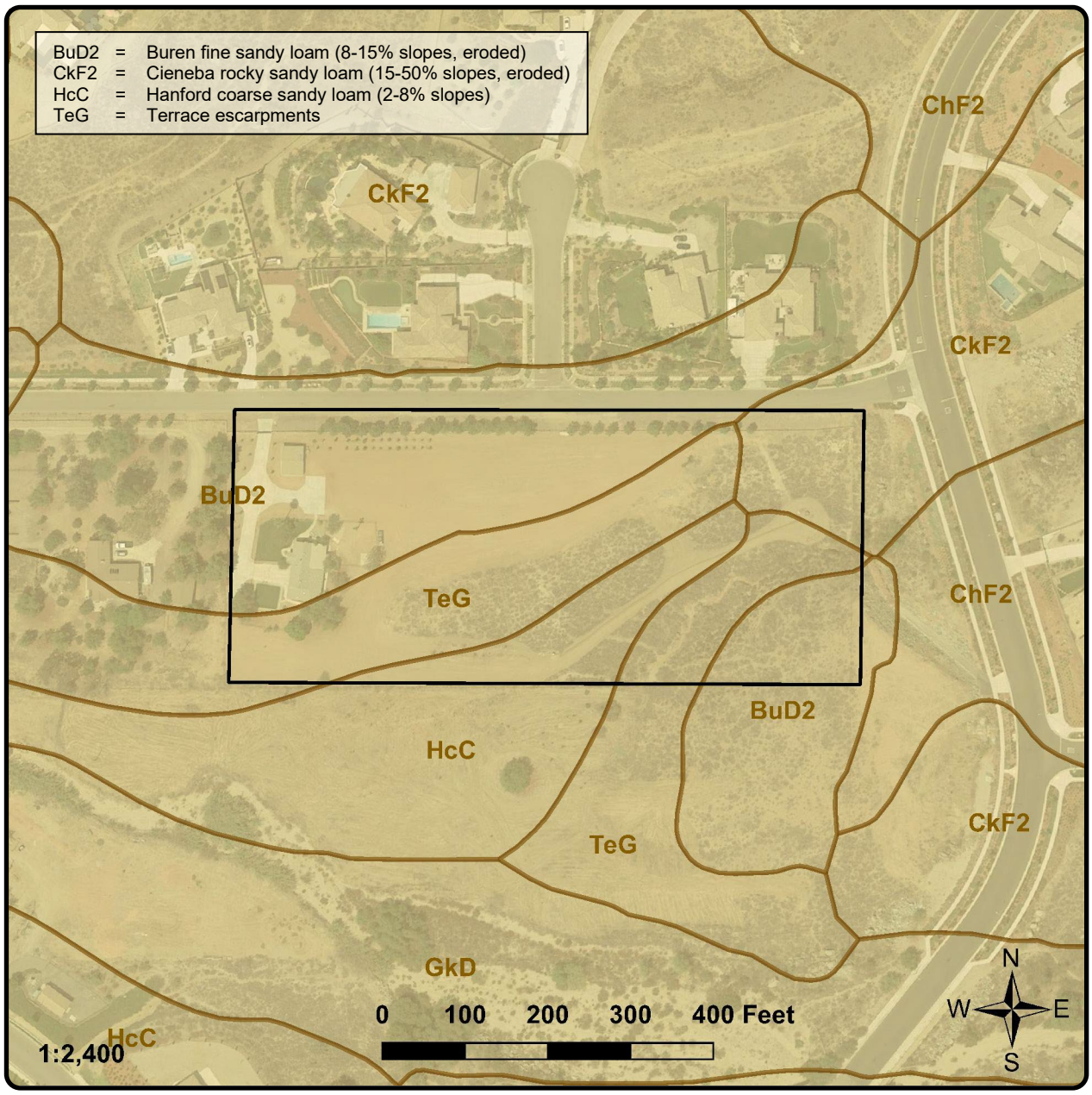

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Figure 4

Soils Map

(Aerial obtained from Google Earth, August 2018, USDA Nat. Res. Cons. Serv. SSURGO Data)

Alpine Meadows Lane, City of Riverside
Riverside County, California

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). Soils were examined in the field via test pit (Figure 6).

The project area had no rain for the 30 days preceding the site visit. Rainfall between October 2020 and August 2021 totaled 4.92 inches (http://agacis.rcc-acis.org/?fips=06065).

Soils on the surface of the ground were drained. No hydric soils or undisturbed vegetation was present in any of the streambeds.

4.2) Vegetation

The site has been historically utilized for residential, agricultural, and ranching purposes. Recently disked open fields are present throughout the majority of the site. A house is present along the western boundary with associated landscape and ornamental trees are present along Alpine Meadows Lane. The remainder of the parcel is either regularly disked for weed abatement purposes or covered with Riversidean sage scrub.

The following vegetation alliance is present within or near to the drainage:

4.2.1) *Encelia farinosa* Shrubland Alliance

Brittlebush shrubland (*Encelia farinose*) is found on approximate one half of the site primarily within the southeast corner. Lower areas associated with the drainage also contain common sunflower (*Helianthus anuus*) and black mustard (*Brassica nigra*, see Figure 7).

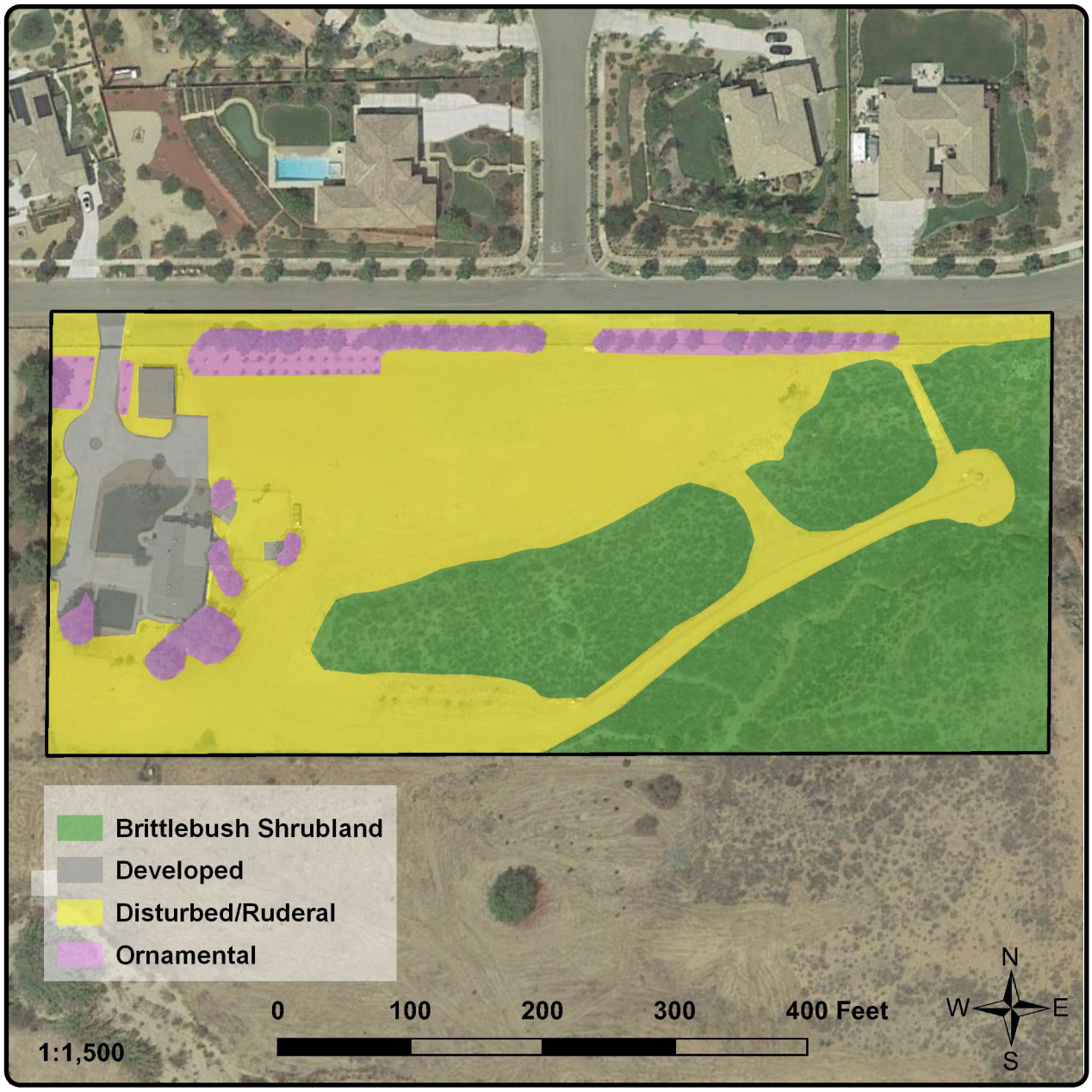

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Figure 5

Habitat Map
(Aerial obtained from Google Earth, August 2018)

Alpine Meadows Lane, City of Riverside
Riverside County, California

4.2.2) Developed and Disturbed Lands

Developed and disturbed areas onsite include existing structures and paved, cleared, or graded land altered by human activities. This habitat community is estimated to occupy ±3.66 acres or 63% of the site.

Non-native trees and other ornamental landscape shrubs are present in association with the onsite residence and areas along the driveway and road (Alpine Meadows Lane).

4.2.3) Vernal Pool

Soil types are not consistent with an alkali playa or vernal pool complex and pools or depressions characteristic of vernal pool habitat were not noted as present on the subject property. Soils are well drained and slopes present prevent pooling from occurring onsite.

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.

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 a few hundred feet south of the property; however, none are mapped onsite. An unnamed feature crosses under Kingdom Drive and enters the parcel in the middle of the eastern boundary. Periodic flows cross the eastern half of the parcel, flowing southwest before leaving the site (https://www.fws.gov/wetlands/Data/Mapper.html).

The parcel is within Zone X, an area of minimal flood hazard (FIRMette Map - https://msc.fema.gov/portal/search?AddressQuery=841%20ALPINE%20MEADOWS%20LANE%2C%20Riverside%2C%20Riverside%20County%2C%20CA#searchresultsanchor). Prenda Dam (a flood control facility) is located a few hundred feet west of the project area.

4.4) Precipitation Data and Analysis

4.4.1) Climate and Growing Season

The average high temperature in Riverside in the summer is around 94 degrees and the average low in the winter is 42 degrees. Precipitation averages 11 inches per year (https://www.bestplaces.net/climate/city/california/riverside).

4.4.2) Precipitation

Information is available from Natural Resources Conservation Service Wetlands Climate Tables (NRCS WETS) for Riverside County, Riverside 5.8 E, CA (CoCoRaHS). The project area had no rain during the 30 days preceding the site visit. L&L 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).

Table 3. Precipitation and NRCS WETS October. Climatological Data for Riverside 5.8 E, CA (CoCoRaHS).

Monthly Total Precipitation for RIVERSIDE 5.8 E, CA (CoCoRaHS)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2015	0.24	0.83	0.14	0.36	0.65	0.00	1.79	0.00	0.70	0.61	0.10	0.52	**6.07**
2016	2.24	0.18	0.57	0.91	0.15	0.00	0.00	0.00	0.02	0.58	1.23	2.50	**8.63**
2017	4.72	2.11	0.06	0.02	0.06	0.00	T	0.04	0.06	0.00	0.06	0.00	**7.13**
2018	2.14	0.27	1.61	0.00	0.29	0.00	0.03	0.00	0.00	0.71	1.05	1.30	**7.40**
2019	2.20	5.13	2.10	0.03	1.06	0.00	0.02	0.00	0.00	0.00	0.18	2.72	**15.34**
2020	0.08	0.12	3.80	3.99	0.00	0.03	0.00	0.00	0.00	0.00	0.15	1.32	**9.57**
2021	1.72	0.01	1.25	0.00	0.01	0.09	0.12	M	M	M	M	M	**3.45**
Mean	**1.91**	**1.24**	**1.36**	**0.76**	**0.32**	**0.02**	**0.28**	**0.01**	**0.13**	**0.32**	**0.46**	**1.39**	**8.23**

Climatological Data for RIVERSIDE 5.8 E, CA (CoCoRaHS) - July 2021

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2021-07-01	M	M	M	M	M	0.00	0.0	M
2021-07-02	M	M	M	M	M	0.00	0.0	M
2021-07-03	M	M	M	M	M	S	M	M
2021-07-04	M	M	M	M	M	M	M	M
2021-07-05	M	M	M	M	M	M	M	M
2021-07-06	M	M	M	M	M	0.00A	M	M
2021-07-07	M	M	M	M	M	M	M	M
2021-07-08	M	M	M	M	M	0.00	0.0	M
2021-07-09	M	M	M	M	M	0.00	0.0	M
2021-07-10	M	M	M	M	M	S	M	M
2021-07-11	M	M	M	M	M	M	M	M
2021-07-12	M	M	M	M	M	0.00A	M	M
2021-07-13	M	M	M	M	M	0.00	0.0	M
2021-07-14	M	M	M	M	M	0.00	0.0	M
2021-07-15	M	M	M	M	M	0.00	0.0	M
2021-07-16	M	M	M	M	M	0.00	0.0	M
2021-07-17	M	M	M	M	M	S	M	M
2021-07-18	M	M	M	M	M	M	M	M
2021-07-19	M	M	M	M	M	0.00A	M	M
2021-07-20	M	M	M	M	M	0.00	0.0	M
2021-07-21	M	M	M	M	M	0.00	0.0	M
2021-07-22	M	M	M	M	M	0.00	0.0	M
2021-07-23	M	M	M	M	M	0.00	0.0	M
2021-07-24	M	M	M	M	M	S	M	M
2021-07-25	M	M	M	M	M	M	M	M
2021-07-26	M	M	M	M	M	0.05A	M	M
2021-07-27	M	M	M	M	M	0.07	M	M
2021-07-28	M	M	M	M	M	0.00	0.0	M
2021-07-29	M	M	M	M	M	0.00	0.0	M
2021-07-30	M	M	M	M	M	0.00	0.0	M
2021-07-31	M	M	M	M	M	S	M	M
Average|Sum	M	M	M	M	M	0.12	0.0	M

Climatological Data for RIVERSIDE 5.8 E, CA (CoCoRaHS) - August 2021

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2021-08-01	M	M	M	M	M	M	M	M
2021-08-02	M	M	M	M	M	0.00A	M	M
2021-08-03	M	M	M	M	M	0.00	0.0	M
2021-08-04	M	M	M	M	M	0.00	0.0	M
2021-08-05	M	M	M	M	M	0.00	0.0	M
2021-08-06	M	M	M	M	M	0.00	0.0	M
2021-08-07	M	M	M	M	M	S	M	M
2021-08-08	M	M	M	M	M	M	M	M
2021-08-09	M	M	M	M	M	0.00A	M	M
2021-08-10	M	M	M	M	M	0.00	0.0	M
2021-08-11	M	M	M	M	M	0.00	0.0	M
2021-08-12	M	M	M	M	M	0.00	0.0	M
2021-08-13	M	M	M	M	M	0.00	0.0	M
2021-08-14	M	M	M	M	M	S	M	M
2021-08-15	M	M	M	M	M	M	M	M
2021-08-16	M	M	M	M	M	0.00A	M	M
2021-08-17	M	M	M	M	M	0.00	0.0	M
2021-08-18	M	M	M	M	M	0.00	0.0	M
2021-08-19	M	M	M	M	M	0.00	0.0	M
2021-08-20	M	M	M	M	M	0.00	0.0	M
2021-08-21	M	M	M	M	M	S	M	M
2021-08-22	M	M	M	M	M	M	M	M
2021-08-23	M	M	M	M	M	0.00A	M	M
2021-08-24	M	M	M	M	M	0.00	0.0	M
2021-08-25	M	M	M	M	M	0.00	0.0	M
2021-08-26	M	M	M	M	M	0.00	0.0	M
2021-08-27	M	M	M	M	M	0.00	0.0	M
2021-08-28	M	M	M	M	M	S	M	M
2021-08-29	M	M	M	M	M	M	M	M
2021-08-30	M	M	M	M	M	0.00A	M	M
2021-08-31	M	M	M	M	M	0.00	0.0	M
Average|Sum	M	M	M	M	M	0.00	0.0	M

4.5) Description of Drainages

4.5.1) Streambed/Riverine 1

Streambed / Riverine Feature 1 is 20,222 sq. ft. is unvegetated and disturbed or contains upland vegetation with an average width of 6.625 feet. Of the present 3,834.40 Sq. Ft. with an average width of 5.863, this feature qualifies as Non-wetland Waters of the United States at the federal level under jurisdiction of the USACE. Vegetation alongside the drainages includes mustard, tree tobacco and brittlebush.

At the time of the field visit soils were completely dry and no water was observed. An examination of Google Earth images accessed while conducting the site visit indicated the presence of discrete flows. The feature lacks any of the three (3) criteria necessary for wetland status at the state level. This feature consists of state streambed and MSHCP riverine habitat (Tables 5a and 5b).

Table 5a. CDFW Streambed/MSHCP

Point	Average Width (ft.)	Square Feet (Acres)	Type of Waters	Longitude	Latitude	HGM Code	Comment
State 1	6.625	20,222 (0.46)	Riverine Streambed Unveg/disturbed	-117.033852°	33.963021°	Riverine	Flood Facility
Total		20,222 (0.46)					

Table 5b. USACE Drainage

Point	Average Width (ft.)	Length of Fed Drainage (Feet)	Square Feet (Acres)	Type of Waters	Longitude	Latitude	HGM Code	Comment
R1	5.863	654	3,834.40 (0.088)	Non-Wetland Waters of the US	-117.033852°	33.963021°	Riverine	Flood Facility
Total		654	3,834.40 (0.088)					

No state or federal wetlands are present and no MSHCP riparian vegetation is present. A single large Peruvian pepper is present which was not counted as wetland vegetation under any criterion.

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BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

QUIN-05-752
July 2022

Figure 6

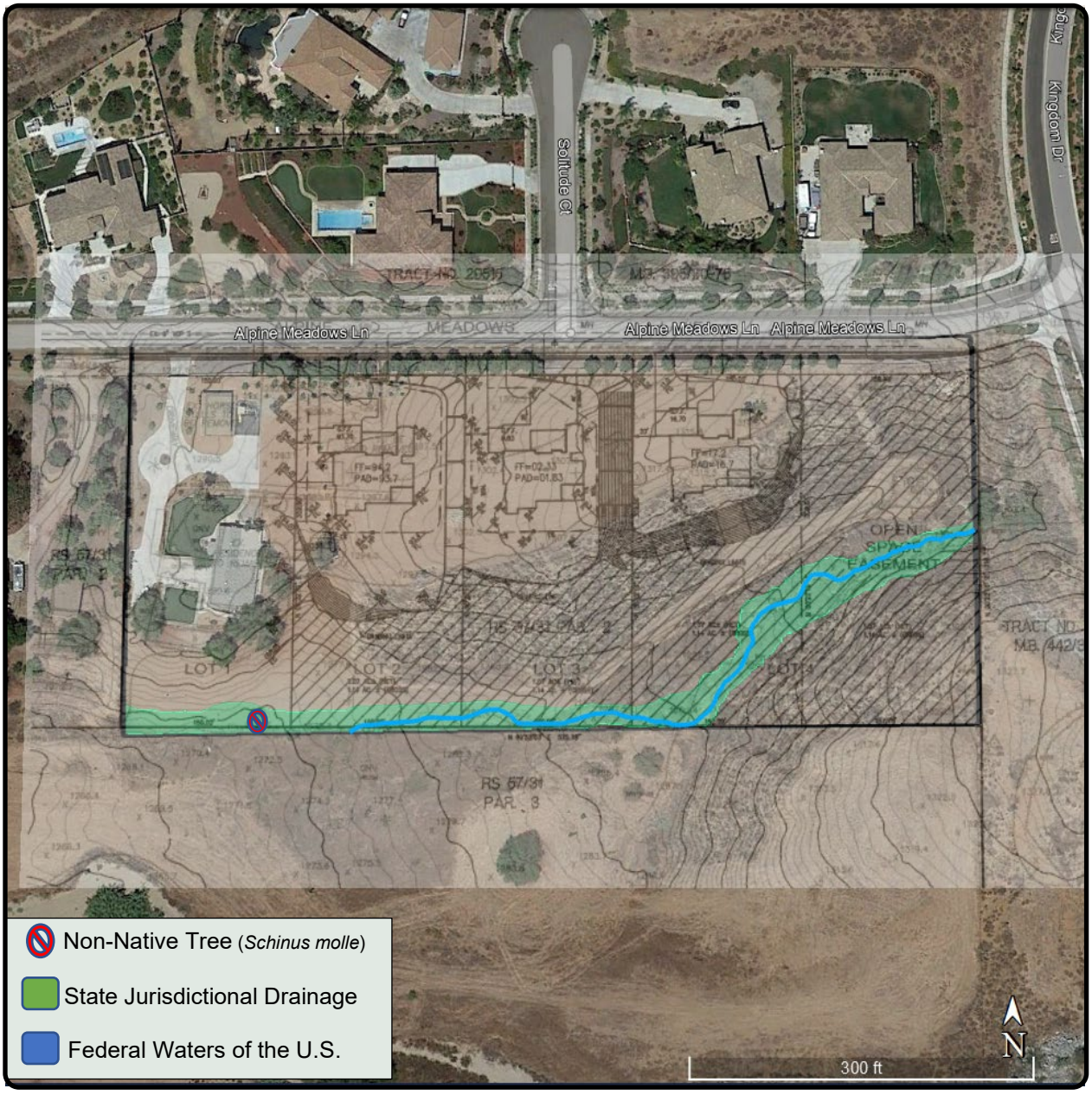
Jurisdictional Delineation
(Aerial obtained from Google Earth, August 2018)

Alpine Meadows Lane, City of Riverside
Riverside County, California

4.6) Description of Avoidance and Impact

4.6.1) Avoidance

The project has been designed to avoid impacts to the drainage system and no impacts will occur as a result of the proposed project (Figure 9).



L&L Environmental, Inc.

BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

WR-21-877
September 2022

Figure 7

Jurisdictional Features Impacts

APNs 182-350-002 & -003, Jurupa Valley
County of Riverside, California

5.0) CONCLUSIONS

L&L found jurisdictional “waters of the state” present within the 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]). Jurisdictional streambeds or drainages that connect to downstream flows are also jurisdictional.

L&L found jurisdictional “waters of the US” present within the site. Until the Navigable Waters Protection Rule takes effect, the Step One rule is in effect. 40 CFR 230.3(s) indicates that the term “waters of the United States” means:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which 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 including any such waters:
    a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    b. (From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (s)(1) through (4) of this section;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA. Definition of "Waters of the United States" under the Clean Water Act | US EPA.

Wetland areas within or adjacent to features 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).

L&L found state streambeds present within the site. FGC Section 1602 states: (a) An entity shall not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

All jurisdictional delineations conducted by consultants are considered preliminary until verified and accepted or acted upon by the agencies.

Total Resources

L&L found 20,222 sf (0.46 acre) of CDFW streambeds of which 20,222 (0.46 acre) is also subject to Section 6.1.2 of the MSHCP. L&L found 3,834.40 sf (0.088 acre) subject to the USACE jurisdiction. No state or federal wetlands are present. No vernal pools or vernal pool species are present.

Project Impacts

No impact to CDFW streambeds or waters is planned. No impact to USACE “waters” is planned. Not impact to MSHCP riverine habitat is planned nor will occur as a result of the development of the project as proposed (Figure 9). No impact to state or federal wetlands or MSHCP riparian habitat is planned as none are present on the site.

APPENDIX A – Species List

Table 7. List of plant species identified This list does not include all landscape ornamental shrubs/annuals associated with the onsite residence. * = non-native

Scientific Name	Common Name	Arid West Wetland Status
Asteraceae	**Sunflower Family**	
Encelia farinose	Brittlebush	Upland
Helianthus anuus	Common Sunflower	FACU
***Brassicaceae**	**Cabbage Family**	
Brassica nigra	Black Mustard*	Upland
Caprifoliaceae	**Honeysuckle Family**	
Sambucus mexicana	Blue Elderberry	Upland
***Euphorbiaceae**	**Spurge Family**	
Ricinus communis	Castor Bean	FACU
***Anacardiaceae**	**Pepper Tree Family**	
Schinus molle	Peruvian Pepper Tree	FACU
Solanaceae	**Nightshade Family**	
Nicotiana glauca	Tobacco Tree*	FAC

**Invasive*

APPENDIX B – Site Photos

(PP1) Drainage 1 and vegetation facing southwest

(PP2) Drainage 1 showing vegetation

(PP3) Drainage 1 facing west

(PP4) Drainage 1 beds and banks

(PP5)Overlooking Property site facing south

(PP6) Drainage 1 beds and banks/Vegetation

(PP7) Drainage 1 facing west towards adjacent residence

(PP8) Drainage 1 Federal streambed

(PP9) Drainage 1 sandy bottomed streambed

(PP10) Drainage 1 debris and bank

(PP11)Schinus molle, invasive tree facing East

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SCCA-21-881
June 2022

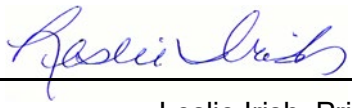
Figure 8
Picture Point Locations

(Aerial obtained from Google Earth, August 2018)

Alpine Meadows Lane, City of Riverside
Riverside County, California

APPENDIX C – 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: July 28, 2022 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 D – Literature Citations and References

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