JURISDICTIONAL DELINEATION REPORT RIVERSIDE TRANSMISSION RELIABILITY PROJECT

PREPARED FOR:

Southern California Edison Irwindale, CA Contact: Gary Busteed, Environmental Project Manager

PREPARED BY:

ICF 1250 Corona Pointe Court Corona, CA 92879 Contact: Marisa Flores

June 2017



ICF. 2017. *Jurisdictional Delineation Report, Riverside Transmission Reliability Project.* June. (ICF 00286.17) Corona, CA. Prepared for Southern California Edison, Irwindale, CA.

Contents

List of Tables	ii
List of Acronyms and Abbreviations	. iii

Page

Chapter 1 Intro	oduction
1.1	Project Purpose1-1
1.2	Project Location1-1
1.3	Project Description1-2
Chapter 2 Met	hods 2-1
2.1	Project Research2-1
2.2	Field Investigation2-1
2.2.1	USACE Jurisdiction2-2
2.2.2	RWQCB/SWRCB Jurisdiction2-2
2.2.3	CDFW Jurisdiction2-2
Chapter 3 Envi	ronmental Setting
3.1	Topography and Land Use
3.2	Hydrology3-1
3.2.1	Precipitation
3.2.2	Watershed and Hydrologic Features3-1
3.3	Soils
3.3.1	Soil Series
Chapter 4 Juris	dictional Delineation Results
4.1	Jurisdictional Delineation Results4-1
4.1.1	Earthen Channels4-2
4.1.2	Concrete Channels
4.1.3	Seasonal Wet Depression4-5
4.1.4	Swales and Erosional Features4-5
4.1.5	Non-Jurisdictional Features4-5
4.2	Conclusion4-5
Chapter 5 Refe	rences
Attachment 1 F	igures
Attachment 2 F	Photo Log

Attachment 3 Wetland Determination Forms

June 2017 ICF 00286.17

Tables

Table	Page
3-1. Rainfall Data Summary for the JD Study Area	3-1
4-1. Summary of Jurisdictional Delineation Results	4-1
4-2. Jurisdictional Delineation Details for USACE, RWQCB, and CDFW Aquatic Resources	4-7

Acronyms and Abbreviations

_	
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
DigAlert	Underground Service Alert of Southern California
FAC	Facultative
FACU	facultative upland
FACW	facultative wetland
FEMA	Federal Emergency Management Agency
GIS	geographic information system
HUC	hydrologic unit code
I-15	Interstate 15
JD study area	Jurisdictional Delineation study area
MLRA	Major Land Resource Area
NHD	national hydrography dataset
NI	no indicator
NO	no occurrence
NL	not listed
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
OBL	Obligate
OHWM	Ordinary High Water Mark
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
RPU	Riverside Public Utilities
RTRP	Riverside Transmission Reliability Project
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
SSURGO	Soil Survey Geographic
SP	Sample Point
SWRCB	State Water Resources Control Board
ТОВ	top of bank

USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	United States Geological Survey

ICF has conducted a routine-level delineation of jurisdictional waters and wetlands for Southern California Edison (SCE) pertaining to the proposed transmission line of the Riverside Transmission Reliability Project (RTRP, hereafter referred to as the project), which is located in Jurupa Valley, California (Figure 1; all figures are located in Attachment 1). The purpose of this delineation was to identify the extent of federal and state jurisdiction within the jurisdictional delineation study area (JD study area) pursuant to Sections 401 and 404 of the federal Clean Water Act (CWA), as well as Section 13260 of the state Porter-Cologne Water Quality Control Act (Porter-Cologne Act) and Section 1602 of the California Fish and Game Code.

Section 404 of the CWA covers waters of the United States as well as federal wetlands and is regulated by the U.S. Army Corps of Engineers (USACE). Under Section 401 of the CWA, the Regional Water Quality Control Board (RWQCB) regulates at the state level all activities that are regulated at the federal level by the USACE. The RWQCB or State Water Resources Control Board (SWRCB) may also regulate activities affecting non-federal waters and wetlands (e.g., isolated features) under the Porter-Cologne Act. Section 1602 of the California Fish and Game Code is regulated by the California Department of Fish and Wildlife (CDFW) and covers aquatic features, which include lakes or streambeds with a defined bed and bank plus any adjacent riparian vegetation.

The information and results presented herein document the investigation, best professional judgment, and conclusions of ICF. It is correct and complete to the best of ICF's knowledge. However, all jurisdictional delineations should be considered preliminary until reviewed and approved/determined by the regulatory agencies.

1.1 Project Purpose

The proposed project is a joint project with SCE and Riverside Public Utilities (RPU) to provide a second 230kV transmission line connection to RPU's transmission system. The purpose of the proposed project is to increase the reliability of the RPU grid.

1.2 Project Location

The proposed project occurs within the Jurupa Valley area in northwestern Riverside County, California (Figure 1). The project consists of two segments that are oriented north-south and eastwest. The north-south segment runs along the eastern side of Interstate 15 (I-15) from just north of the intersection at Cantu-Galleano Ranch Road and Wineville Avenue south to 68th Street. The project then makes a 90 degree turn east. The east-west segment is located to the south of the Santa Ana River, with the eastern terminus occurring just east of Wilderness Avenue and the western terminus just east of I-15 at Pats Ranch Road. The JD study area is located in the United States Geological Survey (USGS) 7.5-minute Guasti, Corona North, and Riverside West topographic quadrangles (Figure 2; USGS 1980, 1981). The latitude and longitude for the center of the project are 33.960949 and -117.503172, respectively.

1.3 Project Description

SCE proposes to construct approximately 10 miles of new 230kV transmission line along the project alignment (Figure 3). Towers will be built throughout the alignment connecting the transmission lines, with corresponding work areas beneath each tower structure. Existing access roads will be used to access the tower construction areas, as well as drive and crush areas where work vehicles and equipment will drive over vegetation to access power poles and towers. In addition, two separate areas not connected to the project construction area will be utilized for temporary staging areas and yards to store equipment and vehicles during the construction phase of the project.

2.1 Project Research

Prior to the field visit, a 100-foot-scale (1 inch = 100 feet) aerial photograph of the site was obtained and compared with the USGS 7.5-minute topographic Guasti, Corona North, and Riverside West quadrangle maps (USGS 1980, 1981) and Google Earth (Google, Inc. 2016) to observe vegetation types, topographic changes, and visible drainage patterns associated with the JD study area. In addition, the National Wetland Inventory (NWI) (USFWS 2017) was reviewed to identify mapped wetlands that occur within the JD study area. A map depicting the JD study area in relation to the Federal Emergency Management Agency (FEMA) 100-year and 200-year flood zones is provided in Figure 4, a map showing the national hydrography dataset (NHD) drainages and NWI wetlands is provided in Figure 5, and a map illustrating the watersheds is provided in Figure 6.

2.2 Field Investigation

A jurisdictional waters and wetland delineation was conducted by ICF biologists Marisa Flores and Dennis Miller on May 10 and 18, 2017 and Paul Schwartz and Kristin Klinefelter on May 10 and 11, 2017.

The JD study area consists of the combined limits of the following:

- The general disturbance area for stringing, existing poles, and proposed structure work areas;
- A maximum 250-foot wide buffer of the transmission line alignment¹;
- Existing dirt access roads and a 10-foot buffer;
- Drive and crush access routes and a 20-foot wide buffer; and
- The work area necessary for the Marshalling Yards.

The survey was conducted on foot, and jurisdictional limits were recorded using high-resolution aerial photographs (1 inch = 100 feet) and the Collector geographic information system (GIS) application on an iPad with sub-meter accurate external receiver. Existing conditions were documented in field notes and site photographs.

In order to comply with the Underground Service Alert of Southern California (DigAlert) requirements, Marisa Flores and Dennis Miller conducted an initial investigation of the JD study area on May 9, 2017 to identify areas where digging may be necessary for wetland soil sampling. Once sample areas were identified, the location was staked and coordinates were recorded with the iPad. DigAlert was contacted and a ticket number obtained prior to any soil sampling of the JD study area.

¹The survey area buffer used for the transmission line alignment was reduced in some locations so that it did not extend beyond the disturbance area for the proposed structure work. In addition, because of increased developed areas west of the Santa Ana River, survey area was pulled back so that it did not encroach into the Caltrans right-of-way or was limited by the width of the roadway along Pats Ranch Road and 68th Street.

2.2.1 USACE Jurisdiction

Potential waters of the United States and wetlands were delineated using methods established in the *Wetland Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). Non-wetland waters were delineated based on the presence of OHWM indicators, whereas the following three criteria must be fulfilled in order to classify an area as a wetland water: (1) a predominance of hydrophytic vegetation, (2) the presence of hydric soils, and (3) the presence of wetland hydrology. Details of the application of these criteria are provided below.

- **Hydrophytic Vegetation:23** The hydrophytic vegetation criterion is satisfied at a location if greater than 50% of all the dominant species present within the vegetation unit have a wetland indicator status of obligate (OBL), facultative wetland (FACW), or facultative (FAC) (Environmental Laboratory 1987). An OBL indicator status refers to plants that almost always occur in wetlands. A FACW indicator status refers to plants that usually occur in wetlands but are occasionally found elsewhere. A FAC indicator status refers to plants that are equally likely to occur in wetlands or elsewhere. A no indicator (NI) status designates that insufficient information was available to determine an indicator status. A no occurrence (NO) status indicates that the species does not occur in the region; when a plant with an NO status is found within a region, it usually indicates that the plant is ornamental. Other indicators are NL (not listed) and FACU (facultative upland). NL plant species are considered Upland for wetland delineation purposes. The wetland indicator status used for this report follows the *National Wetland Plant List* (Lichvar et al. 2016).
- **Hydric Soils:** The definition of a hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA/NRCS 1994). This determination is made based on various field indicators detailed in the *Arid West Supplement* and the *Field Indicators of Hydric Soils in the United States* (Version 8.0) (USDA/NRCS 2016).
- **Wetland Hydrology:** Wetland hydrology is determined using indicators of inundation or saturation (flooding, ponding, or tidally influenced) detailed in the *Wetland Delineation Manual* and the *Arid West Supplement*.

Within the JD study area, soil pits were dug to examine soil color and texture and determine the wetland boundary. Wetland Determination Data Forms are included with this document as Attachment 3.

2.2.2 RWQCB/SWRCB Jurisdiction

Evaluation of state jurisdiction followed guidance from Section 401 of the CWA and typically follows the same jurisdictional areas as USACE. In addition, the JD study area was reviewed for resources potentially regulated under the Porter-Cologne Act (i.e., isolated features).

2.2.3 CDFW Jurisdiction

CDFW jurisdiction typically includes water features with a defined bed and bank. Evaluation of potentially jurisdictional areas followed the guidance of standard practices by CDFW personnel. Briefly, CDFW jurisdiction was delineated by measuring outer width and length boundaries of

potentially jurisdictional areas (lakes or streambeds), consisting of the greater of either the top of bank (TOB) measurement or the extent of associated riparian or wetland vegetation.

3.1 Topography and Land Use

The topography within the JD study area is relatively flat, with graded developed areas and open areas surrounding most of the project. It gently slopes down from northeast to southwest with elevations ranging from approximately 610 to 790 feet above mean sea level.

Land use in the local vicinity of the JD study area is composed primarily of residential and commercial development with associated public infrastructure, and to a lesser extent, industrial complexes, undeveloped open space, orchards, a golf course, and a water treatment plant. The Santa Ana River Trail traverses along and adjacent to the east-west segment of the project and is used for recreational uses, including hiking, biking, and horseback riding.

3.2 Hydrology

3.2.1 Precipitation

Based on the Riverside Municipal Airport weather station located 3 miles southeast of the central portion of the JD study area, total estimated precipitation within the last year was approximately 13.37 inches (Table 3-1, NWS 2017). The weather station is located to the east of Van Buren Boulevard between Central Avenue and Arlington Avenue at Latitude 33.950731, Longitude - 117.445904.

Table 3-1. Rainfall Data Summary for the JD study area (inches)

Month	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	0ct 2016	Nov 2016		Jan 2017	Feb 2017	Mar 2017	Apr 2017	Total
Total	0.18	0.00	0.00	0.00	0.00	0.96	0.96	3.34	5.48	2.19	0.16	0.10	13.37

*Data source: National Weather Service, Riverside Municipal Airport Station. Available: http://w2.weather.gov/climate/xmacis.php?wfo=sgx. Accessed May 2017. Located approximately 3 miles southeast of the central portion of the JD study area.

3.2.2 Watershed and Hydrologic Features

The JD study area is within the Santa Ana Watershed (USGS HUC 8: 18070203) (Figure 6). The Santa Ana River Watershed covers 2,800 square miles and drains from the San Bernardino Mountains before passing through San Bernardino, Riverside, and Orange counties for approximately 74 miles before emptying into the Pacific Ocean. The Middle Santa Ana River Sub-watershed and Chino Creek Subwatershed occur within the Santa Ana Watershed. Major streams within the Middle Santa Ana River and Chino Creek, Sub-watersheds include Santa Ana River, Day Creek, East Etiwanda Creek, and several constructed flood-control channels. The majority of the hydrology in the project vicinity is associated with the Santa Ana River (Figure 5). The dominant land uses in the Middle Santa Ana

River and Chino Creek Sub-watersheds are urban (including residential, commercial, and industrial), with undeveloped lots and open space scattered throughout the area.

3.3 Soils

3.3.1 Soil Series

The Natural Resources Conservation Service (NRCS) has mapped the following soil series as occurring within the JD study area based on the Soil Survey Geographic (SSURGO) database (USDA/NRCS 2017a) (Figure 7): Altamont, Anza, Arlington, Buchenau, Cajalco, Cieneba, Delhi, Dello, Fallbrook, Gorgonio, Grangeville, Greenfield, Hanford, Hilmar, Las Posas, Madera, Monserate, Placentia, Porterville, Ramona, Tujunga, and Vista. Terrace escarpments also occur within the JD study area.

A description of the soil series included within the SSURGO mapping units is provided below based on the official soil descriptions and hydric soil classifications provided by the U.S. Department of Agriculture (USDA) (USDA/NRCS 2017b, 2017c).

3.3.1.1 Altamont

The Altamont series consist of deep, well-drained soils that formed in material weathered from finegrained sandstone and shale. Runoff is medium to very high, with slow permeability once cracks swell shut. Altamont series occur on uplands, hills and mountains, have slopes of 0 to 75%, and occur at elevations of 100 to 4,480 feet. Altamont series soils are extensive and are found in the Diablo Ranges in the coastal mountain ranges in central and southern California and in the Sutter Buttes.

The Altamont series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Altamont clay, 5 to 15 percent slopes.

3.3.1.2 Anza

The Anza series consist of well-drained soils of alluvium that derived from igneous and metamorphic rock. Runoff is medium. The Anza series occur on alluvial fans.

The Anza series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Anza loam, 2 to 8 percent slopes.

3.3.1.3 Arlington

The Arlington series consist of well-drained soils of alluvium that derived from granite. Runoff is medium, with slow permeability. Arlington series occur on alluvial fans and terraces, are nearly level to strongly sloping, and occur at elevations of 400 to 2,000 feet. Arlington series soils are moderately extensive and are found in the coastal and intermediate valleys of southern California.

The Arlington series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Arlington fine sandy loam, deep, 2 to 8 percent slopes; Arlington fine sandy loam, deep, 8 to 15 percent slopes; Arlington loam, deep, 0 to 5 percent slopes; and Arlington loam, deep, 5 to 15 percent slopes.

3.3.1.4 Buchenau

The Buchenau series consist of well to moderately well-drained soils that formed from alluvium derived from mixed sources. Runoff is medium to very slow, with moderately slow permeability to the hardpan, then very slow permeability. Buchenau series occur on small alluvial fans formed from metasedimentary rocks at elevations of 300 to 1,500 feet. Buchenau series soils are inextensive, comprising approximately 6,000 acres, and are found on the east side of the San Joaquin Valley and intermountain valleys of southern California.

The Buchenau series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Buchenau loam, slightly saline-alkali, 2 to 8 percent slopes.

3.3.1.5 Cajalco

The Cajalco series consist of well-drained soils formed in deeply weathered, basic igneous rocks. Runoff is medium, with moderate permeability. Cajalco series occur on gently sloping to steep uplands at elevations less than 3,500 feet. Cajalco series soils are moderately extensive and are found in the foothills and interior valleys of southern California.

The Cajalco series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Cajalco fine sandy loam, 8 to 15 percent slopes, eroded, and Cajalco fine sandy loam, 15 to 35 percent slopes, eroded.

3.3.1.6 Cieneba

The Cieneba series consist of very shallow and shallow, somewhat excessively drained soils that formed in material weathered from granitic rock. Runoff is low to high, with moderately rapid permeability. Cieneba series occur on hills and mountains, have slopes of 9 to 85%, and occur at elevations of 500 to 4,000 feet. Cieneba series soils are extensive and are found in the coastal mountain ranges in central and southern California and in the foothills of the Sierra Nevada.

The Cieneba series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Cieneba sandy loam, 15 to 50% slopes, eroded.

3.3.1.7 Delhi

The Delhi soil series is a very deep, somewhat excessively drained soil that is formed on wind modified alluvium on floodplains, alluvial fans, and terraces. The Delhi soil series has negligible to slow runoff, and rapid permeability. Delhi series occur on floodplains, alluvial fans, and terraces, have slopes of 0 to 15%, and occur at elevations of 25 to 1,400 feet. Delhi series soils are extensive in Major Land Resource Area (MLRA) 17 and are found on the east side of the San Joaquin Valley, in the central valley, and intermountain valleys in the western part of southern California.

The Delhi series is identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series is characterized Delhi fine sand, 2 to 15 percent slopes, wind-eroded, and Delhi loamy fine sand, 0 to 2 percent slopes.

3.3.1.8 Dello

The Dello series consist of very deep, very poorly drained soils that formed in alluvium from granitic rock sources. Runoff is slow, with rapid permeability. Dello series occur on wind-modified old alluvial fans in small depressions, have slopes of 0 to 2%, and occur at elevations 10 feet below sea level to about 500 feet. Dello series soils are extensive in MLRA 16 and 17 and are found in the San Joaquin Valley, Sacramento-San Joaquin Delta and intermountain valleys of southern California.

The Dello series is identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Dello loamy sand, 0 to 5 percent slopes, and Dello loamy sand, poorly drained, 0 to 2 percent slopes.

3.3.1.9 Fallbrook

The Fallbrook series consist of deep, well-drained soils that formed in material weathered from granitic rocks. Runoff is medium to very rapid, with moderately slow permeability. Fallbrook series occur on rolling and round hills, with slopes ranging from 5 to 75%, at elevations of 200 to 3,000 feet, or as high as 3,500 feet on south-facing slopes. Fallbrook series soils are extensive and are found in the foothills on the east side of the San Joaquin Valley and the foothills in the western part of southern California.

The Fallbrook series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Fallbrook sandy loam, 8 to 15% slopes, eroded, and Fallbrook fine sandy loam, 2 to 8% slopes, eroded.

3.3.1.10 Gorgonio

The Gorgonio soil series are characterized as somewhat excessively drained, with slow or medium runoff and rapid permeability. They occur on nearly level to moderately sloping alluvial fans at elevations from 20 to 3,000 feet. Gorgonio series soils are moderately extensive and are found near the mountains in southern and central coast areas of California.

The Gorgonio series is identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Gorgonio loamy sand, 0 to 8 percent slopes, and Gorgonio loamy sand, deep, 2 to 8 percent slopes.

3.3.1.11 Grangeville

The Grangeville series consist of very deep, somewhat poorly drained soils that formed in moderate coarse textured alluvium dominantly from granitic rock sources. Runoff is negligible to very low, with moderately rapid permeability and moderate permeability in saline-sodic phases. Grangeville series occur on alluvial fans and floodplains, have slopes of 0 to 2%, and occur at elevations of 0 to 1,800 feet. Grangeville series soils are extensive in MLRA 17 and 19 and are found in the east side of the San Joaquin Valley and intermountain valleys in the western part of southern California.

The Grangeville series is identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Grangeville loamy fine sand, drained, 0 to 5 percent slopes, and Grangeville fine sandy loam, poorly drained, saline-alkali, 0 to 5 percent slopes.

3.3.1.12 Greenfield

The Greenfield series consist of deep, well-drained soils that formed in moderately coarse and coarse textured alluvium derived from granitic and mixed rock sources. Runoff is slow to medium, with moderately rapid permeability. Greenfield series occur on alluvial fans and terraces, have slopes of 0 to 30%, and occur at elevations of 100 to 3,500 feet. Greenfield series soils are extensive and are found in the interior and coastal valleys of central and southern California.

The Greenfield series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Greenfield sandy loam, 2 to 8 percent slopes, eroded.

3.3.1.13 Hanford

The Hanford series consist of very deep, well-drained soils that formed in deep, moderately coarse textured alluvium dominantly from granite and other quartz bearing rocks of similar texture. Runoff is negligible to low, with moderately rapid permeability. Hanford series occur on stream bottoms, floodplains, and alluvial fans, have slopes of 0 to 15%, and occur at elevations of 150 to 3,500 feet. Hanford series soils are extensive in MLRA 17 and are widely distributed in the San Joaquin Valley and in the valleys of central and southern California.

The Hanford series is identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Hanford coarse sandy loam, 0 to 2 percent slopes; Hanford coarse sandy loam, 2 to 8 percent slopes; and Hanford coarse sandy loam, 8 to 15 percent slopes, eroded.

3.3.1.14 Hilmar

The Hilmar series consist of somewhat poorly drained soils that are formed in alluvium from granitic rock sources. Runoff is slow, with rapid permeability to slow permeability. Hilmar series occur near basins, are nearly level, and occur at elevations of 300 to 900 feet. Hilmar series soils are moderately extensive and are found in the east side of the San Joaquin Valley and the intermountain valleys in the western part of southern California.

The Hilmar series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Hilmar loamy sand, 0 to 2 percent slopes, eroded; Hilmar loamy very fine sand, 0 to 2 percent slopes; and Hilmar loamy very fine sand, 2 to 8 percent slopes.

3.3.1.15 Las Posas

The Las Posas series consist of moderately deep, well-drained soils that formed in material weathered from basic igneous rocks. Runoff is medium to rapid, with slow permeability. Las Posas series occur on mountainous uplands, have slopes of 5 to 50%, and occur at elevations of 200 to 3,000 feet. Las Posas series soils are moderately extensive and are found in the foothills of southern California and the Sierra Nevada.

The Las Posas series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Las Posas loam, 2 to 8 percent slopes.

3.3.1.16 Madera

The Madera series consist of moderately deep to hardpan, well or moderately well-drained soils that formed in old alluvium derived from granitic rock sources. Runoff is medium to very slow, with very slow permeability. Madera series occur on undulating low terraces, have slopes of 0 to 9%, and occur at elevations of 10 to 250 feet. Madera series soils are extensive in MLRA 17 and are found in the eastern side of the Sacramento and San Joaquin valleys.

The Madera series is identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Madera fine sandy loam, shallow, 2 to 8 percent slopes, eroded.

3.3.1.17 Monserate

The Monserate series consist of moderately well to well-drained soils that formed in alluvium derived principally from granitic rocks. Runoff is slow to rapid, with moderately slow permeability in the B2t horizon and very slow permeability in the duripan. Monserate series occur on nearly level to moderately steep old dissected terraces and fans at elevations of 700 to 2,500 feet. Monserate series soils are moderately extensive and are found in the interior valleys in the western part of southern California.

The Monserate series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Monserate sandy loam, 0 to 5 percent slopes, and Monserate sandy loam, 8 to 15 percent slopes, eroded.

3.3.1.18 Placentia

The Placentia series consist of well or moderately well-drained soils that formed in alluvium from granite and other rocks of similar composition and texture. Runoff is slow to rapid, with very slow permeability. Placentia series are nearly level to moderately sloping and are on fans and terraces at elevations of 50 to 2,500 feet. Placentia series soils are extensive and are found in the Salinas Valley and coastal parts of southern California.

The Placentia series is identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Placentia fine sandy loam, 0 to 5 percent slopes.

3.3.1.19 Porterville

The Porterville series consist of deep, well-drained soils that formed in fine textured alluvial material from basic and metabasic igneous rock. Runoff is very slow to rapid, with slow permeability. Porterville series occur on fans and foothills, have slopes of 0 to 15%, and occur at elevations of less than 2,000 feet in the lower valleys and 4,000 to 4,500 feet in the higher valleys. Porterville series soils are moderately extensive and are found at the edges of the great valley and in intermountain valleys of southern California.

This soil series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Porterville clay, moderately deep, slightly salinealkali, 0 to 5 percent slopes.

3.3.1.20 Ramona

The Ramona series consist of well-drained soils that formed in alluvium derived mostly from granitic and related rock sources. Runoff is slow to rapid, with moderately slow permeability. Ramona series occur on terraces and fans, are nearly level to moderately steep, and occur at elevations of 250 to 3,500 feet. Ramona series soils are extensive and are found in the interior valleys of central and the western part of southern California.

The Ramona series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Ramona sandy loam, 2 to 5 percent slopes, eroded; Ramona sandy loam, 0 to 5 percent slopes, severely eroded; Ramona sandy loam, 8 to 15 percent slopes, eroded; Ramona sandy loam, 8 to 15 percent slopes, severely eroded; and Ramona very fine sandy loam, 0 to 8 percent slopes, eroded.

3.3.1.21 Tujunga

The Tujunga series consist of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Runoff is negligible to low, with high saturated hydraulic conductivity. Tujunga series occur on alluvial fans and floodplains, including urban areas, have slopes of 0 to 9%, and occur at elevations of 6 to 1,970 feet. Tujunga series soils are extensive and are found in the central and southern coastal plains and valleys in MLRA 14 and 19.

The Tujunga series is identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Tujunga gravelly loamy sand, 0 to 8 percent slopes.

3.3.1.22 Vista

The Vista series consist of moderately deep, well-drained soils that formed in material weathered from decomposed granitic rocks. Runoff is slow to rapid, with moderately rapid permeability. Vista series occur on hills and mountainous uplands, have slopes of 2 to 75%, and occur at elevations of 400 to 3,900 feet within southern California. Vista series soils are extensive and are located in mountains of southern California and Sierra Nevada foothills.

The Vista series is not identified as a hydric soil for the Western Riverside Area soil survey area. Within the JD study area, this soil series occurs as Vista coarse sandy loam, 8 to 15% slopes, eroded, and Vista coarse sandy loam, 15 to 35% slopes, eroded. The following identifies the delineated features and their expected jurisdictional status. More detailed information is provided in the attachments to this document.

- Attachment 1 Figures
- Attachment 2 Photo Log
- Attachment 3 Wetland Determination Forms

4.1 Jurisdictional Delineation Results

A total of 17 features were delineated within the JD study area, including earthen channels, concrete channels, seasonal wet depressions, and swales and erosional features. These features along with the agency jurisdiction for wetlands and non-wetlands are summarized in Table 4-1, below, are described in detail in Table 4-2, and are illustrated on Figure 8.

	USACE,	/RWQCB (ac	cres)	RWQ	CB Only (acı	res)	CDFW (acres)			
Feature ID	Non- Wetland	Wetland	Total	Non- Wetland	Wetland	Total	Associated Riparian	Streambed	Total	
Feature 0001	0.025		0.025			N/A		0.068	0.068	
Feature 0002 (Santa Ana River)	0.762	1.215	1.977			N/A	6.092	4.277	10.369	
Feature 0003	0.051		0.051			N/A	0.257	< 0.001	0.257	
Feature 0004	0.126		0.126			N/A	0.116	0.203	0.319	
Feature 0005			N/A		0.064	0.064			N/A	
Feature 0006	0.012		0.012			N/A		0.195	0.195	
Feature 0007			N/A	0.039		0.039			N/A	
Feature 0008			N/A	0.026		0.026			N/A	
Feature 0009	0.011		0.011	0.011		0.011		0.057	0.057	
Feature 0010			N/A	0.039		0.039			N/A	
Feature 0011	0.028		0.028			N/A	0.224	0.010	0.234	
Feature 0012	0.162		0.162			N/A	0.037	0.260	0.297	
Feature 0013	0.821		0.821			N/A		1.412	1.412	
Feature 0014	0.535	0.163	0.698			N/A	0.530	0.463	0.993	
Feature 0015	0.025		0.025			N/A	0.021	0.113	0.134	

Table 4-1. Summary of the Jurisdictiona	al Delineation Results
---	------------------------

Feature ID	USACE	/RWQCB (ac	res)	RWQ	CB Only (acı	res)	CDFW (acres)			
	Non- Wetland	Wetland	Total	Non- Wetland	Wetland	Total	Associated Riparian	Streambed	Total	
Feature 0016	0.022		0.022			N/A		0.088	0.088	
Feature 0017	0.001		0.001			N/A		0.005	0.005	
Total	2.581	1.473	3.959	0.104	0.064	0.179	7.210	7.218	14.428	

4.1.1 Earthen Channels

Twelve of the 17 features in the JD study area are earthen-bottom channels that receive input from the surrounding uplands and adjacent residential land that flow into the Santa Ana River (Table 4-1 and Table 4-2). Indicators used to delineate the OHWM commonly included terracing, sediment deposition, sediment sorting, the destruction of terrestrial vegetation, changes in the character of the soil, an abrupt change in a plant community, flow patterns, a natural line impressed on the bank, the presence of litter and debris, and the presence of a wrack line. The TOB and riparian vegetation was used to delineate CDFW jurisdiction. These earthen channels would be jurisdictional under the USACE, RWQCB, and CDFW. A brief description of each feature is provided below.

<u>Feature 0002 (Santa Ana River)</u>

The Santa Ana River (Feature 0002) flows from northeast to southwest across the JD study area and conveys precipitation, and urban, agricultural, and mountain runoff within Santa Ana River Watershed. This feature is identified as a blue-line stream on USGS mapping. The main channel of the river is open water, with wetlands occurring on the banks of the river and a floodplain vegetated with southern riparian scrub, southern willow scrub, non-native riparian woodland, mulefat scrub, and non-native grasslands. The dominant riparian vegetation documented in the Santa Ana River was stinging nettle (*Urtica dioica*, FAC), blackberry (*Rubus ursinus*, FACU), poison oak (*Toxicodendron diversilobum*, FAC), giant reed (*Arundo donax*, FACW), cattail (*Typha* sp., OBL), Gooding's black willow (*Salix gooddingii*, FACW), and black elderberry ((*Sambucus nigra*, FAC). Hydrophytic vegetation, hydric soils, and wetland hydrology indicators were present at Sample Point (SP) 6. At SP-7, wetland hydrology indicators were not observed, so no soil sampling was conducted and this outpoint determined the wetland boundary. Due to density of riparian vegetation and the high potential to disrupt nesting bird activity on the eastern side of the Santa Ana River, it was assumed that wetlands are also present where hydrology indicators and hydrophytic vegetation are present; therefore no additional sampling was conducted.

Feature 0003

Feature 0003 is an earthen channel that drains precipitation from uplands into the Santa Ana River (Feature 0002). Ephemeral flows drain from south to north. The upstream end of the drainage has two low flow channels which drain into a single downstream channel. Feature 0003 is vegetated by southern willow scrub and is dominated by Gooding's black willow (FACW) and black elderberry (FAC), hemlock (*Conium maculatum*, FAC). SP-5 was taken at Feature 0003 and was determined not to contain a wetland due to the absence of wetland hydrology indicators and hydric soils.

<u>Feature 0004</u>

Feature 0004 is an earthen channel that drains precipitation from uplands into the Santa Ana River (Feature 0002). Ephemeral flows drain from south to north. This feature is vegetated with a

disturbed mulefat scrub and is comprised of mulefat and tree tobacco (*Nicotiana glauca*, FAC). SP-4 was taken at Feature 0004 and was determined not to contain a wetland, due to the absence of wetland hydrology indicators and hydric soils.

Feature 0006

This earthen channel conveys precipitation from uplands and urban runoff from south to north into the Santa Ana River (Feature 0002). Vegetation in the channel is comprised of non-native riparian woodland and is dominated by black elderberry, palo verde (*Parkinsonia* sp.), summer mustard (*Hirschfeldia incana*, NL), and black mustard (*Brassica nigra*, NL). Due to the lack of hydrophytic vegetation, no sample points were taken for wetlands.

Feature 0009

This earthen channel originates at a culvert and riprap at the south end and conveys local runoff and precipitation from uplands from south to north towards the Santa Ana River (Feature 0002). At the southern end of this feature, there is a fence and on the north side of the fence the feature no longer has discernible OHWM or top of bank indicators. Instead, it appears flows from Feature 0009 drain into a black pipe with an approximately 12" diameter, and this pipe has been placed at the toe of the slope. It was determined that this pipe was not jurisdictional. Vegetation within Feature 0009 is ruderal and dominated by castor bean (FACU), summer mustard (NL), black mustard (NL), tree tobacco (FAC), and black elderberry (FAC). Due to the lack of hydrophytic vegetation, no sample points were taken for wetlands.

Feature 0011

Feature 0011 is an earthen ephemeral feature that conveys urban runoff and precipitation from uplands from south to north towards the Santa Ana River (Feature 0002). The channel is deeply incised with very little vegetation documented in the channel bottom. The channel occurs within a riparian scrub community. Riparian vegetation located on the banks of the channel were comprised of stinging nettle (FAC), Gooding's black willow (FACW), and wild desert grape (*Vitis girdiana*, FAC). SP-2 determined that this feature was not a wetland due to lack of hydrophytic vegetation, hydric soils and wetland hydrology indicators within the channel.

<u>Feature 0012</u>

This earthen channel conveys flows from urban runoff and precipitation from uplands from southeast to northwest towards the Santa Ana River (Feature 0002). The western portion of the channel within the JD study area, directly adjacent to Feature 0011, was deeply incised and comprised of wild desert grape (FAC) and stinging nettle (FAC). The eastern portion of the channel was vegetated with mulefat scrub and dominated by mulefat (FACW), giant reed (FACW), and poison hemlock on the banks. Water was present in this feature during the site visit on May 10, and was likely present from dewatering of the construction site that occurs upstream (south) of the feature. The portion of the feature on the south side of the fenceline within the construction area was not accessible. SP-1 determined that Feature 0012 was not a wetland based on lack of hydric soils indicators.

Feature 0013

Feature 0013 is an earthen channel that has been modified by construction activities, including a portion converted to basins and the majority of the channel lacks riparian vegetation. Small amounts of mulefat (FACW), castor bean (FACU), and curly dock (*Rumex crispus*, FAC), were noted in the

channel but the majority of the vegetation in the channel has been removed by construction. This feature was not accessible because it occurs within an active construction area.

Feature 0014

Feature 0014 is a perennial channel which conveys urban runoff and stormwater to the Santa Ana River (Feature 0002). The feature is comprised of southern riparian scrub dominated by Gooding's black willow (FACW), shining willow (*Salix lasiondra*, FACW), mulefat (FACW), and cattails (OBL). Wetlands were mapped along the edge of the channel. No wetland sampling was conducted due to presence of homeless encampments in the vicinity; however this feature was delineated by ICF in November 2016 and the results of the delineation for Feature 0014 are included in Figure 8. Wetland sampling conducted just outside of the JD study area in November 2016 showed a predominance of hydrophytic vegetation, hydric soils (redox dark surface), and wetland hydrology for Feature 0014.

Feature 0015

Feature 0015 is an ephemeral channel that conveys urban runoff from south to north towards the Santa Ana River (Feature 0002). Ephemeral flows exit a large culvert with riprap at the upstream end and these flows settle into a basin with an inlet overflow drain pipe on the south side of the Santa Ana River Trail. Any overflow exits through a culvert just to the north of the Santa Ana River Trail. The vegetation in the channel is ruderal and dominated by dense tocalote (*Centaurea melatensis*, NL) and black mustard. The OHWM and TOB was only visible for a portion of the southern end of channel due to the dense vegetation growing in the channel. The northern end of the channel was mostly unvegetated with the same ruderal vegetation present at the TOB. Due to the lack of hydrophytic vegetation, no sample points were taken for wetlands.

Feature 0016

This ephemeral channel conveys precipitation from uplands from south to north towards the Santa Ana River (Feature 0002). Vegetation within the channel is ruderal and dominated by castor bean (FACU), black mustard (NL), tree tobacco (FAC), and black elderberry (FAC). Due to the lack of hydrophytic vegetation, no sample points were taken for wetlands.

Feature 0017

Feature 0017 originates outside of the JD study area in uplands and only a few feet of the feature occurs within the JD study area. The feature captures precipitation that drains from uplands. Feature 0017 is deeply incised and full of heavy debris. Vegetation is classified as ruderal and there were a few scattered tree tobacco (FAC) inside of the feature. Due to inaccessibility into this channel and the heavy debris, delineators could not confirm there was a culvert at the terminus of the feature that would convey flows from south to north to the Santa Ana River.

4.1.2 Concrete Channels

Feature 0001

Only one feature mapped within the JD study area is a maintained concrete-lined flood-control channel (Feature 0001). It occurs within the construction staging area along Harrel Street. The channel runs north-south and passes under Harrel Street. The feature is a concrete trapezoidal channel, which is constructed in uplands to convey ephemeral flows to prevent erosion and facilitate drainage. It is not identified as a blue-line feature. Some low flow was present during field surveys

(Photo ID 0001, Attachment 2). The feature did not contain sediment buildup that would allow vegetation growth and no riparian habitat or wetlands were present, although an individual tall flat sedge (*Cyperus eragrostis*, FACW) was observed within the cracks in the concrete. OHWM indicators were based on the presence of water staining and sediment/debris deposition along the bottom of the channel invert. The CDFW width was measured at the top of bank.

4.1.3 Seasonal Wet Depression

Feature 0005

There is one area within the JD study area comprised of an isolated seasonal wet depression (Feature 0005). This depressional area formed from old road ruts and is located near the center of the east-west segment of the JD study area just south of the Santa Ana River Trail. The location had hydrophytic vegetation indicators and wetland hydrology present (Attachment 3; SP-3). Wet and dry, cracked soils occurred, with ponded areas containing mulefat and curly dock. Hydric soils were assumed to be present due to those conditions, but sampling was not conducted to avoid potential impacts to potential habitat for listed fairy shrimp. The wetland was of low quality due to off-road vehicular disturbances on the dirt road directly adjacent to the wetland and due to the feature having formed from disturbed soils. For the purpose of water permitting, this feature is being presumed an isolated wetland.

4.1.4 Swales and Erosional Features

Features 0007, 0008 and 0010

Three of the 17 features in the JD study area are swales and erosional features that occur in uplands along the sides of the Santa Ana River Trail (Features 0007, 0008, and 0010). Swales were armored with riprap, and although a discernable OHWM or bed and bank were measured based on the width of the riprap, these armored swales were constructed to convey flows and prevent erosion along the edges of the Santa Ana River Trail. The swales capture runoff from upland areas preventing erosion of the trail. Features 0007 and 0008 convey surface flows into a culvert towards Feature 0009, and Feature 0010 conveys surface flows towards Feature 0011. Vegetation associated with these features included castor bean, summer mustard, and black mustard. Within the JD study area, these features are anticipated to be RWQCB jurisdictional only; they are not considered USACE or CDFW jurisdictional because the features are man-made swales.

4.1.5 Non-Jurisdictional Features

Several non-jurisdictional features were present in the JD study area. These features are man-made and appear to have been constructed for agricultural purposes, but are no longer in use (remnant, non-functional), or were constructed as Best Management Practices (BMP) ditches to prevent erosion.

4.2 Conclusion

USACE/RWQCB jurisdictional resources within the JD study area include 2.581 acres of non-wetland waters of the U.S. and State and waters of the state, 1.473 acres of wetland waters of the U.S. and State. Additionally, 0.104 acre of RWQCB non-wetland waters of the State and 0.064 acre of RWQCB wetland waters of the State occur within the JD study area. A total of 7.210 acres of CDFW riparian

habitat, and 7.218 acre CDFW streambed occur within the JD study area. Refer to Table 4-1 for a summary of the USACE, RWQCB, and CDFW jurisdictions for wetlands and non-wetlands. The delineated features are associated with the Santa Ana River, which eventually empties into the Pacific Ocean (a Traditional Navigable Water). Therefore, the delineated features are assumed to be subject to regulation under Sections 404 and 401 of the CWA. In addition, the tributaries to the Santa Ana River had a defined bed and bank and/or riparian canopy and therefore, are subject to CDFW jurisdiction under Sections 1600-1616 of the California Fish and Game Code. Feature 0005 is an isolated wetland of the state and jurisdictional under the Porter-Cologne Water Quality Control Act, subject to RWQCB oversight; in addition, Features 0007, 0008, and 0010 are also waters of the state subject to RWQCB jurisdiction under the Porter-Cologne Act. The project may result in impacts that would require authorization under the CWA Section 404, a CWA 401 Water Quality Certification, a Waste Discharge Requirement and/or a Streambed Alteration Agreement.

Table 4-2. Jurisdictional Delineation Details for USACE, RWQCB, and CDFW Aquatic Resources

Name of Aquatic Resource	Feature Type	Cowardin	Non-wetland			Wetland		Vegetation Community	Latitude/	
		Туре*	USACE/RWQCB Streambed Acreage (acres)	RWQCB Streambed Acreage (acres)	CDFW Riparian Acreage (acres)	CDFW Streambed Acreage (acres)	USACE/RWQCB Wetland Acreage (acres)	RWQCB Wetland Acreage (acres)		Longitude
Feature 0001	Concrete channel	R4SBCr	0.025			0.068			Developed	34.011502°/ -117.528840°
Feature 0002 (Santa Ana River)	Earthen channel	PFO/ EM1C R2UBH	0.762		6.092	4.277	1.212		Riparian Scrub, Southern Willow Scrub, Non-Native Riparian Woodland, Mulefat Scrub, and Non-native Grasslands	33.959776°/ - 117.528344
Feature 0003	Earthen channel	PSSC	0.051		0.257	<0.001			Southern Willow Scrub	33.960351°/ -117.502914°
Feature 0004	Earthen channel	R4SBA	0.126		0.116	0.203			Mulefat Scrub	33.960364°/ - 117.493273°
Feature 0005	Seasonal Wet Depression	N/A						0.064	Mulefat Scrub	33.960288°/ -117.490604°
Feature 0006	Earthen channel	PSSA	0.012			0.195			Non-native Riparian Woodland	33.961151°/ -117.481932°
Feature 0007	Swale	N/A		0.039					Ruderal	33.961460°/ -117.480065°
Feature 0008	Swale	N/A		0.026					Ruderal	33.961674°/ -117.479651°
Feature 0009	Earthen channel	R4SBA	0.011			0.057			Ruderal	33.962296°/ -117.479209°
Feature 0010	Swale	N/A		0.039					Ruderal	33.963221°/ -117.476951°
Feature 0011	Earthen channel	PFOA	0.028		0.224	0.010			Riparian Scrub	33.962783°/ -117.476634°
Feature 0012	Earthen channel	PSSA	0.162		0.037	0.260			Mulefat Scrub	33.962823°/ -117.476034° °
Feature 0013	Earthen channel	PSSA	0.821			1.412			Ruderal	33.961402°/ -117.472463°
Feature 0014	Earthen channel	PFO/ EM1C	0.535		0.463	0.530	0.163		Southern Riparian Scrub	33.960589°/ -117.465960°

Name of Aquatic Resource	Feature Type	Cowardin Type*	Non-wetland			Wetland		Vegetation Community	Latitude/	
			USACE/RWQCB Streambed Acreage (acres)	RWQCB Streambed Acreage (acres)	CDFW Riparian Acreage (acres)	CDFW Streambed Acreage (acres)	USACE/RWQCB Wetland Acreage (acres)	RWQCB Wetland Acreage (acres)		Longitude
Feature 0015	Earthen channel	N/A	0.025		0.021	0.113	0.098		Ruderal	33.965272°/ -117.450556°
Feature 0016	Earthen channel	R4SBA	0.022			0.088			Ruderal	33.966039°/ -117.446932°
Feature 0017	Earthen channel	R4SBA	0.001			0.005			Ruderal	33.966675°/ -117.444571°
Total 	•		2.581	0.104	7.210	7.218	1.473	0.064		
* Cowardin Typ <u>System</u> R= Riverine P= Palustrine	<u>e</u>	2= Lo	<u>ystem</u> wer Perennial ermittent	<u>Class</u> EM= Em F= Fores SB= Stre SS= Scru UB= Unc	ted ambed	m C= Seas	stent		<i>I <u>Modifier</u></i> icial substrate	

- Environmental Laboratory. 1987. *Corps of Engineers Wetland Delineation Manual*. Technical Report Y-87-1. Vicksburg, MS: U.S. Army Waterways Experiment Station.
- Google, Inc. 2016. *Aerial imagery in Google Earth Pro 7.1.1.1580 (beta)*. Project area aerial imagery dated 2016.
- Lichvar, R. W., D. L. Banks, W. N. Kirchner, and N. C. Melvin. 2016. *The National Wetland Plant List: 2016 Wetland Ratings*. Phytoneuron 2016-30:1–17. April.
- National Weather Service. 2017. *San Diego Forecast Office*. Available: http://w2.weather.gov/climate/xmacis.php?wfo=sgx. Accessed: May 19, 2017.
- U.S. Army Corps of Engineers (USACE). 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0). Vicksburg, MS: U.S. Army Engineer Research and Development Center. September.

———. 2008b. A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States: A Determination Manual. Available: http://www.crrel.usace.army.mil/library/technicalreports/ERDC-CRREL-TR-08-12.pdf. August.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA/NRCS). 1994. *Changes in Hydric Soils of the United States*. Federal Register 59(133): 35680–35681, July 13.

———. 2016. *Field Indicators of Hydric Soils in the United States, Version 8.0.* L. M. Vasilas, G. W. Hurt, and C. V. Noble (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

———. 2017a. *Soil Survey Geographic (SSURGO) Database for Western Riverside Area, California*. Prepared by Soil Survey Staff of the Natural Resources Conservation Service. Available: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed: May 19, 2017.

———. 2017b. California State List. Available: https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/. Accessed: May 24, 2017.

——. 2017c. *Official Soil Series Descriptions*. Prepared by Soil Survey Staff of the Natural Resources Conservation Service. Available:

<a>https://soilseries.sc.egov.usda.gov/osdname.aspx>. Accessed: May 19, 2017.

U.S. Fish and Wildlife Service (USFWS). 2017. National Wetlands Inventory. Available: http://www.fws.gov/wetlands/. Accessed: May 22, 2017.

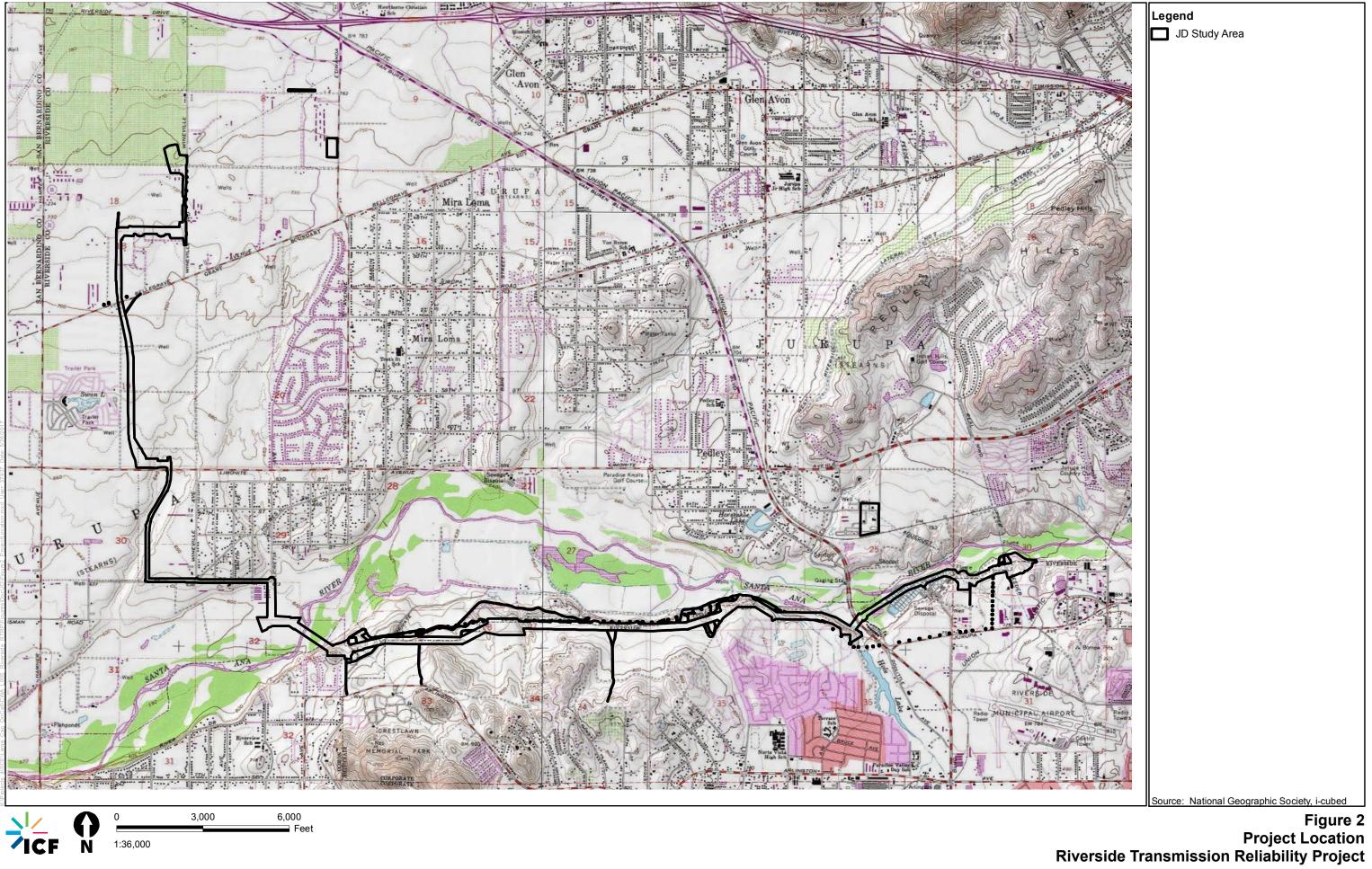
U.S. Geological Survey (USGS). 1980. Riverside West, California, 7.5-minute Quadrangle.

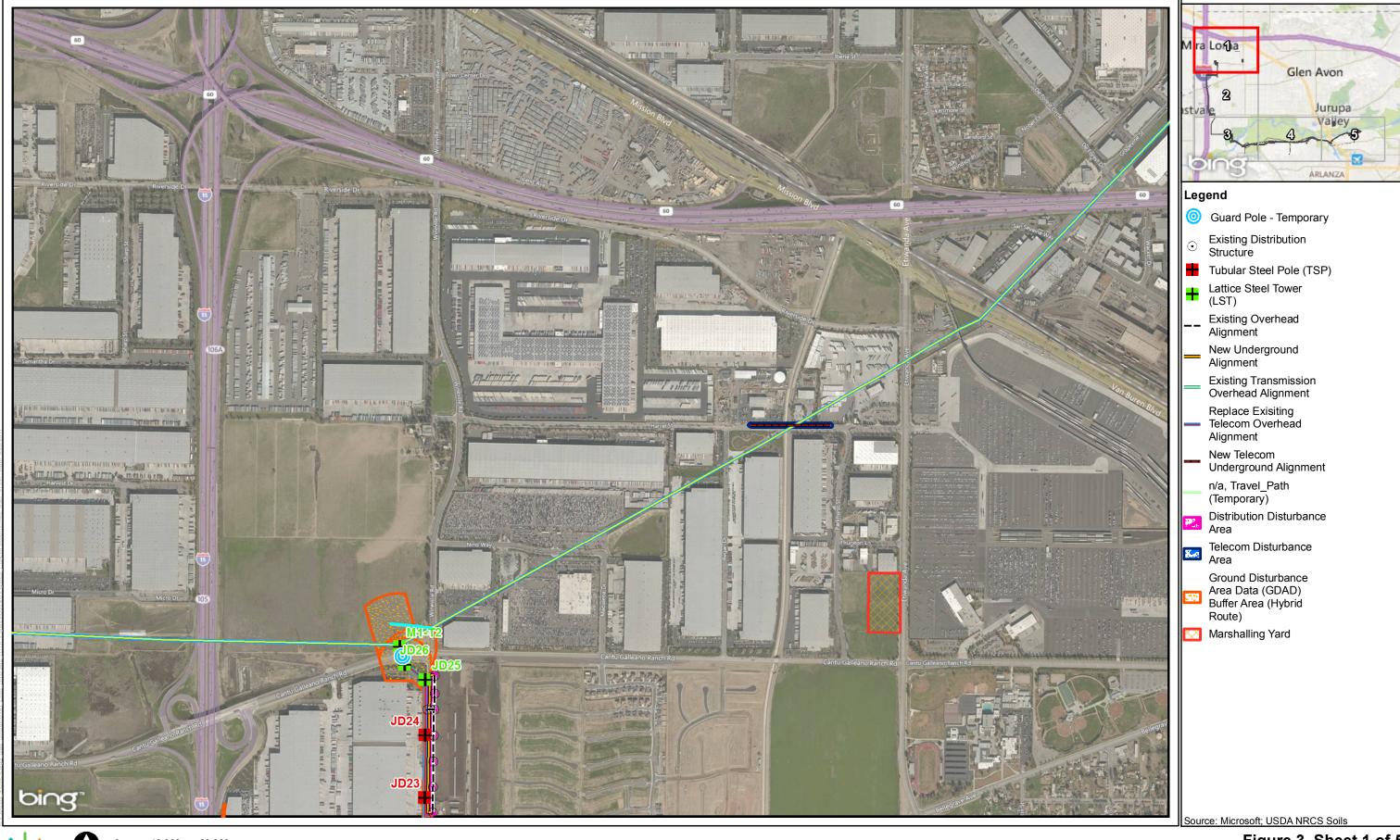
———. 1981. Guasti and Corona North, California, 7.5-minute Quadrangle.



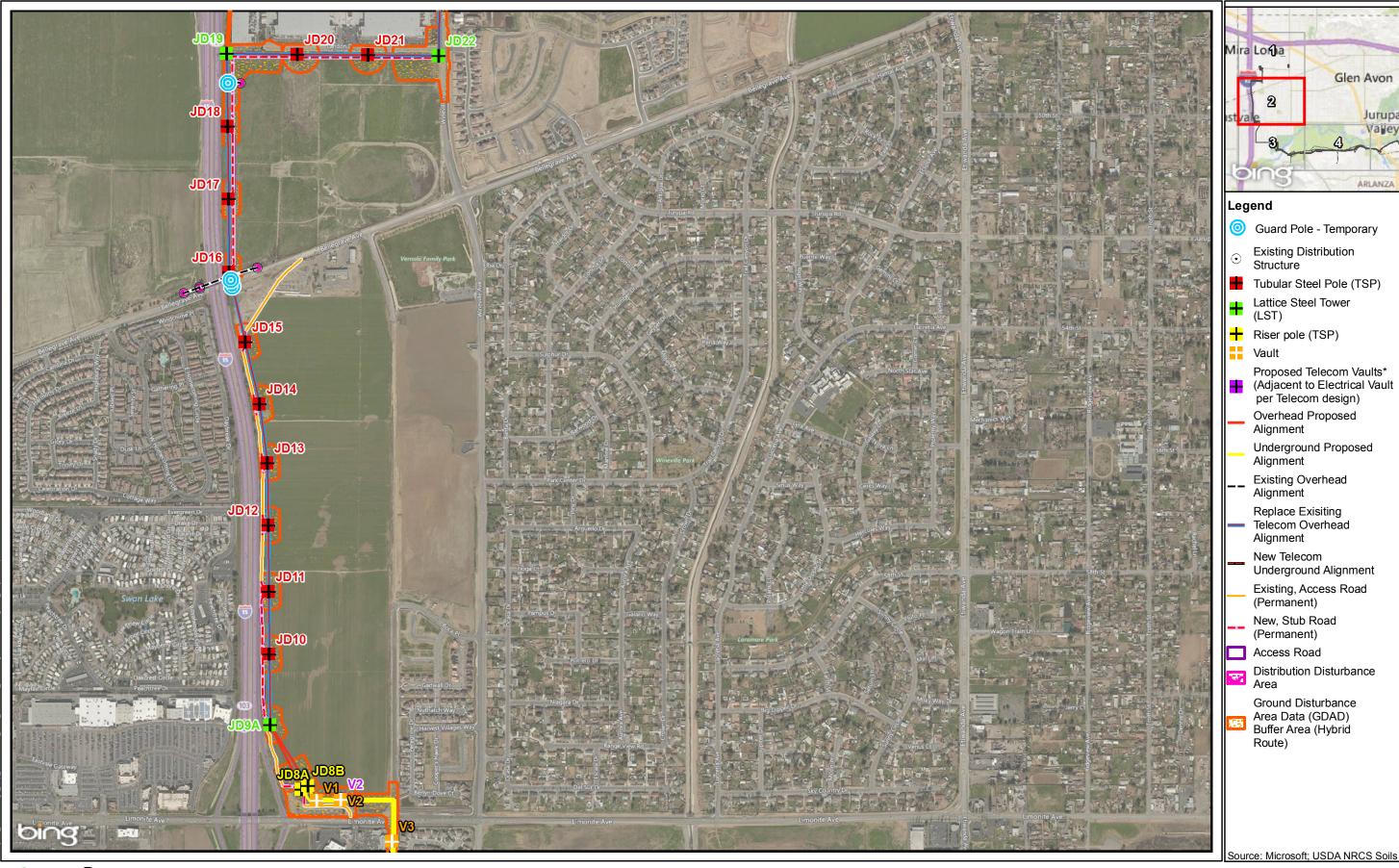


Figure 1 Project Vicinty Riverside Transmission Reliability Project





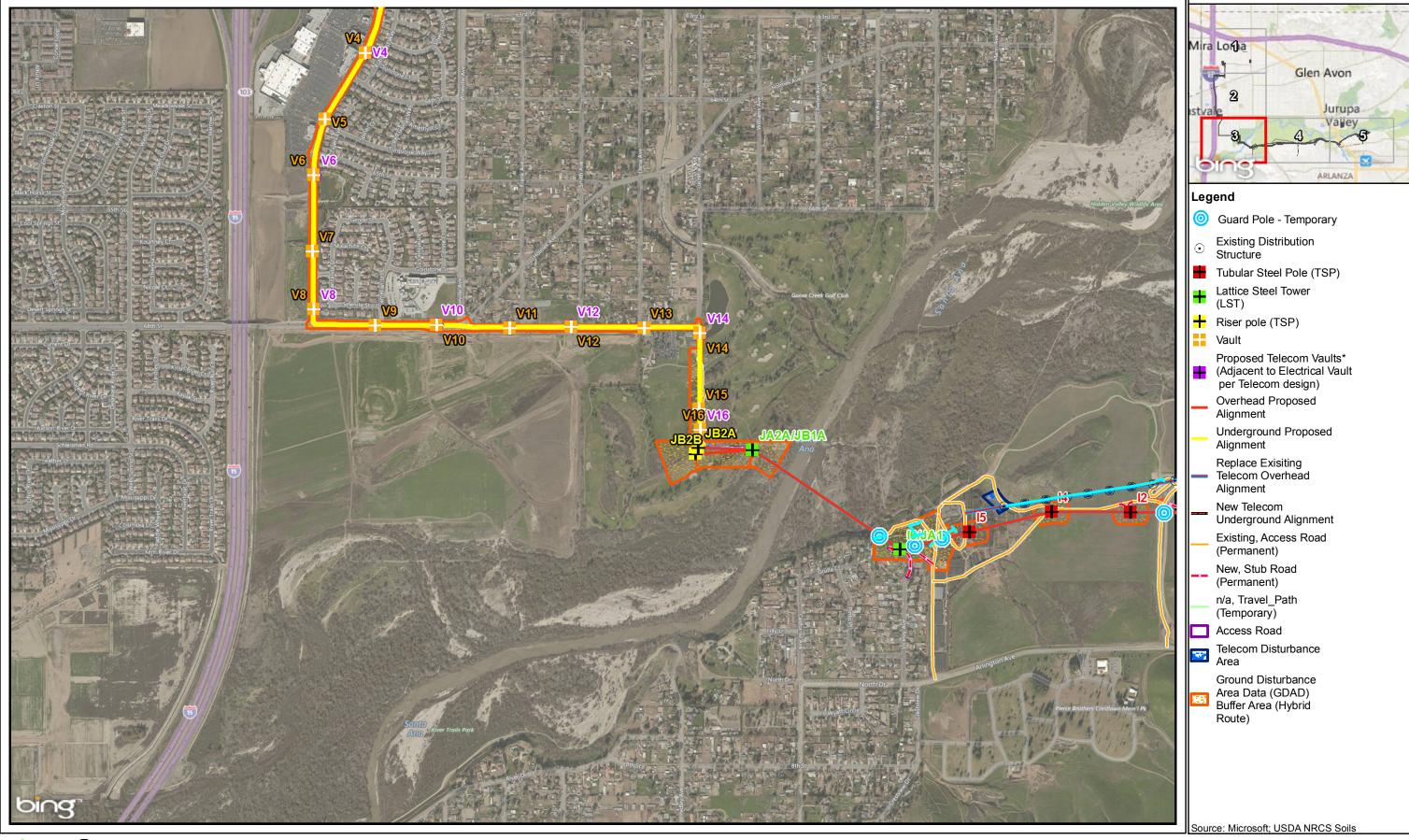
CFN 0 10,000 20,000 1:12,000 Feet Figure 3, Sheet 1 of 5 Project Footprint Riverside Transmission Reliability Project



10,000 20,000 0 Feet Ν 1:12,000

Figure 3, Sheet 2 of 5 **Project Footprint Riverside Transmission Reliability Project**

Jurupa Valley



CF N 0 10,000 20,000 1:12,000 Feet Figure 3, Sheet 3 of 5 Project Footprint Riverside Transmission Reliability Project

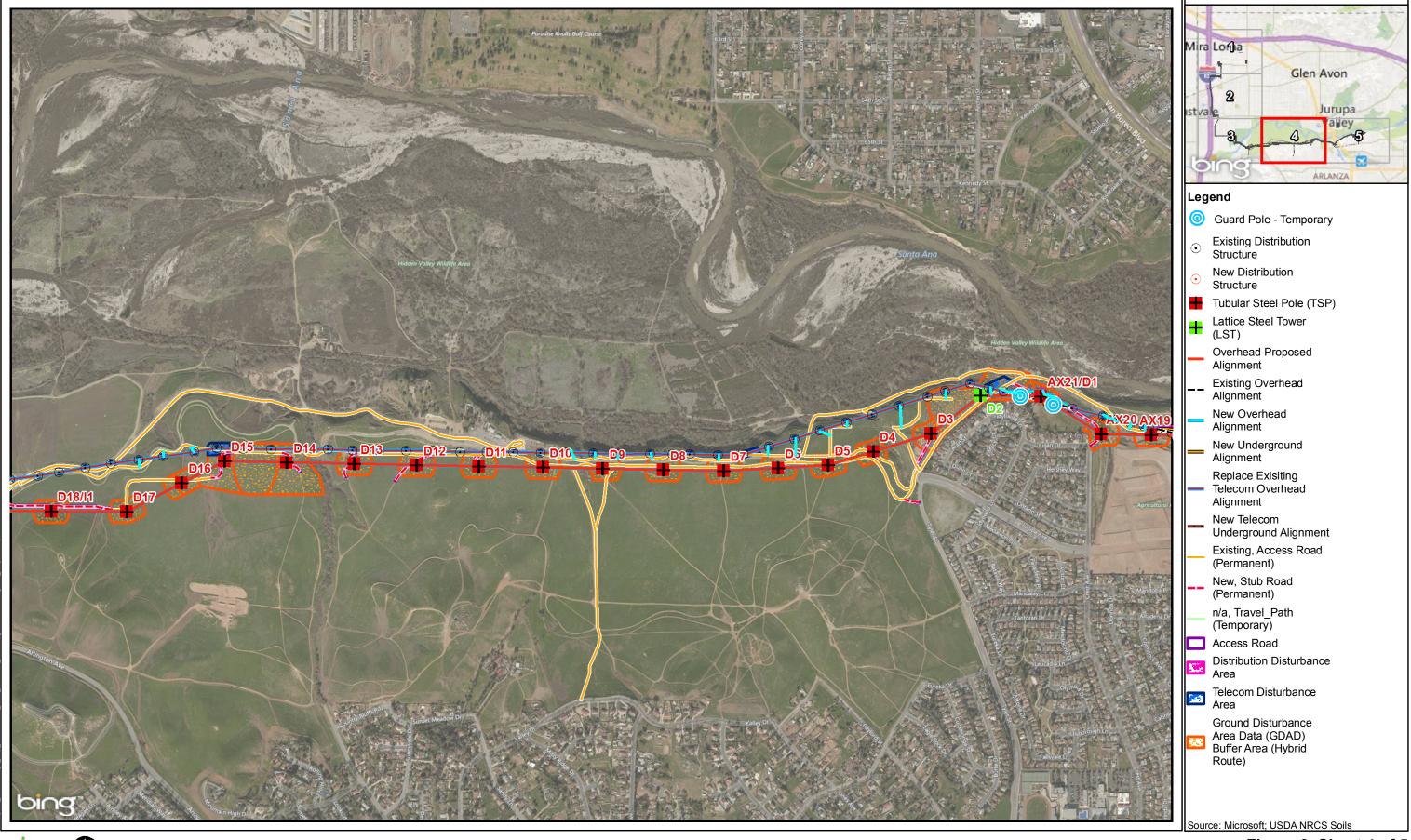




Figure 3, Sheet 4 of 5 Project Footprint Riverside Transmission Reliability Project

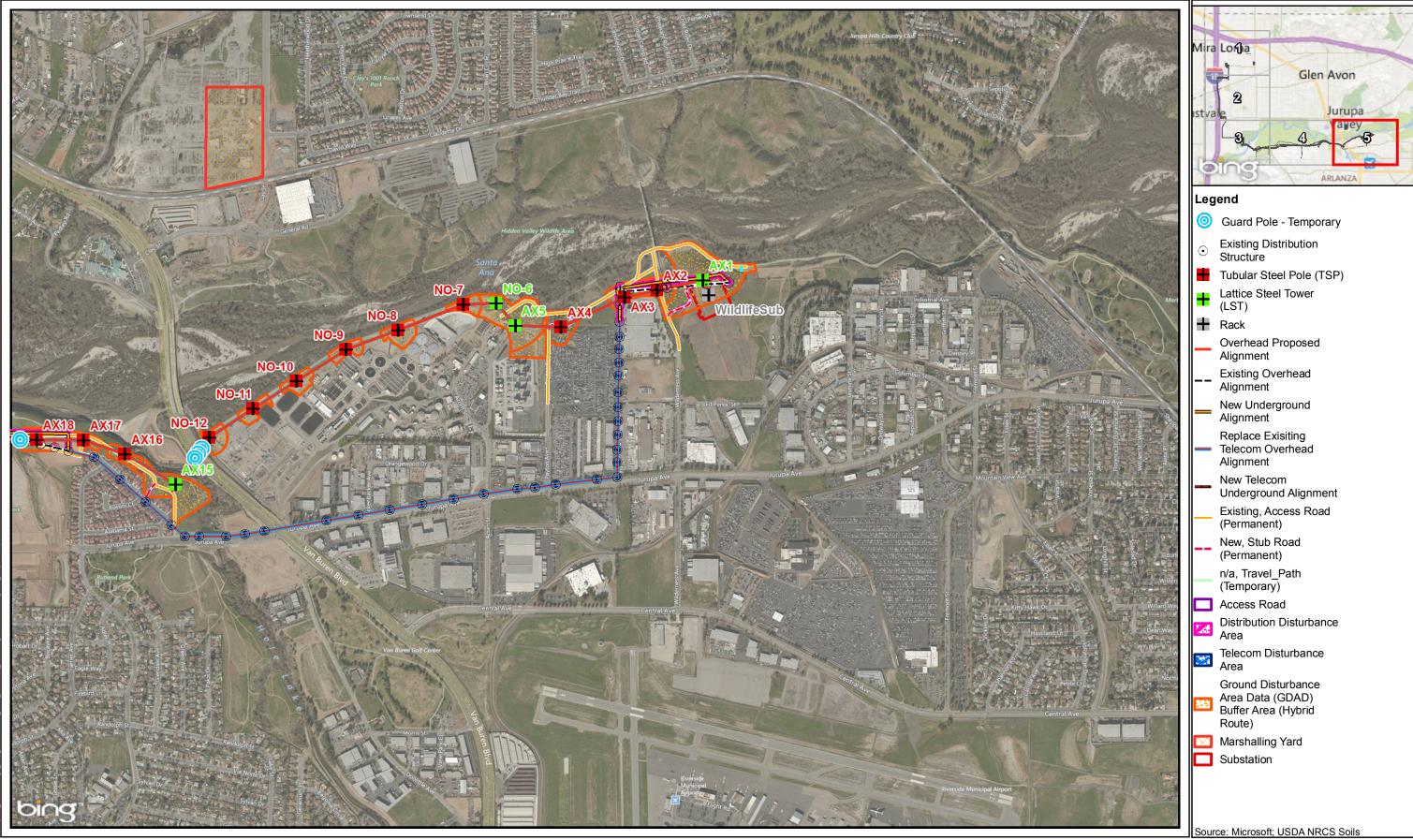
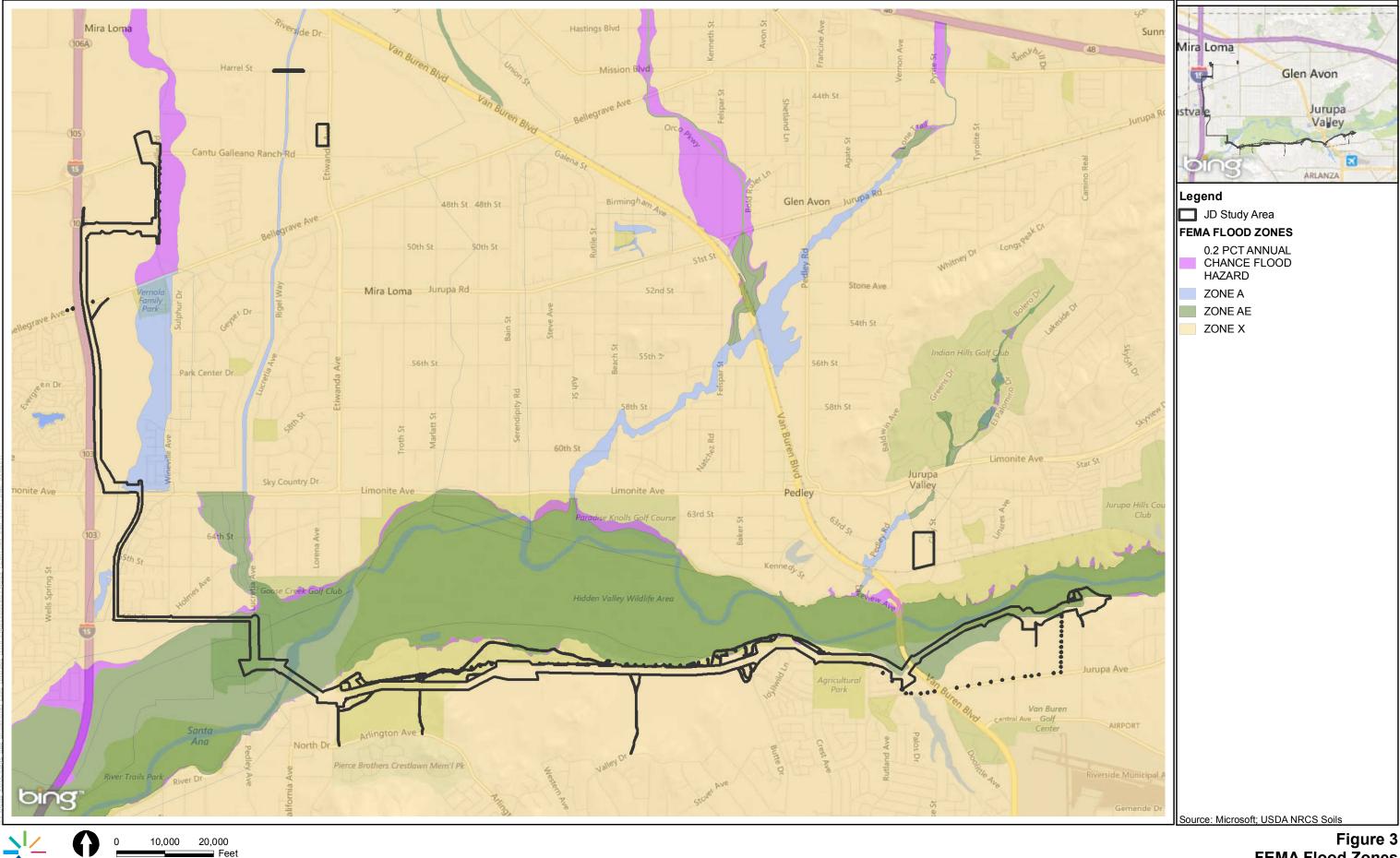




Figure 3, Sheet 5 of 5 Project Footprint Riverside Transmission Reliability Project



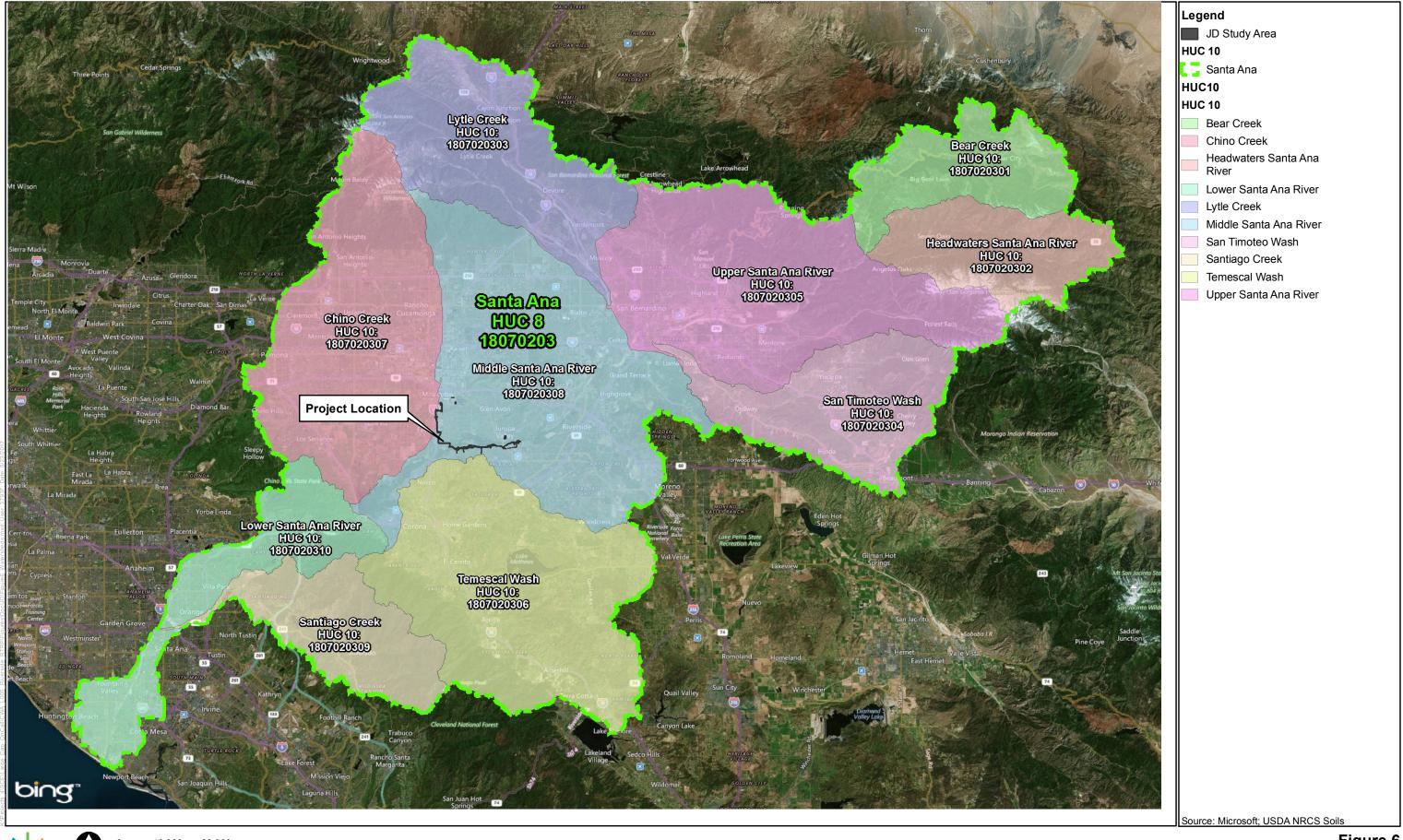
1) 1:33,043

Ň

FEMA Flood Zones Riverside Transmission Reliability Project

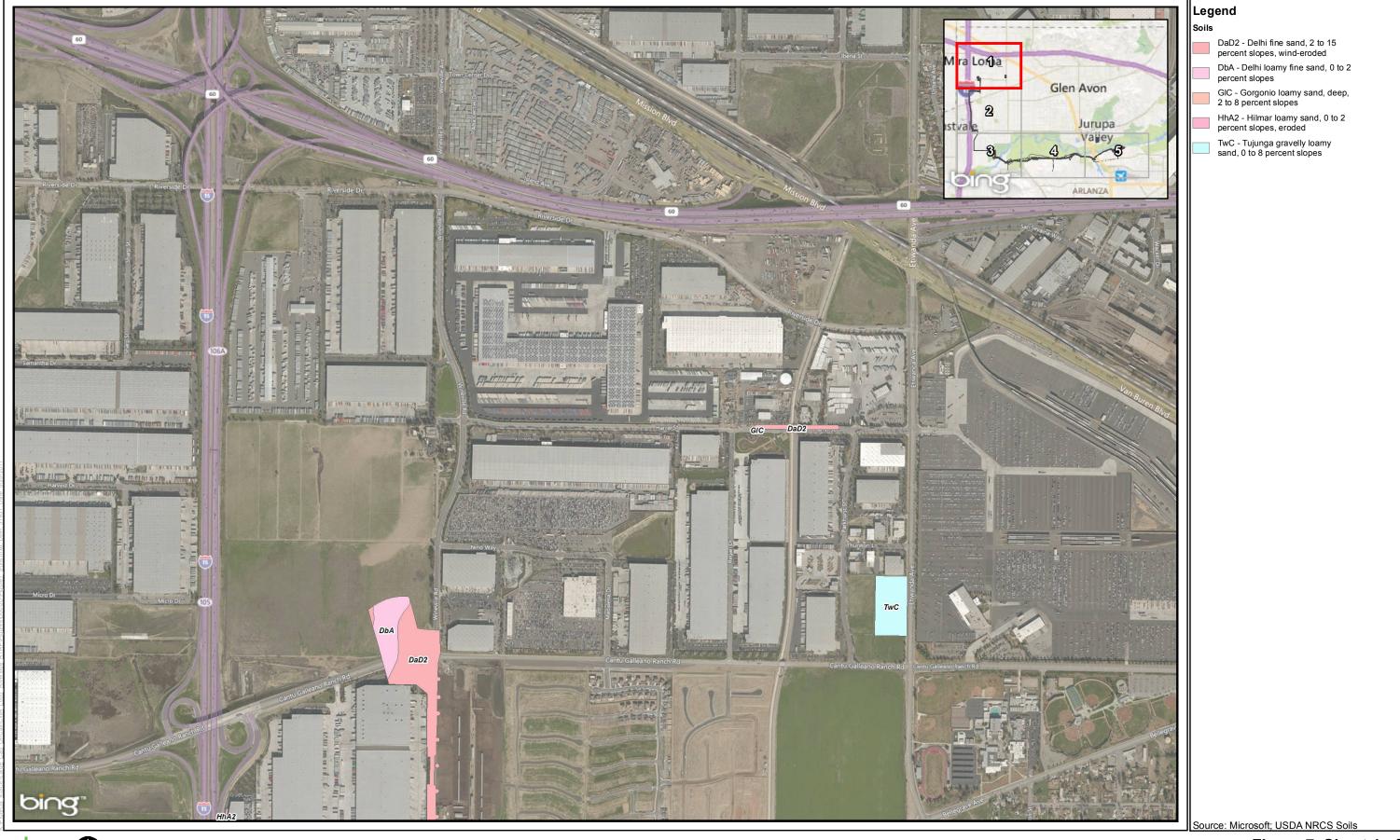


CF N 0 10,000 20,000 1:33,043 Feet Figure 5 Hydrography and Wetlands Riverside Transmission Reliability Project

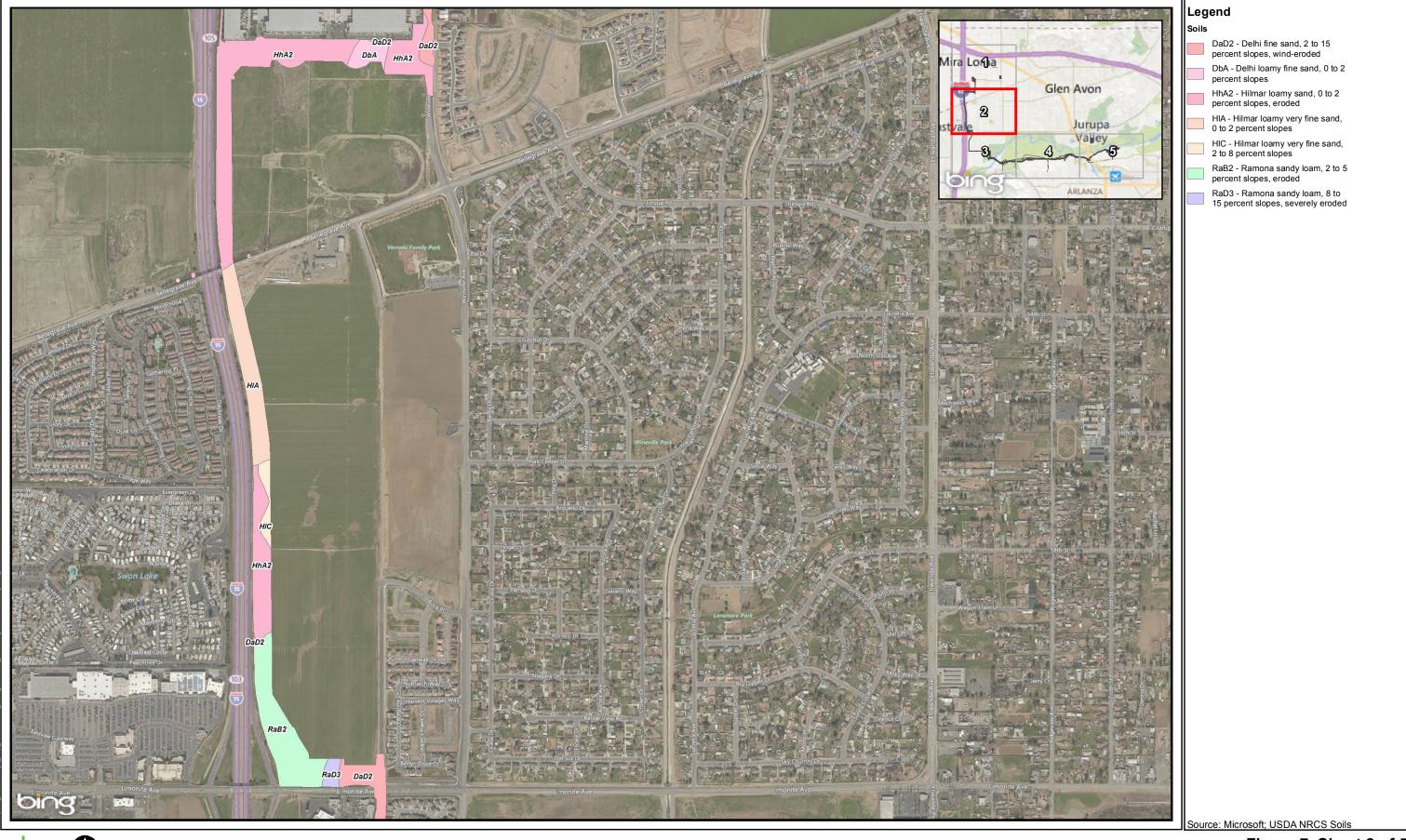


CF N 0 10,000 20,000 1:400,000 Feet

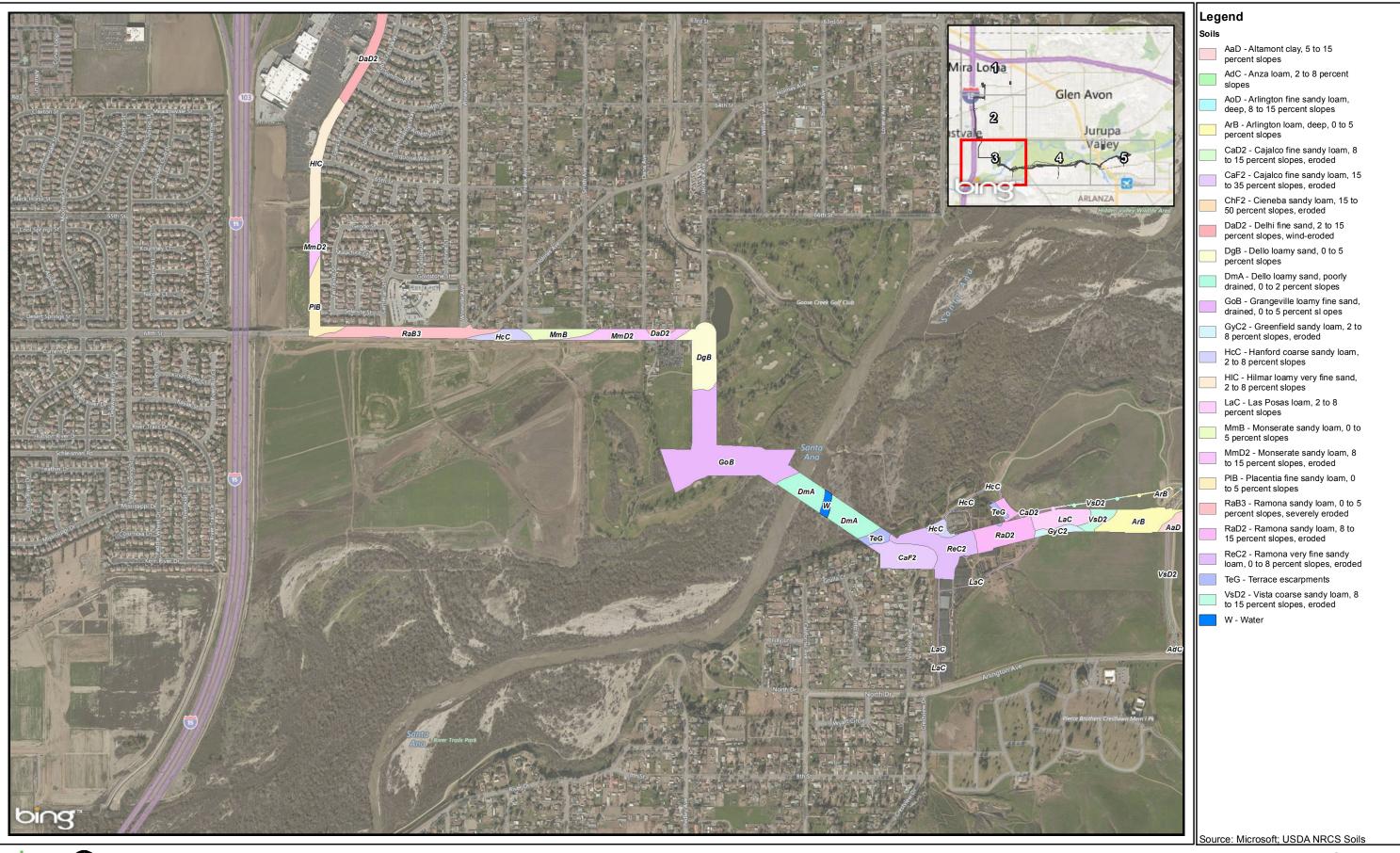
Figure 6 Watersheds Riverside Transmission Reliability Project



CF N 0 10,000 20,000 1:12,000 Feet Figure 7, Sheet 1 of 5 Soils Riverside Transmission Reliability Project



CFN 0 10,000 20,000 1:12,000 Feet Figure 7, Sheet 2 of 5 Soils Riverside Transmission Reliability Project



10,000 20,000 0 Feet Ν 1:12,000

Figure 7, Sheet 3 of 5 Soils **Riverside Transmission Reliability Project**

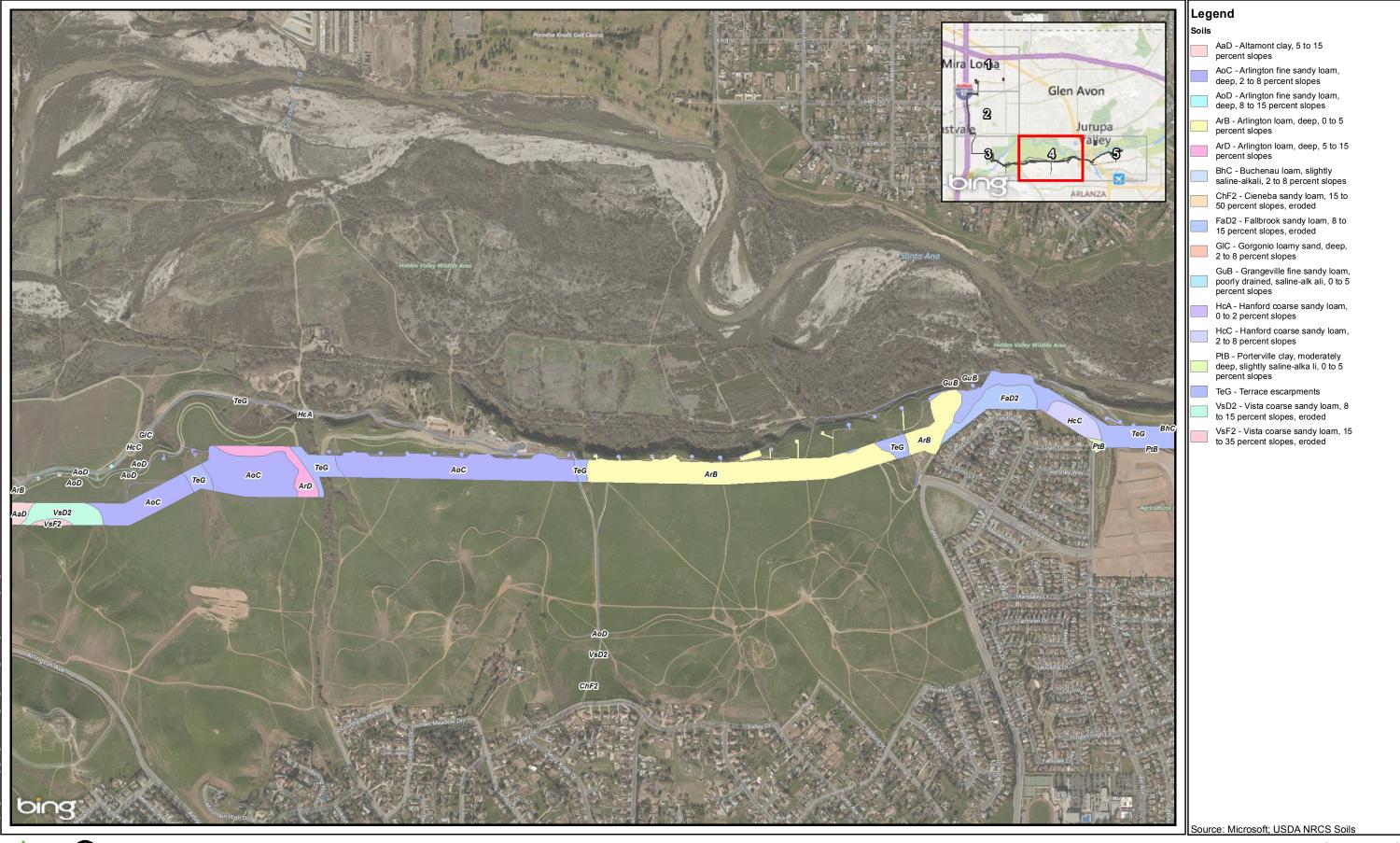




Figure 7, Sheet 4 of 5 Soils Riverside Transmission Reliability Project

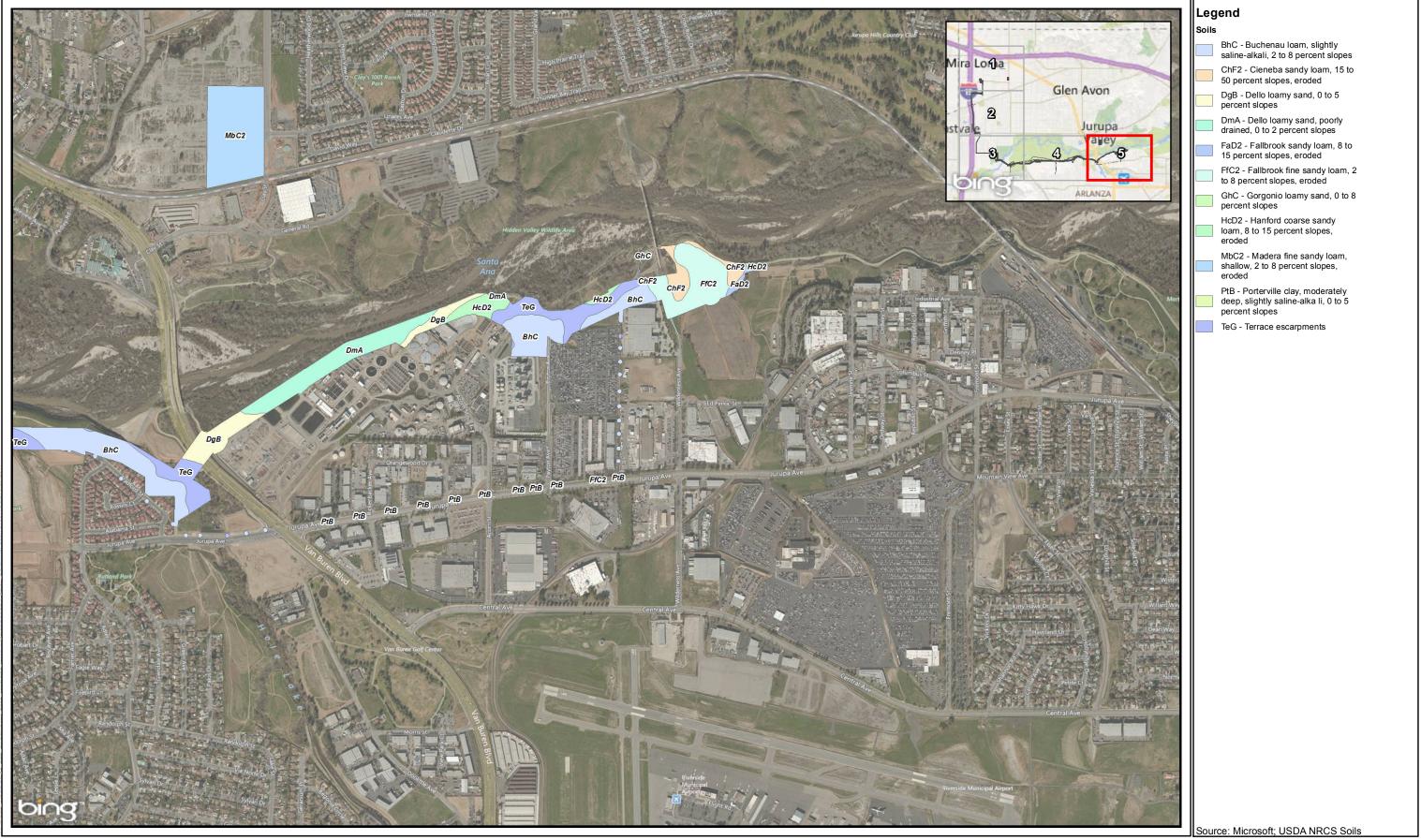
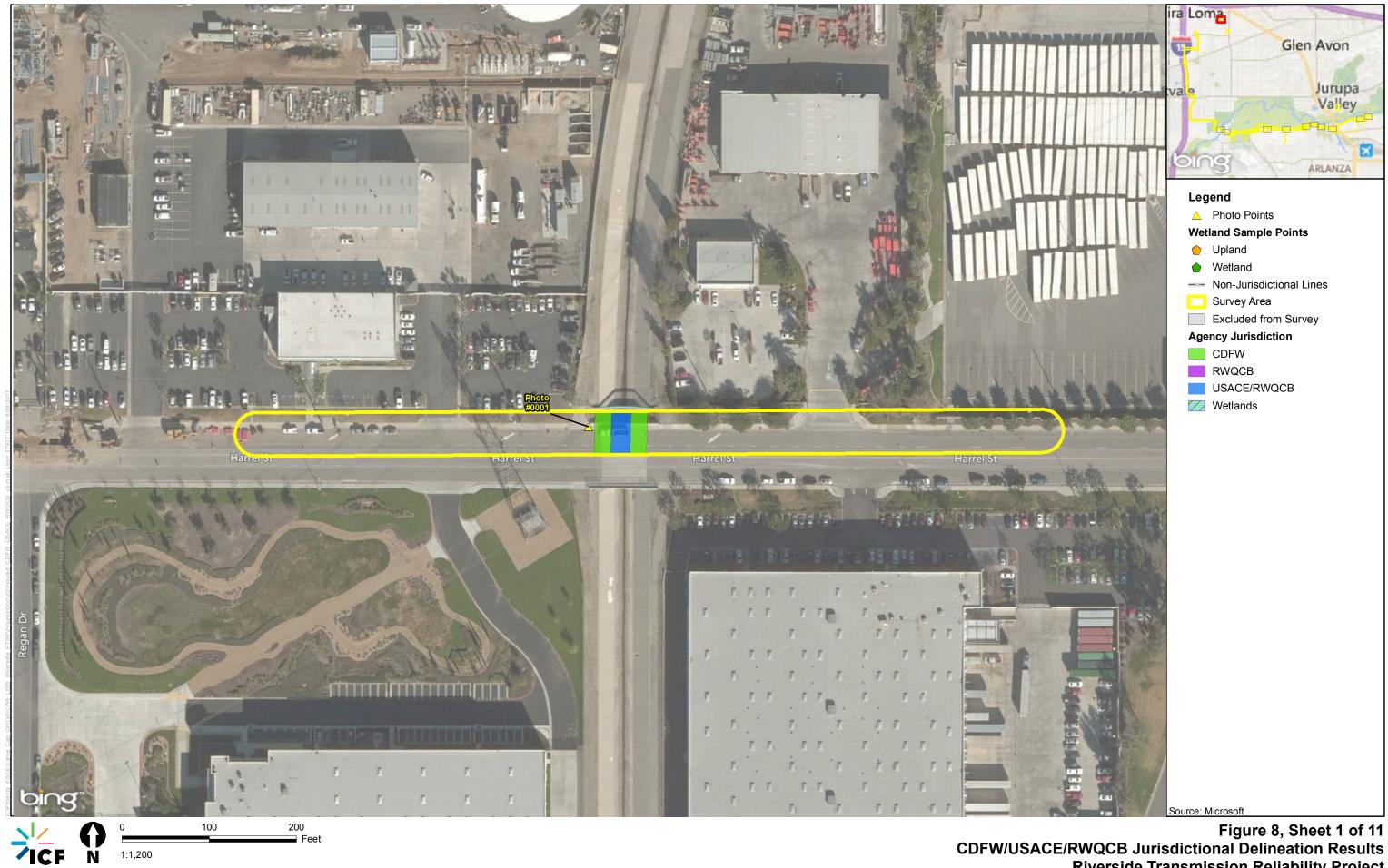




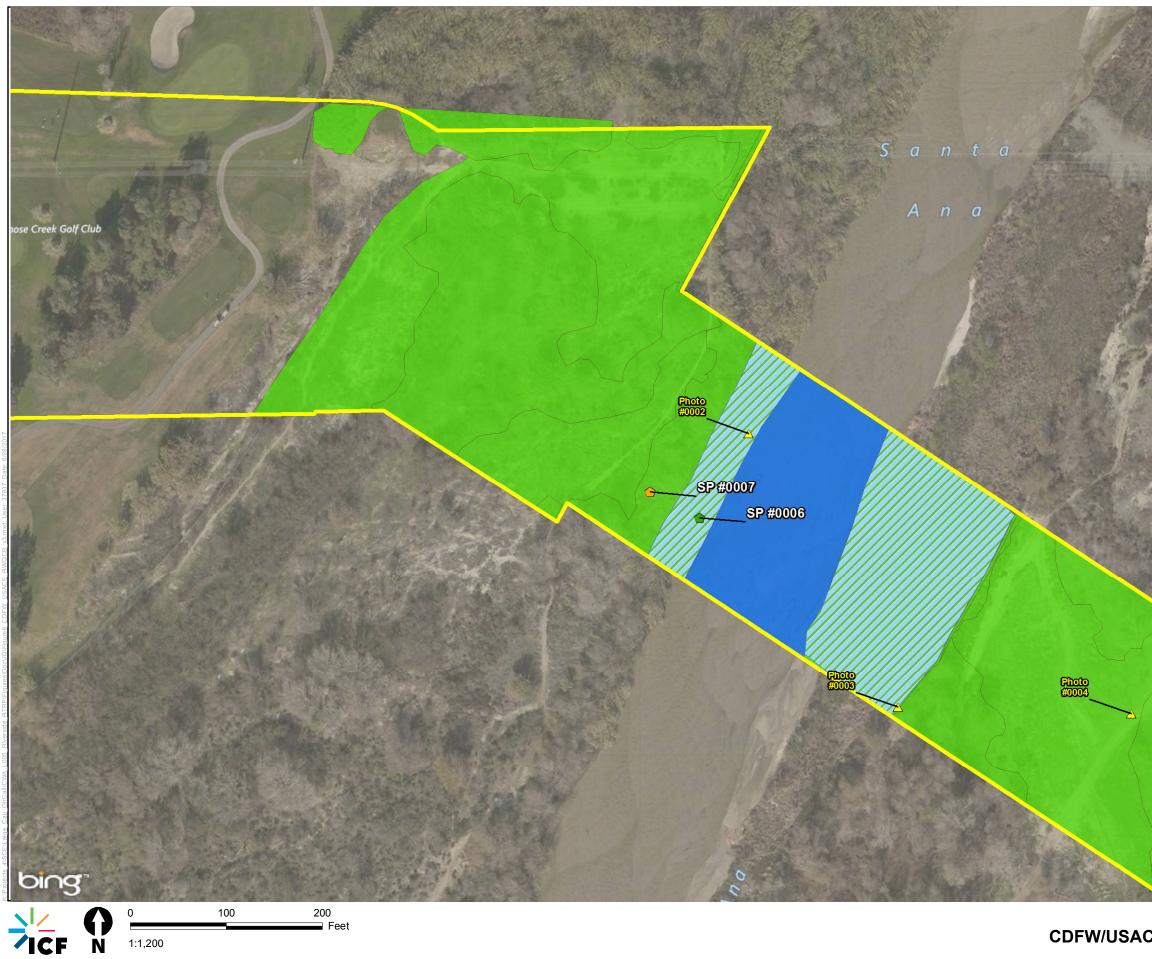
Figure 7, Sheet 5 of 5 Soils Riverside Transmission Reliability Project

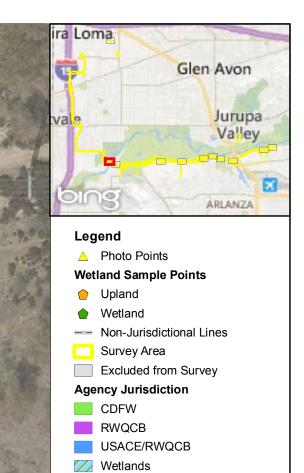


1:1,200

CDFW/USACE/RWQCB Jurisdictional Delineation Results **Riverside Transmission Reliability Project**

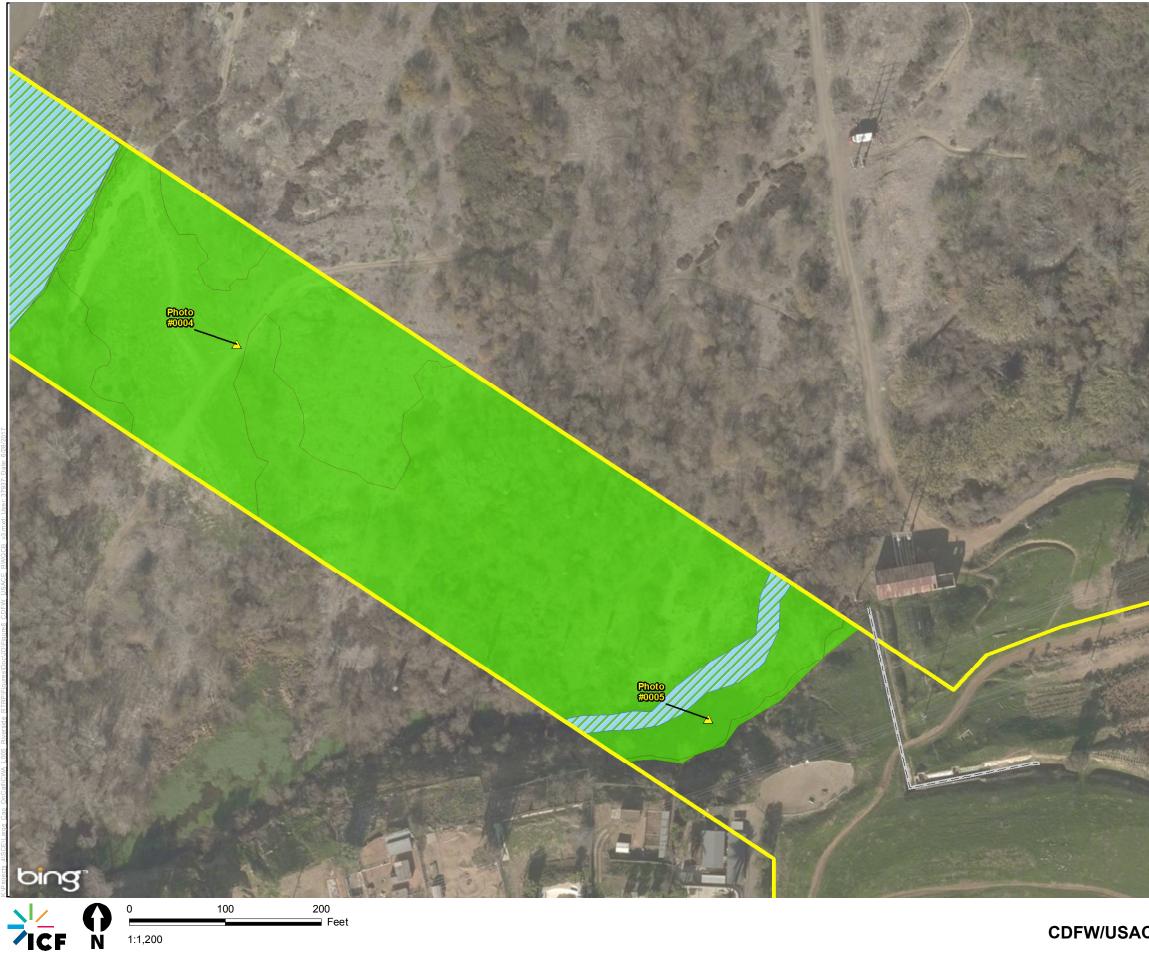
Legend			
\triangle	Photo Points		
Wet	land Sample Points		
\bigcirc	Upland		
	Wetland		
	Non-Jurisdictional Lines		
	Survey Area		
	Excluded from Survey		
Age	ncy Jurisdiction		
	CDFW		
	RWQCB		
	USACE/RWQCB		
	Wetlands		

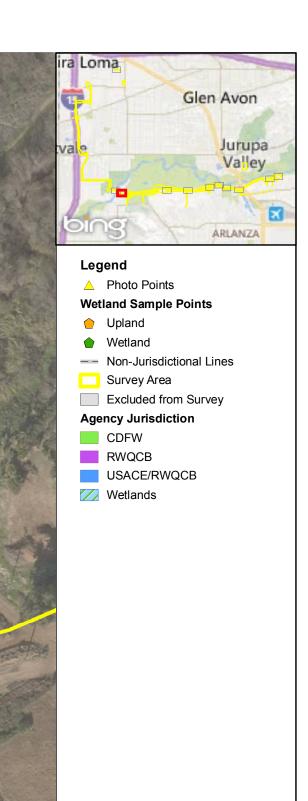




Source: Microsoft

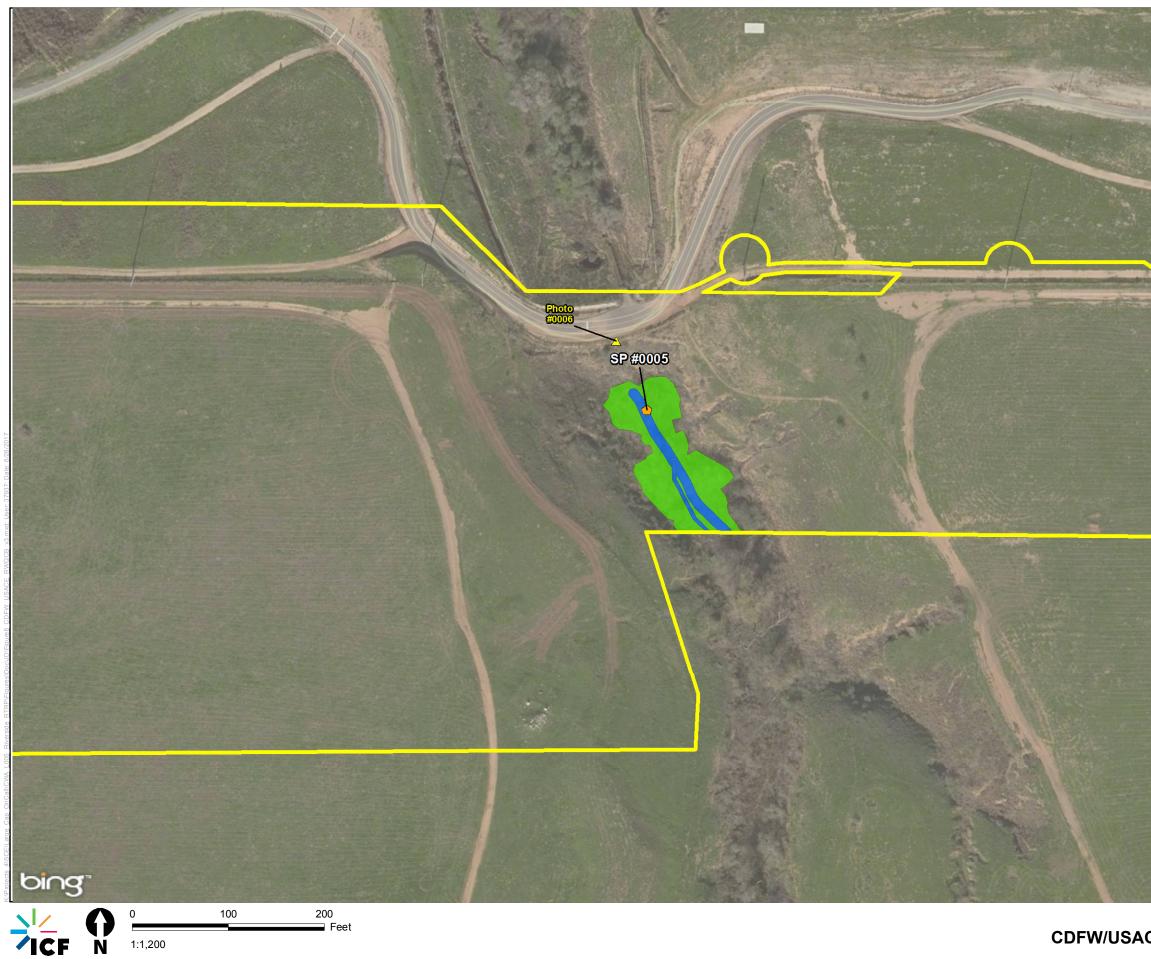
Figure 8, Sheet 2 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project





Source: Microsoft

Figure 8, Sheet 3 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project





Legend ▲ Photo Points

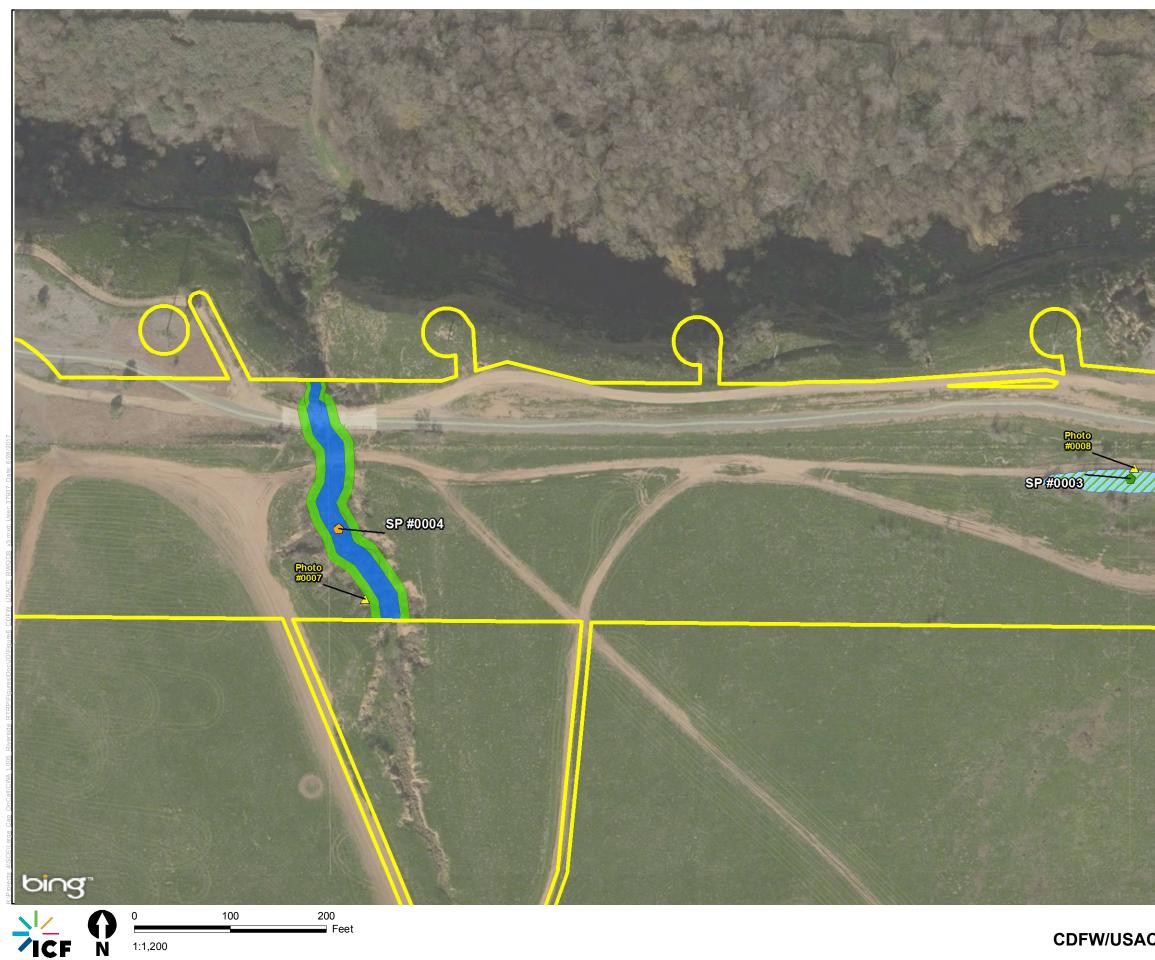
Wetland Sample Points Upland Wetland Non-Jurisdictional Lines Survey Area Excluded from Survey Agency Jurisdiction CDFW RWQCB

USACE/RWQCB

💋 Wetlands

Source: Microsoft

Figure 8, Sheet 4 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project



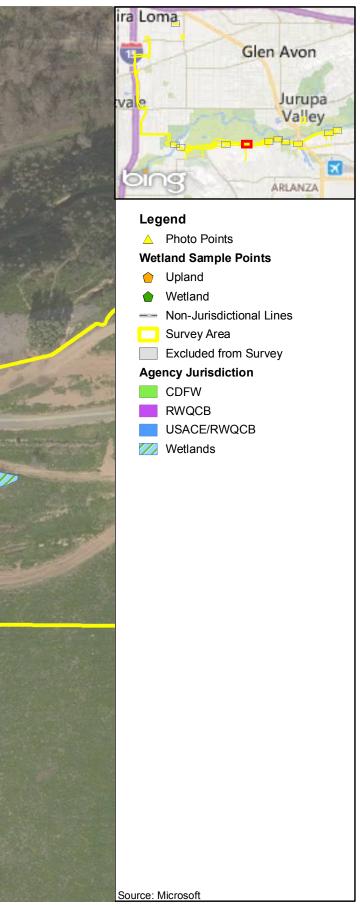
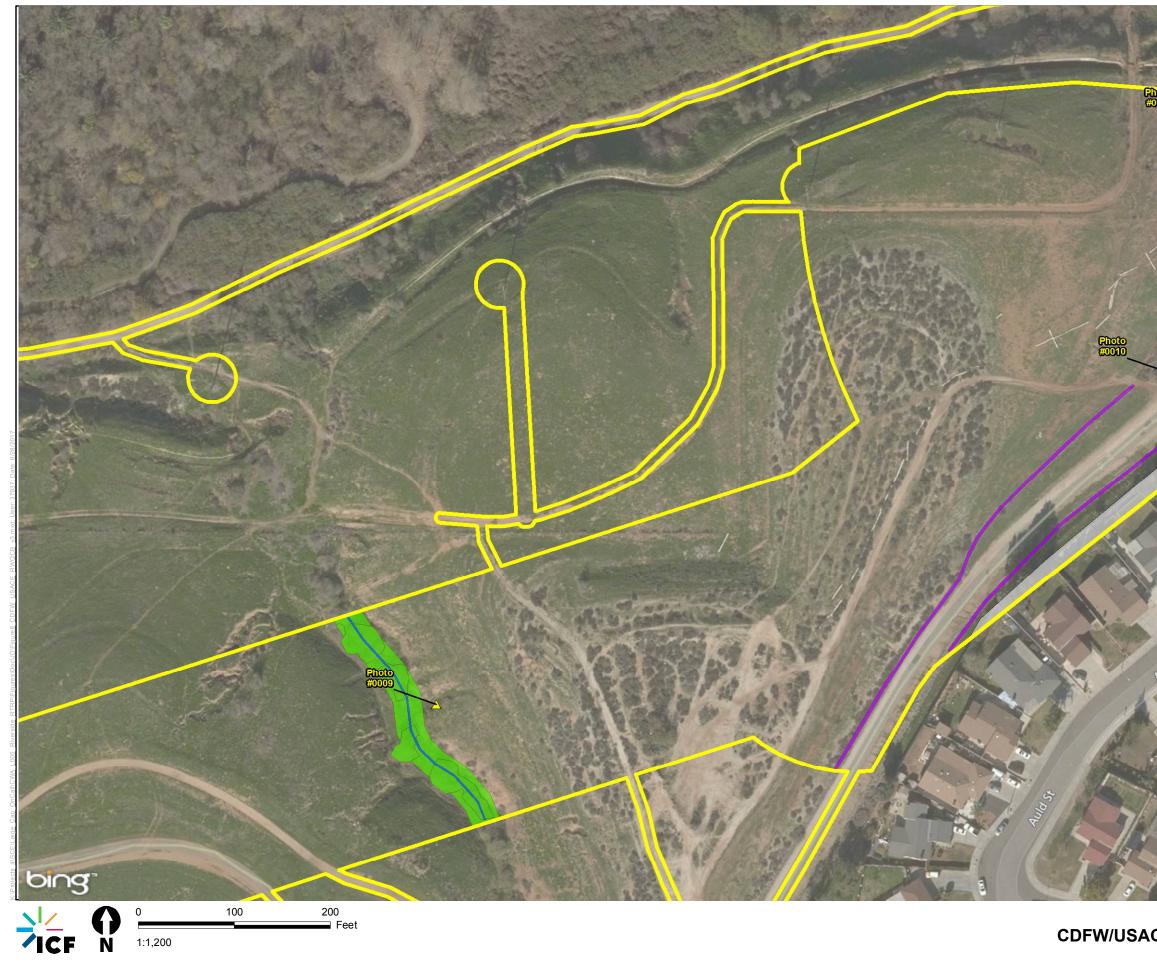


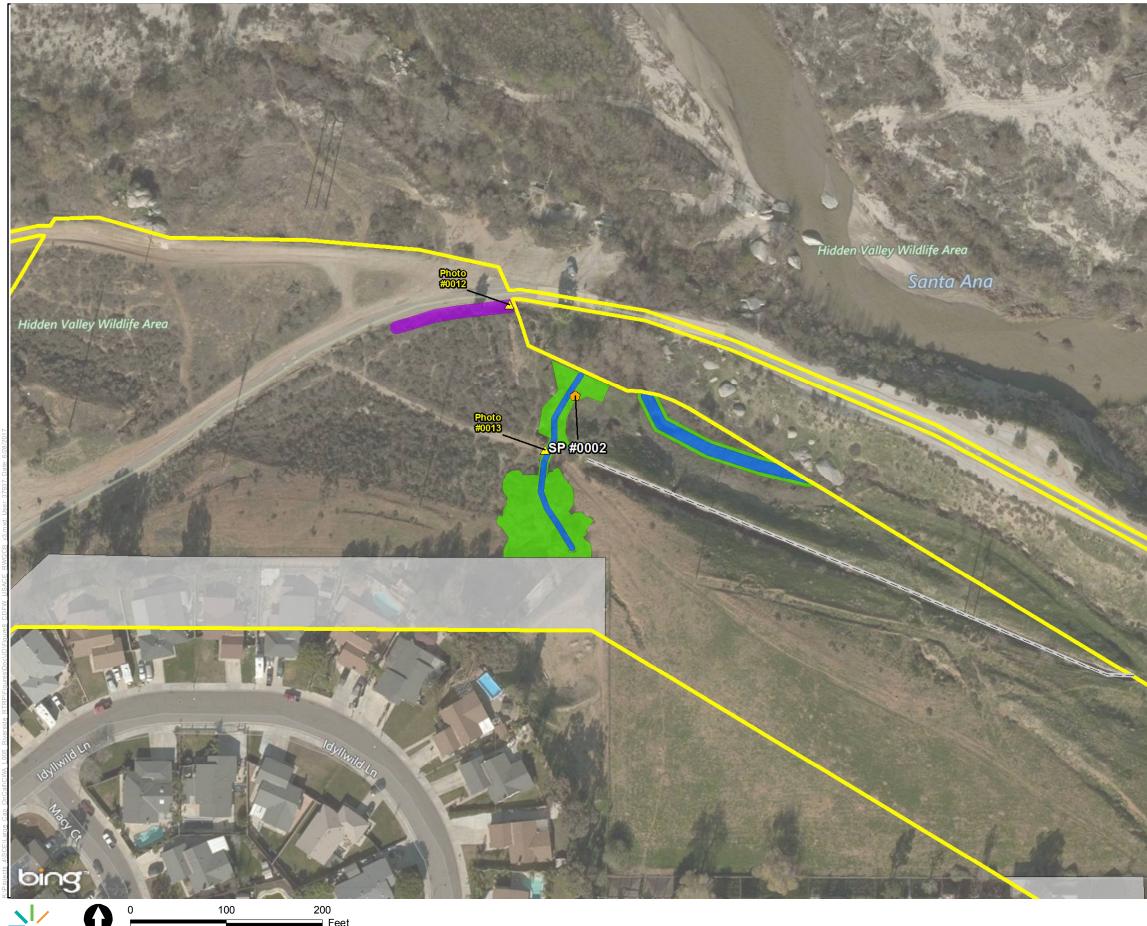
Figure 8, Sheet 5 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project





Source: Microsoft

Figure 8, Sheet 6 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project



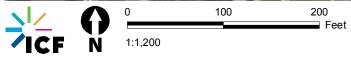


Figure 8, Sheet 7 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project



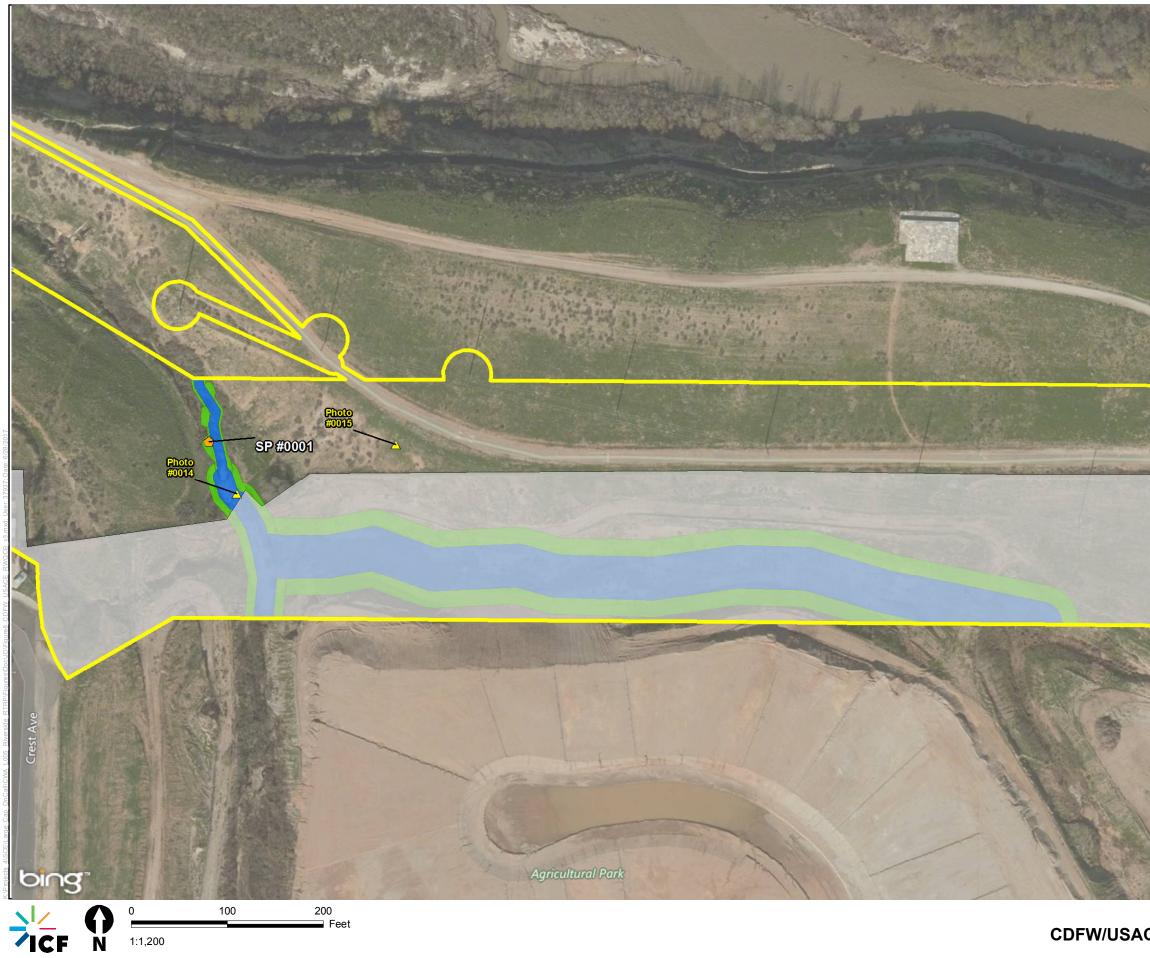
Legend ▲ Photo Points

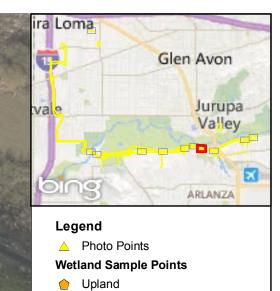
Wetland Sample Points

wetland Sample Points			
\bigcirc	Upland		
	Wetland		
	Non-Jurisdictional Lines		
	Survey Area		
	Excluded from Survey		
Agency Jurisdiction			
	CDFW		
	RWQCB		
	USACE/RWQCB		

💋 Wetlands

Source: Microsoft

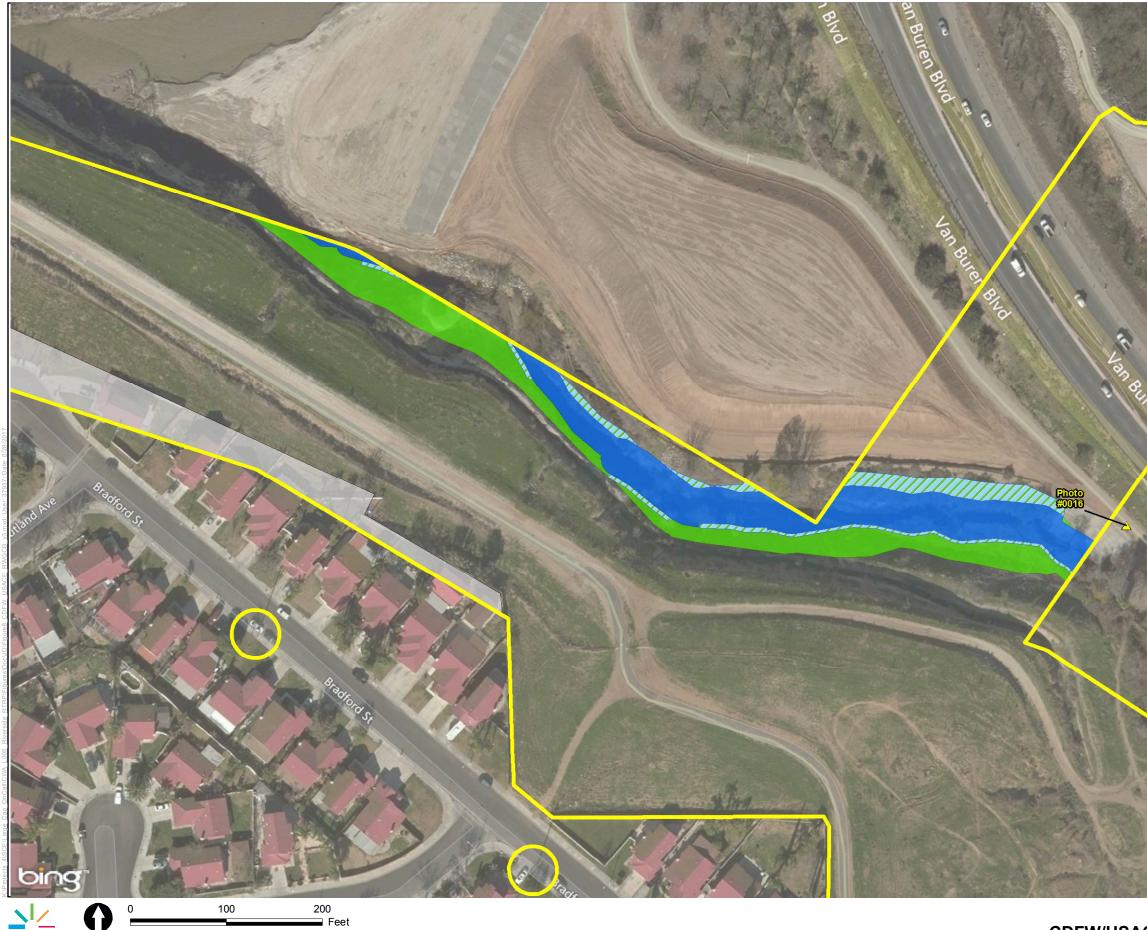


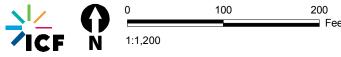


<u> </u>	opialia
	Wetland
	Non-Jurisdictional Lines
	Survey Area
	Excluded from Survey
Age	ncy Jurisdiction
	CDFW
	RWQCB
	USACE/RWQCB
	Wetlands

Source: Microsoft

Figure 8, Sheet 8 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project





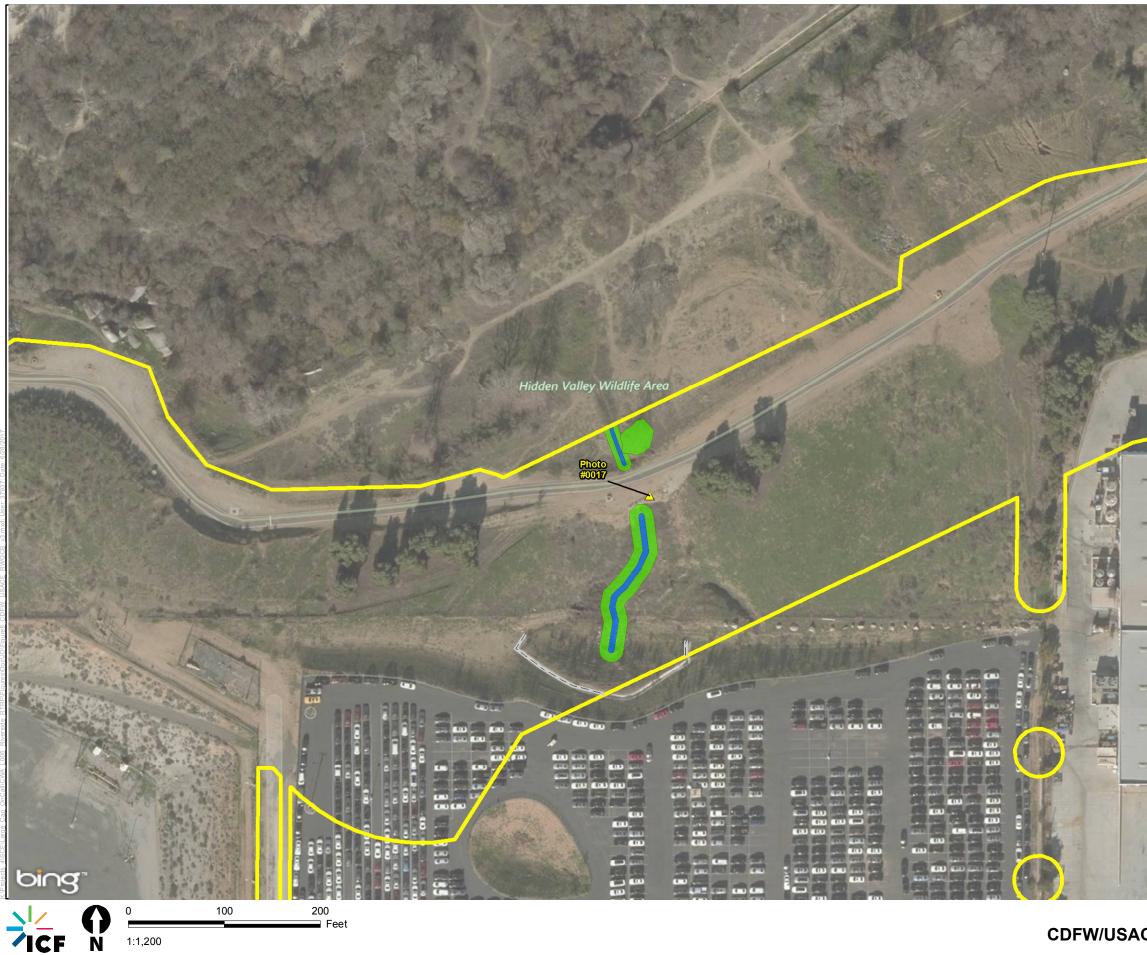


Legend

\triangle	Photo Points		
Wet	Wetland Sample Points		
	Upland		
	Wetland		
	Non-Jurisdictional Lines		
	Survey Area		
	Excluded from Survey		
Age	ncy Jurisdiction		
	CDFW		
	RWQCB		
	USACE/RWQCB		
	Wetlands		

Source: Microsoft

Figure 8, Sheet 9 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project





Legend ▲ Photo Points Wetland Sample Points

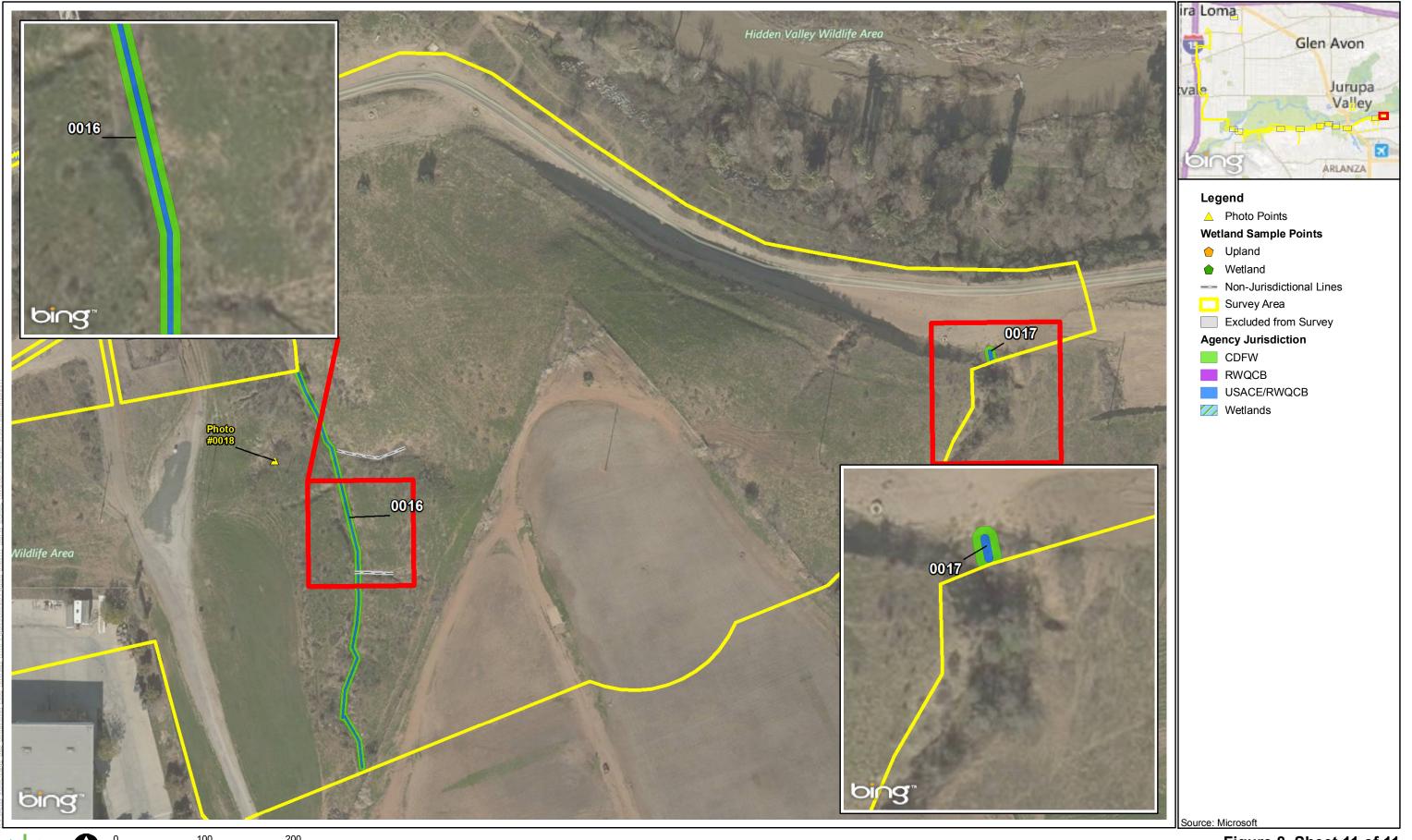
	Upland	
	Wetland	
	Non-Jurisdictional Lines	
	Survey Area	
	Excluded from Survey	
Agency Jurisdiction		
	CDFW	
	RWQCB	

USACE/RWQCB

💋 Wetlands

Source: Microsoft

Figure 8, Sheet 10 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results Riverside Transmission Reliability Project



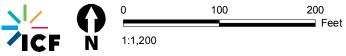


Figure 8, Sheet 11 of 11 CDFW/USACE/RWQCB Jurisdictional Delineation Results **Riverside Transmission Reliability Project**

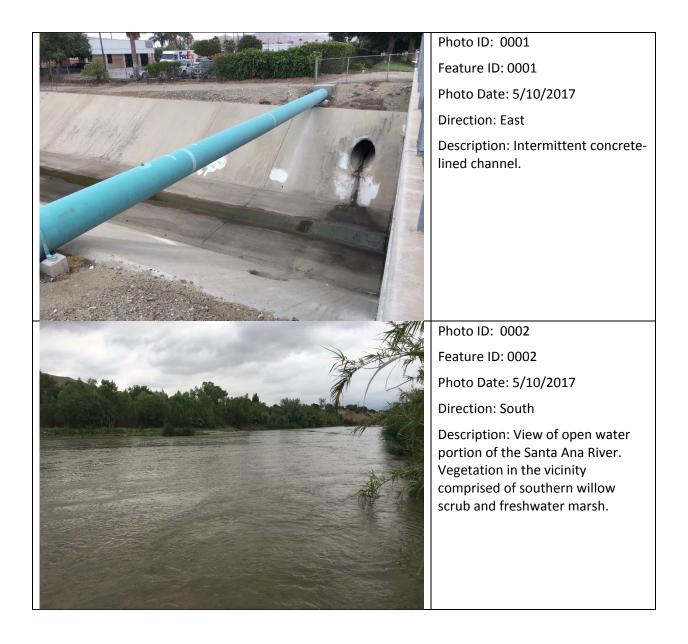


	Photo ID: 0003
	Feature ID: 0002
	Photo Date: 5/11/2017
The Martine War and the second	Direction: North
	Description: Perennial stream surrounded by freshwater marsh, within the OHWM of the Santa Ana River.
Ŧ	Photo ID: 0004
and the second	Feature ID: 0002
	Photo Date: 5/11/2017
	Direction: East
	Description: View of the floodplain of the Santa Ana River. Soils are primarily sandy and vegetated with nonnative grasses, but also intermixed with southern willow scrub.

And Take States	Photo ID: 0005
	Feature ID: 0002
	Photo Date: 5/10/2017
	Direction: Northwest
	Description: Wetland area within drainage of the Santa Ana River floodplain. Dominated by hydrophytic vegetation, including southern cattail (<i>Typha</i> <i>domingensis</i> , OBL), wild grape (<i>Vitis girdiana</i> , FAC), black willow (<i>Salix goodingii</i> , FACW), and giant reed (<i>Arundo donax</i> , FACW). Drainage inundated during site visit.
	Photo ID: 0006
348.	Feature ID: 0003 Photo Date: 5/10/2017
the second secon	Direction: South
	Description: View of ephemeral drainage and riparian woodland.

The BAIL	Photo ID: 0007
A CONTRACT OF A	Feature ID: 0004
	Photo Date: 5/11/2017
	Direction: North
	Description: Ephemeral stream surrounded by southern willow scrub.
	Photo ID: 0008
	Feature ID: 0005
	Photo Date: 5/11/2017
	Direction: West
	Description: Depressional area that ponds seasonally. Soil cracks observed along with mulefat scrub vegetation.
A STATE AND A STAT	

	Photo ID: 0009
The state of the second s	Feature ID: 0006
	Photo Date: 5/11/2017
	Direction: West
	Description: Ephemeral stream surrounded by nonnative grasses and riparian scrub dominated by Mexican elderberry (<i>Sambucus</i> <i>nigra</i> , FAC).
	Photo ID: 0010
and the second sec	Feature ID: 0009
	Photo Date: 5/10/2017
	Direction: North
	Description: Ephemeral drainage surrounded by nonnative vegetation, including black mustard (NL), summer mustard (NL), tree tobacco (FAC), and black elderberry (FAC).

2000	Photo ID: 0011
	Feature ID: Non-jurisdictional
The second se	Photo Date: 5/10/2017
The second s	Direction: North
	Description: Black pipe appears to convey the ephemeral flows from Feature 0009 to the Santa Ana River. No OHWM indicators or TOB was observed.
	Photo ID: 0012
	Feature ID: 0010
	Photo Date: 5/11/2017
	Direction: West
	Description: Ephemeral armored riprap ditch, anthropogenically disturbed.

MOY MADA	and the state of the	Photo ID: 0013
	Re-ally Male	Feature ID: 0011
		Photo Date: 5/11/2017
	A Company and the second	Direction: Northeast
		Description: Ephemeral stream surrounded by southern willow scrub.
	AND IN THE REAL PROPERTY OF	
CAS ALLAND		
Contraction of the second	Mar and to be a first of	Photo ID: 0014
She i far I have	A Contractory	Feature ID: 0012
		Photo Date: 5/11/2017
		Direction: Northwest
		Description: Looking downstream at ephemeral stream surrounded by mule fat scrub.
	A JOHN	
in such is with		
and the second s	and the state of the	

	Photo ID: 0015
I A A A A A A A A A A A A A A A A A A A	Feature ID: 0012 and 0013
	Photo Date: 5/11/2017
the second second	Direction: Southwest
and the second s	Description: Looking at confluence
	of two ephemeral streams. Streams occur within an active
	construction area. The stream has
	been anthropogenically disturbed
	by construction including, the
	installation of water quality basins.
A Silver	Photo ID: 0016
A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWN	Feature ID: Feature 0014
	Photo Date: August 10, 2016
	Direction: West
	Description: View of the perennial
	channel from TOB.
SAN OFFICE A CALLER SAN AND AND AND AND AND AND AND AND AND A	
and the second	

	Photo ID: 0017
	Feature ID: 0015
	Photo Date: 5/10/2017
	Direction: South
	Description: Ephemeral stream surrounded by nonnative grassland. Dominated by dense black mustard (<i>Brassica nigra</i>).
	Photo ID: 0018
	Feature ID: 0016
	Photo Date: 5/10/2017
Print Print in the second s	Direction: North
	Description: Ephemeral stream surrounded by nonnative grassland. Vegetation within the channel comprised of nonnative species, including tree tobacco (<i>Nicotana glauca</i> , FAC) and castor bean (<i>Ricinus communis</i> , FACU).

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site:	City/County: Kive/Side County Sampling Date: 5/18/17
Investigator(s): <u>M.F.O.(es</u> , <u>D.M.iller</u> Landform (hillslope, terrace, etc.): <u>draup.age</u>	Section, Township, Range: Local relief (concave, convex, none): <u>NO Ne</u> Slope (%): <u>≺\</u> : <u>33.96/68757</u> Long: <u>12.47375878</u> Datum: NWI classification:
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> signific Are Vegetation <u> </u>	antly disturbed? Are "Normal Circumstances" present? Yes X. No
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Yes No	within a Wetland? Yes No

VEGETATION - Use scientific names of plants.

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 39	<u>% Cover Species? Status</u>	Number of Dominant Species
1N/A		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3.		Species Across All Strata: (B)
4		Description of Development Crossler
	= Total Cover	Percent of Dominant Species 75 (A/B)
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	15 Y FARW	Prevalence Index worksheet:
1. Baacharis Salicitalia	- D V FACU	Total % Cover of: Multiply by:
2. RICCIPUS COMMUNIS		
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
	<u>35</u> = Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)		UPL species x 5 =
1. <u>fols pozon, monspeliensis</u>	4 Y FACW	Column Totals: (A) (B)
2. Brassica pigra	1 N UPL	
3. Conium Maculatin	3 V Arw	Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
4		X Dominance Test is >50%
5		Prevalence Index is ≤3.0 ¹
6		
7		Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8		Problematic Hydrophytic Vegetation ¹ (Explain)
	= Total Cover	
Woody Vine Stratum (Plot size:)		1. It stores of buddle cell and wolland budgelony must
1N/A		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		
	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum 90 % Cov	er of Biotic Crust	Vegetation Xaa X
% Bare Ground in Herb Stratum 70 % Cov	er of Biotic Crust	Present? Yes No
Remarks:		
· · ·		

SOIL

iches)	Color (moist)	%	<u>Redox Features</u> Color (moist) % Type ¹	Loc ² T	ovturo Deserve
0-1	10YR 3/4			· · · · · · · · · · · · · · · · · · ·	extureRemarks
1-8	104R 4/4	<u>100</u> 100			0200
					and
3-16	10YR 3/4	60 _			anysand
3-16	104 R 4/4	<u> </u>	40-	8	sand
	·······				
······································	<u> </u>				
	·				
ре: С=Сог	ncentration, D=Deple	tion, RM=Re	educed Matrix, CS=Covered or Coated	Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
iric Soil in	dicators: (Applicat	ole to all LR	Rs, unless otherwise noted.)		dicators for Problematic Hydric Soils ³ :
Histosol (A	,		Sandy Redox (S5)		_ 1 cm Muck (A9) (LRR C)
	pedon (A2)		Stripped Matrix (S6)		_ 2 cm Muck (A10) (LRR B)
Black Hist			Loamy Mucky Mineral (F1)		_ Reduced Vertic (F18)
	Sulfide (A4) _ayers (A5) (LRR C)		Loamy Gleyed Matrix (F2)		Red Parent Material (TF2)
1 cm Muck	(A9) (LRR D)		Depleted Matrix (F3)	<u> </u>	Other (Explain in Remarks)
	R (A9) (LRR D) Below Dark Surface ('A11)	Redox Dark Surface (F6) Depleted Dark Surface (F7)		
	Surface (A12)	<u>AU</u>	Redox Depressions (F8)	3 In	diastars of hydrophytic vessions and
	cky Mineral (S1)		Vernal Pools (F9)		dicators of hydrophytic vegetation and wetland hydrology must be present,
	yed Matrix (S4)				unless disturbed or problematic.
trictive Lav	yer (if present):				
-					
ype:			-	Hvd	
уре:			- - -	Hyd	ric Soil Present? Yes No 🔀
ype: Depth (inche harks: ROLOGY and Hydro ary Indicato Surface Wa High Water Saturation (Water Marks	(logy indicators: ors (minimum of one ter (A1) Table (A2) A3) s (B1) (Nonriverine)	required; ch	eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)		Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
ype: Depth (inche larks: ROLOGY and Hydro ary Indicato Surface Wa High Water Saturation (, Vater Marks Sediment Do	(logy Indicators: ors (minimum of one iter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriv	required; ch	<u>eck all that apply)</u> Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livia		Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
ype: eepth (inche arks: arks: ROLOGY and Hydro ary Indicato Surface Wa digh Water Saturation (, Vater Marks Sediment De Drift Deposit	f logy Indicators: ors (minimum of one iter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriv ts (B3) (Nonriverine	required; ch	eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livia Presence of Reduced Iron (C4)	ng Roots (C3)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
ype: eepth (inche arks: arks: ROLOGY and Hydro ary Indicato Surface Wa tigh Water Saturation (, Vater Marks Sediment De orift Deposition furface Soil	f logy Indicators: ors (minimum of one iter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriv ts (B3) (Nonriverine Cracks (B6)	required; ch erine)	eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livia Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	ng Roots (C3)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C
ype: eepth (inche arks: ROLOGY and Hydro and Hydro ary Indicato Surface Wa High Water Saturation (Vater Marks Sediment De Drift Deposit Curface Soll Surface Soll Surface Soll	f logy Indicators: ors (minimum of one ter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriv ts (B3) (Nonriverine Cracks (B6) /isible on Aerial Imag	required; ch erine)	eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livia Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7)	ng Roots (C3)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
ype: lepth (inche arks: arks: ROLOGY and Hydro and Hydro ary Indicato Surface Wa ligh Water Saturation (J Vater Marks Bediment De vifit Deposit urface Soil oundation V Jater-Staine	es): logy Indicators: ors (minimum of one ter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriv ts (B3) (Nonriverine Cracks (B6) /isible on Aerial Imag ed Leaves (B9)	required; ch erine)	eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livia Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	ng Roots (C3)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C
ype: eepth (inche arks: arks: ROLOGY and Hydro ary Indicato Surface Wa ligh Water Saturation (Vater Marks Sediment De orift Deposit ourface Soil ourface Soil oundation V /ater-Staine Observatio	(logy indicators: ors (minimum of one iter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriv ts (B3) (Nonriverine Cracks (B6) /isible on Aerial Imag ed Leaves (B9) ons:	required; ch erine)) jery (87)	eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livia Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)	ng Roots (C3)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
ype: Pepth (inche arks: ROLOGY and Hydro and Hydro ary Indicato Surface Wa tigh Water Saturation (Vater Marks Sediment Do orift Deposit Surface Soil bundation V Vater-Staine Observatio Se Water Pr	All and the set of th	erine)) jery (B7)	eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)	ng Roots (C3)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
ype: eepth (inche arks: ROLOGY and Hydro and Hydro ary Indicato Surface Wa High Water Saturation (Vater Marks Sediment De Drift Deposit Curface Soll Surface Soll Surface Soll	All content of the second sec	erine)) jery (B7) No No	eck all that apply)	ng Roots (C3) bils (C6)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Crayfish Burrows (B10) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)
ype: eepth (inche arks: ROLOGY and Hydro and Hydro ary Indicato Surface Wa tigh Water Saturation (Vater Marks Sediment De orift Deposit surface Soil bundation V Vater-Staine Observatio ce Water Pre- Table Presention Presention Presention Constant Presention	A Iogy Indicators: ors (minimum of one ter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) Cracks (B6) /isible on Aerial Imaged Leaves (B9) ons: resent? Yes _ sent? Yes _ nt? Yes _	erine)) jery (B7) No No	eck all that apply)	ng Roots (C3) bils (C6)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
ype: eepth (inche arks: ROLOGY and Hydro ary Indicato Surface Wa digh Water Saturation (, Vater Marks Sediment De orift Deposit surface Soil oundation V vater-Staine Observation water-Staine Observation water Presented and Presented attion Presented attio	f logy indicators: ors (minimum of one) ter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) cracks (B6) (/isible on Aerial Imaged Leaves (B9) ons: resent? Yes sent? Yes nt? Yes y fringe) Yes	erine)) lery (B7) No No	eck all that apply)	ng Roots (C3) bils (C6) Wetland Hyd	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5) rology Present? Yes X No
ype: eepth (inche arearks: ROLOGY and Hydro ary Indicato Surface Wa High Water Saturation (Water Marks Sediment De Orift Deposit Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil	A Iogy Indicators: prs (minimum of one) ter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) Cracks (B6) Visible on Aerial Imaged Leaves (B9) ons: resent? Yes	erine)) jery (B7) No No No ge, monitorin	eck all that apply)	ng Roots (C3) bils (C6) Wetland Hyd ions), if availat	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5) rology Present? Yes No
ype: eepth (inche arearks: ROLOGY and Hydro ary Indicato Surface Wa High Water Saturation (Water Marks Sediment De Orift Deposit Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil Surface Soil	A Iogy Indicators: prs (minimum of one) ter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) Cracks (B6) Visible on Aerial Imaged Leaves (B9) ons: resent? Yes	erine)) jery (B7) No No No ge, monitorin	eck all that apply)	ng Roots (C3) bils (C6) Wetland Hyd ions), if availat	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5) rology Present? Yes X No

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 10 RTPP CUSA 005	City/County: Rwerside	Sampling Date: <u>5/1/3/11</u>
Applicant/Owner: SCC	State: CA	Sampling Point:
Investigator(s): M. Flo(es B Miller	Section, Township, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):γυ	
Subregion (LRR):	_ Lat: <u>33.962_99471</u> Long: <u>-117.474</u>	<u> 3723</u> Datum:
Soil Map Unit Name: Terrace escarpmente	NWI class	ification:
Are climatic / hydrologic conditions on the site typical for this Are Vegetation <u>り</u> , Soil <u>り</u> , or Hydrology <u>り</u> s Are Vegetation <u>り</u> , Soil <u>り</u> , or Hydrology <u>り</u> n SUMMARY OF FINDINGS – Attach site map	ignificantly disturbed? Are "Normal Circumstances aturally problematic? (If needed, explain any ans	" present? Yes No wers in Remarks.)
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No		

VEGETATION – Use scientific names of plants.

L

2.5	Absolute Dominant Indicator	Dominance Test worksheet:
1 (Plot size:)	<u>Cover</u> <u>Species?</u> <u>Status</u> <u>45</u> <u>Y</u> <u>FACW</u>	Number of Dominant Species (That Are OBL, FACW, or FAC: (A)
2 3		Total Number of Dominant Species Across All Strata:(B)
4	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
		Prevalence Index worksheet:
1		Total % Cover of: Multiply by:
		OBL species x 1 =
3		FACW species $00 \times 2 = 120$
4		FAC species 6 x 3 = 6
5	= Total Cover	FACU species $62 \times 4 = 248$
Herb Stratum (Plot size: <u>3</u>)		UPL species $5 \times 5 = 2S$
1. Brassica nigra	5 N LPL	Column Totals: 127 (A) 373 (B)
2. Conjum maculation	15 N FACW	
3. Bromus diandris	SZ V FACU	Prevalence Index = $B/A = 3.09$
1 · · · · · · · · · · · · · · · · · · ·		Hydrophytic Vegetation Indicators:
4. <u>Stephanomeria</u>	10 N FACU	- Dominance Test is >50%
5. <u>Arshum walgere</u>		Prevalence Index is ≤3.0 ¹
6		Morphological Adaptations ¹ (Provide supporting
7		data in Remarks or on a separate sheet)
8	<u> </u>	Problematic Hydrophytic Vegetation ¹ (Explain)
	85 = Total Cover	
Woody Vine Stratum (Plot size:)		¹ Indicators of hydric soil and wetland hydrology must
1		be present, unless disturbed or problematic.
2	= Total Cover	Hydrophytic
		Vegetation 🗸
% Bare Ground in Herb Stratum 152 % Cover	of Biotic Crust	Present? Yes No X
		l. & tottle Salit is a single
	f san do area	
mature tree douinstream	or compleances,	

SOIL

Sampling Point:	_Sp2
-----------------	------

Profile Desc Depth	Matrix		Redox Fe	eatures			
(inches)	Color (moist)			%Type1	Loc ²	Texture	Remarks
		ŕ					
		·				······ ·	
		· / _					
		/					
	/			······································			
						<u> </u>	
							·
·	1 and the second s						
		<u> </u>				<u> </u>	
/	/	. <u>.</u>					
Type: C=Cor	ncentration, D=Depl	etion. RM=Red	duced Matrix, CS=Co	vered or Coate	d Sand Grai	ns ² Loca	tion: PL=Pore Lining, M=Matrix.
lydric Soil In	dicators: (Applica	ble to all LRF	s, unless otherwise	e noted.)			or Problematic Hydric Soils ³ :
Histosol (Sandy Redox (S	-			•
	pedon (A2)		Stripped Matrix (•			ck (A9) (LRR C)
Black Hist			Coamy Mucky M				ck (A10) (LRR B)
	Sulfide (A4)		Loamy Gleyed N				Vertic (F18)
	Layers (A5) (LRR C	٠ ١	Depleted Matrix				ent Material (TF2) xplain in Remarks)
	k (A9) (LRR D)	, .	Redox Dark Surf				xpiain in Remarks)
	Below Dark Surface	(A11)	Depleted Dark S				
	k Surface (A12)		Redox Depressio	• •		³ Indicators of	hydrophytic vegetation and
	cky Mineral (S1)	-	Vernal Pools (F9				drology must be present,
	yed Matrix (S4)	-		/		•	urbed or problematic.
	yer (if present):			<u></u>			urbed or problematic.
Type:							
		·**-*****					×
Depth (inch						Livelate Cell De	esent? Yes NoX
amarke:		o channe Sandy	I due to ve , which is	eny deep : consiste			, not problematic
emarks: ກາ	o access int	o channe Sandy	d due to ve , which is	en deep : consiste			
emarks: ۲۱ S	o access int old appea r	o channe 1 Sandy	due to ve , which is	en deep : consiste			
emarks: ۲ ای DROLOG	D access int told appea Y Dogy Indicators:			en deep : consiste		slopea. HL SP-1	, not problematic
emarks: ۲ ۵ (DROLOG) etland Hydro imary Indicate	D access int told appea Y Diogy Indicators: prs (minimum of one		ck all that apply)			Slopea. H SP-1 <u>Seconda</u>	, not problematic
emarks: ۲ DROLOG etland Hydro imary Indicate _ Surface Wa	D access int to be appea Y Dogy Indicators: ors (minimum of one ater (A1)		ck all that apply) Salt Crust (B11)			Slopea. H SP-1 <u>Seconda</u> Wate	, not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine)
DROLOG	D access int off appea Y Dology Indicators: Drs (minimum of one ater (A1) Table (A2)		<u>ck all that apply)</u> Salt Crust (B11) Biotic Crust (B12	2)		Slopea. H SP-1 <u>Seconda</u> Wate	, not problematic
emarks: DROLOG etland Hydro mary Indicate Surface Wa High Water Saturation	D access int bld appea Y Dology Indicators: prs (minimum of one ater (A1) Table (A2) (A3)	e required; che	ck all that apply) Salt Crust (B11)	2)		Slo _f eea. H SP-1 <u>Seconda</u> Wate ZSedii	, not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine)
emarks: DROLOG etland Hydro imary Indicato Surface Wa High Water Saturation	D access int off appea Y Dology Indicators: Drs (minimum of one ater (A1) Table (A2)	e required; che	<u>ck all that apply)</u> Salt Crust (B11) Biotic Crust (B12	?) rates (B13)		Slo _p eea. H SP-(<u>Seconda</u> Wate Sedii Drift	, Not problematic <u>IV Indicators (2 or more required)</u> er Marks (B1) (Riverine) ment Deposits (B2) (Riverine)
emarks: DROLOG [*] etland Hydro mary Indicate Surface Wa High Water Saturation i Water Mark	D access int bld appea Y Dology Indicators: prs (minimum of one ater (A1) Table (A2) (A3)	e required; che	ck all that apply) Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebr	?) rates (B13) e Odor (C1)	, steep nt wi	Slo _p eea. +L SP-(<u>Seconda</u> Wate 	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
emarks: DROLOG [®] etland Hydro imary Indicate Surface Wa High Water Saturation I Water Mark Sediment D	D access int bld appea Y Dology Indicators: <u>prs (minimum of one</u> ater (A1) Table (A2) (A3) is (B1) (Nonriverine	e required; che e a) verine)	ck all that apply) Salt Crust (B11) Biotic Crust (B12 Aquatic Inverteb Hydrogen Sulfide	2) rates (B13) e Odor (C1) pheres along Liv	, steep nt wi	Slopea. H SP-(<u>Seconda</u> Wate Sediu Drift Drift C3) Dry-S	, Not problematic <u>ty Indicators (2 or more required)</u> er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2)
emarks: DROLOG etland Hydro imary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi	D access int bld appea Y Dology Indicators: prs (minimum of one ater (A1) Table (A2) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonri	e required; che e a) verine)	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizosp Presence of Red	2) rates (B13) e Odor (C1) pheres along Liv uced iron (C4)	y Steep	Slopea. H SP-(<u>Seconda</u> <u>Wate</u> <u>Sedin</u> Drift <u>Drift</u> C3) <u>Dry-S</u> <u>Crayf</u>	, Not problematic <u>ty Indicators (2 or more required)</u> er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) Tish Burrows (C8)
emarks: DROLOG etland Hydro imary Indicate Surface Wa High Water Saturation I Water Mark Sediment D Drift Deposi Surface Soi	D QCCESS int SUD AFFA Y Plogy Indicators: ors (minimum of one ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (B1) (Nonriverine Deposits (B2) (Nonriverine I Cracks (B6)	e required; che e) e) e) e)	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizosj Presence of Red Recent Iron Redu	2) rates (B13) e Odor (C1) pheres along Liv fuced fron (C4) uction in Tilled S	y Steep	Slopea. H SP-1 <u>Seconda</u> <u>Wate</u> <u>X</u> Sedia <u>Drift</u> <u>Drain</u> C3) <u>Dry-S</u> <u>C3</u>	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C6)
emarks: DROLOG etland Hydro imary Indicate Surface Wa High Water Saturation I Water Mark Sediment D Drift Deposi Surface Soi Inundation V	D QCCESS int D QCCESS int Dogy Indicators: <u>ors (minimum of one</u> ater (A1) Table (A2) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonri its (B3) (Nonriverine I Cracks (B6) Visible on Aerial Ima	e required; che e) e) e) e)	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7)	y Steep	Slopeea. +L SP-(<u>Secondar</u> Wate X-Sedin Drain C3) Dry-S C3) Dry-S C3 Satur Satur Shalk	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Dage Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (CS ow Aquitard (D3)
emarks: (DROLOG) etland Hydro imary Indicate Surface Wa High Water Saturation I Water Mark Sediment D Drift Deposi Surface Soi Inundation V Water-Stain	D QCCESS int D QCCESS int Dogy Indicators: <u>ors (minimum of one</u> ater (A1) Table (A2) (A3) (S (B1) (Nonriverine its (B3) (Nonriverine I Cracks (B6) Visible on Aerial Ima- ted Leaves (B9)	e required; che e) e) e) e)	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizosj Presence of Red Recent Iron Redu	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7)	y Steep	Slopeea. +L SP-(<u>Secondar</u> Wate X-Sedin Drain C3) Dry-S C3) Dry-S C3 Satur Satur Shalk	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C6)
emarks: DROLOG etland Hydro imary Indicato Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation N Water-Stain id Observati	D QCCESS int D QCCESS int Dology Indicators: <u>ors (minimum of one</u> ater (A1) Table (A2) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonriverine I Cracks (B6) Visible on Aerial Ima- ted Leaves (B9) ons:	e required; che e) verine) e) agery (B7)	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7) Remarks)	y Steep	Slopeea. +L SP-(<u>Secondar</u> Wate X-Sedin Drain C3) Dry-S C3) Dry-S C3 Satur Satur Shalk	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Dage Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (CS ow Aquitard (D3)
emarks: DROLOG DROLOG etland Hydro imary Indicate Surface Wa High Water Saturation I Water Mark Sediment D Drift Deposi Surface Soi Inundation V Water-Stain Id Observati face Water P	D QCCESS int bla gpf y plogy Indicators: prs (minimum of one ater (A1) Table (A2) (A3) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonriverine I Cracks (B6) Visible on Aerial Ima ted Leaves (B9) ons: Present? Yes	e required; che e) iverine) e) agery (B7)	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizosj Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7) Remarks)	y Steep	Slopeea. +L SP-(<u>Secondar</u> Wate X-Sedin Drain C3) Dry-S C3) Dry-S C3 Satur Satur Shalk	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Dage Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (CS ow Aquitard (D3)
emarks: DROLOG etland Hydro imary Indicate Surface Wa High Water Saturation I Water Mark Sediment D Drift Deposi Surface Soi Inundation M Water-Stain Id Observati face Water P	D QCCESS int D QCCESS int D QCCESS int D Q Q Q D Q Q Y D Q Q Q Y D Q Q Q Q D Q Q Q D Q Q Q D Q Q Q D Q Q D Q D	e required; che e) e) agery (B7) No <u>/</u> No <u>/</u>	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in	2) rates (B13) e Odor (C1) pheres along Liv luced iron (C4) luction in Tilled S ce (C7) Remarks)	y Steep	Slopeea. +L SP-(<u>Secondar</u> Wate X-Sedin Drain C3) Dry-S C3) Dry-S C3 Satur Satur Shalk	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (C8) ow Aquitard (D3) Neutral Test (D5)
emarks: DROLOG DROLOG etland Hydro imary Indicate Jurface Wa High Water Saturation I Water Mark Sediment D Drift Deposi Surface Soi Inundation V Water-Stain Id Observati face Water Pre ter Table Pre uration Prese	D QCCESS int blb appear y plogy Indicators: prs (minimum of one ater (A1) Table (A2) (A3) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonriverine (B3) (Nonriverine I Cracks (B6) Visible on Aerial Ima ted Leaves (B9) tons: Present? Yes sent? Yes	e required; che e) e) agery (B7) No <u>/</u> No <u>/</u>	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizosj Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in	2) rates (B13) e Odor (C1) pheres along Liv luced iron (C4) luction in Tilled S ce (C7) Remarks)	y Steep nt Wu ving Roots (Soils (C6)	Slo _p cea. +L SP-(<u>Seconda</u> Wate X Sedia Drift Drift Cay Crayf Satur Satur Shalk FAC-1	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (C8) ow Aquitard (D3) Neutral Test (D5)
emarks: DROLOG etland Hydro imary Indicato Surface Wa High Water Saturation I Water Mark Sediment D Drift Deposi Surface Sol Drift Deposi Surface Sol Unundation V Water-Stain Id Observati face Water Pre ter Table Pre uration Prese	D QCCESS int D QCCESS int D QCCESS int D Q QCCESS int D Q Q Q P Q P Q P Q P Q P Q P Q P	e required; che e) iverine) e) agery (B7) No <u>/</u> No <u>/</u>	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in Depth (inches): Depth (inches):	2) rates (B13) e Odor (C1) pheres along Liv uced iron (C4) uction in Tilled S ce (C7) Remarks)	y Steep	Slopeea. +L SP-(<u>Seconda</u> <u>Wate</u> Sedin Drift Drift C3) Dry-S Crayl Satur Satur Shalk FAC-1	not problematic <u>ry Indicators (2 or more required)</u> er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
emarks: DROLOG DROLOG etland Hydro imary Indicate Surface Wa High Water Saturation I Water Mark Sediment D Drift Deposi Surface Sol Unith Deposi Surface Sol Unith Deposi Water-Stain Hod Observati rface Water Pre- ter Table Pre- surface scapillar	D QCCESS int D QCCESS int D QCCESS int D Q QCCESS int D Q Q Q P Q P Q P Q P Q P Q P Q P	e required; che e) iverine) e) agery (B7) No <u>/</u> No <u>/</u>	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in	2) rates (B13) e Odor (C1) pheres along Liv uced iron (C4) uction in Tilled S ce (C7) Remarks)	y Steep	Slopeea. +L SP-(<u>Seconda</u> <u>Wate</u> Sedin Drift Drift C3) Dry-S Crayl Satur Satur Shalk FAC-1	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (C8) ow Aquitard (D3) Neutral Test (D5)
Comparison of the second	D QCCESS int D QCCESS int D QCCESS int D Q QCCESS int D Q Q Q P Q P Q P Q P Q P Q P Q P	e required; che e) iverine) e) agery (B7) No <u>/</u> No <u>/</u>	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in Depth (inches): Depth (inches):	2) rates (B13) e Odor (C1) pheres along Liv uced iron (C4) uction in Tilled S ce (C7) Remarks)	y Steep	Slopeea. +L SP-(<u>Seconda</u> <u>Wate</u> Sedin Drift Drift C3) Dry-S Crayl Satur Satur Shalk FAC-1	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (C8) ow Aquitard (D3) Neutral Test (D5)
Comparison of the second	D QCCESS int bla gpf y plogy Indicators: prs (minimum of one ater (A1) Table (A2) (A3) is (B1) (Nonriverine peposits (B2) (Nonriverine its (B3) (Nonriverine l Cracks (B6) Visible on Aerial Ima ied Leaves (B9) ons: present? Yes sent? Yes sent? Yes prfinge) led Data (stream ga	e required; che e) iverine) e) agery (B7) No <u>/</u> No <u>/</u> uge, monitorin	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in Depth (inches): Depth (inches): g well, aerial photos,	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7) Remarks) previous inspec	ving Roots (Soils (C6) Wetland	Slopeea. +L SP-(<u>Seconda</u> <u>Wate</u> Sedin Drain C3) Dry-S <u>Cayf</u> Satur Shalle Hydrology Pre- ailable:	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) hage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (CS ow Aquitard (D3) Neutral Test (D5) esent? Yes No
emarks: (DROLOG) (DROLOG) (etland Hydro (imary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Inundation (Water-Stain Orift Observati rface Water Pre- total Observation frace Water Cond Scribe Record	D QCCESS int bla gpf y plogy Indicators: prs (minimum of one ater (A1) Table (A2) (A3) is (B1) (Nonriverine peposits (B2) (Nonriverine its (B3) (Nonriverine l Cracks (B6) Visible on Aerial Ima ied Leaves (B9) ons: present? Yes sent? Yes sent? Yes prfinge) led Data (stream ga	e required; che e) iverine) e) agery (B7) No <u>/</u> No <u>/</u> uge, monitorin	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in Depth (inches): Depth (inches): g well, aerial photos,	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7) Remarks) previous inspec	ving Roots (Soils (C6) Wetland	Slopeea. +L SP-(<u>Seconda</u> <u>Wate</u> Sedin Drain C3) Dry-S <u>Cayf</u> Satur Shalle Hydrology Pre- ailable:	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (C8) ow Aquitard (D3) Neutral Test (D5)
emarks: (DROLOG) (DROLOG) (etland Hydro (imary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Orift Deposi Inundation (Water-Stain Id Observati rface Water Pre- tor Table Pre- turation Prese Surface Capillar Scribe Record	D QCCESS int bla gpf y plogy Indicators: prs (minimum of one ater (A1) Table (A2) (A3) is (B1) (Nonriverine peposits (B2) (Nonriverine its (B3) (Nonriverine l Cracks (B6) Visible on Aerial Ima ied Leaves (B9) ons: present? Yes sent? Yes sent? Yes prfinge) led Data (stream ga	e required; che e) iverine) e) agery (B7) No <u>/</u> No <u>/</u> uge, monitorin	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in Depth (inches): Depth (inches): g well, aerial photos,	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7) Remarks) previous inspec	ving Roots (Soils (C6) Wetland	Slopeea. +L SP-(<u>Seconda</u> <u>Wate</u> Sedin Drain C3) Dry-S <u>Cayf</u> Satur Shalle Hydrology Pre- ailable:	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) hage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (CS ow Aquitard (D3) Neutral Test (D5) esent? Yes No
emarks: DROLOG etland Hydro imary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Inundation M Water-Stain Id Observati fface Water Pre uration Prese scribe Record	D QCCESS int bla gpf y plogy Indicators: prs (minimum of one ater (A1) Table (A2) (A3) is (B1) (Nonriverine peposits (B2) (Nonriverine its (B3) (Nonriverine l Cracks (B6) Visible on Aerial Ima ied Leaves (B9) ons: present? Yes sent? Yes sent? Yes prfinge) led Data (stream ga	e required; che e) iverine) e) agery (B7) No <u>/</u> No <u>/</u> uge, monitorin	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in Depth (inches): Depth (inches): g well, aerial photos,	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7) Remarks) previous inspec	ving Roots (Soils (C6) Wetland	Slopeea. +L SP-(<u>Seconda</u> <u>Wate</u> Sedin Drain C3) Dry-S <u>Cayf</u> Satur Shalle Hydrology Pre- ailable:	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) hage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (CS ow Aquitard (D3) Neutral Test (D5) esent? Yes No
emarks: DROLOG etland Hydro mary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Surface Sol Inundation V Water-Stain Id Observati face Water Pre uration Prese ludes capillar coribe Record	D QCCESS int bla gpf y plogy Indicators: prs (minimum of one ater (A1) Table (A2) (A3) is (B1) (Nonriverine peposits (B2) (Nonriverine its (B3) (Nonriverine l Cracks (B6) Visible on Aerial Ima ied Leaves (B9) ons: present? Yes sent? Yes sent? Yes prfinge) led Data (stream ga	e required; che e) iverine) e) agery (B7) No <u>/</u> No <u>/</u> uge, monitorin	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Thin Muck Surfac Other (Explain in Depth (inches): Depth (inches): g well, aerial photos,	2) rates (B13) e Odor (C1) pheres along Liv uced Iron (C4) uction in Tilled S ce (C7) Remarks) previous inspec	ving Roots (Soils (C6) Wetland	Slopeea. +L SP-(<u>Seconda</u> <u>Wate</u> Sedin Drain C3) Dry-S <u>Cayf</u> Satur Shalle Hydrology Pre- ailable:	, Not problematic ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) hage Patterns (B10) Season Water Table (C2) Tish Burrows (C8) ation Visible on Aerial Imagery (CS ow Aquitard (D3) Neutral Test (D5) esent? Yes No

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PTRY (M) A 65	City/County:	wende Court	_ Sampling Date:
Applicant/Owner: SCE	_ , ,	State: CA	Sampling Point: SP_3
investigator(s): N. Gaves D. Willer	Section, Townshit	o, Range:	
Landform (hillslope, terrace, etc.): ep(@STan	Local relief (conc	ave convex none). CO	NANC Slope (%): </td
	22 91 011201	2 1000 1.7 115	Patrilla 1. Datum
Subregion (LRR): Lat		<u> Long</u>	college:
Soil Map Unit Name: <u>Arlungton</u> Lat: Lat: Lat: Soil Map Unit Name: <u>Arlungton</u> / 2 to 5 per	Centruper V		
Are climatic / hydrologic conditions on the site typical for this time of	year res <u></u>		
Are Vegetation, Soil, or Hydrology significan	•	Are "Normal Circumstances"	
Are Vegetation <u>N</u> , Soil , or Hydrology <u>N</u> naturally		(If needed, explain any answe	
SUMMARY OF FINDINGS - Attach site map showin	ng sampling poi	int locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes <u>Yes</u> No	– Is the Sam	pled Area	*
Hydric Soil Present? Yes X No		/etland? Yes <u>/</u>	XNo
Wetland Hydrology Present? Yes <u>X</u> No			
Remarks & Depression Quea. holds water	-Gar portion 0	of year Appears-	formed by old
road nuts. Hydrie soils are	assumed d	we to patend.	at natural for
BILAT CAN Y SVIV UMP		· · · · · · · · · · · · · · · · · · ·	<u></u>
VEGETATION – Use scientific names of plants.		······	
Tree Stratum (Plot size: 30) Absolu	te Dominant Indica ar <u>Species? Statu</u>		
1	<u></u>	IS Number of Dominant S That Are OBL, FACW,	or FAC:
2		Total Number of Domi	
3		Species Across All Stra	
4		Percent of Dominant S	inecies //
0	= Total Cover	That Are OBL, FACW,	
Sapling/Shrub Stratum (Plot size: 15)	Y FAL	Prevalence Index wo	rksheet:
h <u>parman stronger</u>	<u>YKC</u>		Multiply by:
2			x1=
3 4		— ;	x 2 =
5.		FAC species	x 3 =
35	= Total Cover	FACU species	× 4 =
Herb Stratum (Plot size: 5)	V ONG		x 5 =
	- Y FAC		(A) (B)
2. (praeum murinum	y PAC		(= B/A =
3. Rumex conspus 15 4. Openopoolium mulale	N FAC		on Indicators:
5. Bromys diandrus	N FAC		\$ >50%
6. Polygonum arengstrum 5	N NI	Prevalence Index i	is ≤3.0 ¹
7			ptations ¹ (Provide supporting
8			s or on a separate sheet) phytic Vegetation ¹ (Explain)
	= Total Cover		privite vegetation (Explain)
Woody Vine Stratum (Plot size:)		¹ Indicators of hydric sol	il and wetland hydrology must
1		be present, unless dist	
2	= Tolal Cover		
then SA		Vegetation	s <u> </u>
% Bare Ground in Herb Stratum $\underline{WO}5B$ % Cover of Biotic	Crust	Present? Ye	s No
Remarks:			

SOIL

Sampling Point:

Deplh	Matrix	Redox Features		
(inches) Co	olor (moist)	<u>% Color (moist) % Type¹ 1</u>	oc ² Texture Remarks	
<u> </u>				
				<u></u>
lydric Soil Indicat	ors: (Applicable	h, RM=Reduced Matrix, CS=Covered or Coated S to all LRRs, unless otherwise noted.)	and Grains. ² Location: PL=Pore Lining, M=Mat Indicators for Problematic Hydric Soils ⁵	
Histosol (A1)		Sandy Redox (S5)	1 cm Muck (A9) (LRR C)	•
Histic Epipedor		Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)	
Black Histic (A3)	•	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)	
Hydrogen Sulfic		Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)	
Stratified Layers 1 cm Muck (A9)		Depleted Matrix (F3) Redox Dark Surface (F6)	\sum Other (Explain in Remarks)	
	Dark Surface (A1			
_ Thick Dark Surf		Redox Depressions (F8)	³ Indicators of hydrophytic vegetation and	
Sandy Mucky M		Vernal Pools (F9)	wetland hydrology must be present,	
_ Sandy Gleyed M	Aatrix (S4)	_ , , ,	unless disturbed or problematic.	
estrictive Layer (i	f present):		¥	
Туре:		n.v	V	
Depth (inches): _			Hydric Soll Present? Yes 🔨 No	
emarks: NO .	sample to	leen due to potential h	abitat for listed fairy	
2001 V	np. Hyd	ric soils assumed pro	ucut	
DROLOGY				
etland Hydrology	Indicators:			
		uired; check all that apply)	Secondary Indicators (2 or more requir	ed)
Surface Water (A		Salt Crust (B11)	Water Marks (B1) (Riverine)	
_ High Water Table	e (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
_ Saturation (A3)		Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)	

____ Aquatic Invertebrates (B13) ____ Hydrogen Sulfide Odor (C1)

 _____ Hydrogen Sulfide Odor (C1)
 _____ Drainage Patterns (B10)

 _____ Oxidized Rhizospheres along Living Roots (C3)
 _____ Dry-Season Water Table (C2)

Presence of Reduced Iron (C4)
Recent Iron Reduction in Tilled Soils (C6)

Inundation Visible on A	erial Imagery (B7)	Shallow Aquitard (D3)		
Water-Stained Leaves	(89)	Other (Explain in Remarks)	FAC-Neutral Test (D5)	
Field Observations:				
Surface Water Present?	Yes No	⊃X Depth (inches):	_	
Water Table Present?	Yes No	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No	Depth (Inches):	Wetland Hydrology Present? Yes <u>V</u> No	
Describe Recorded Data (sl	ream gauge, moni	toring well, aerial photos, previous inspe	ections), if available:	
Remarks:				

Water Marks (B1) (Nonriverine)

Drift Deposits (B3) (Nonriverine)

X Surface Soil Cracks (B6)

Sediment Deposits (B2) (Nonriverine)

___ Crayfish Burrows (C8)

____ Saturation Visible on Aerial Imagery (C9)

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site:	City/County: <u>Reversed</u> County Sampling Date: 5/18/17 State: <u>CA</u> Sampling Point: <u>Sp. 4</u>
Investigator(s): <u>M. Fwres</u> <u>D. Miller</u> Landform (hillslope, terrace, etc.): <u>A</u> Subregion (LRR): <u>C</u> Soil Map Unit Name: <u>Terrace escarpments</u> Are climatic / hydrologic conditions on the site typical for this time of ye Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology significantly Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally pr	Section, Township, Range:
Hydrophylic Vegetation Present? Yes K No Hydric Soil Present? Yes No K Wetland Hydrology Present? Yes No K Remarks: No K K	g sampling point locations, transects, important features, etc. Is the Sampled Area within a Wetland? Yes No

VEGETATION – Use scientific names of plants.

0	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	<u>% Cover Species? Status</u>	Number of Dominant Species 3
1. Nucohana glauca	12 Y FAL	That Are OBL, FACW, or FAC: (A)
1V		
2	• • • • • • • • • • • • • • • • • • •	Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
	12 = Total Cover	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 15)		
1. baccharis saliciplia	<u> 30% Y FACW</u>	Prevalence index worksheet:
2. Artemisia celifornice	5% N NI	Total % Cover of: Multiply by:
		OBL species x 1 =
3		FACW species x 2 =
4		
5		FAC species x 3 =
	<u> </u>	FACU species x 4 =
Herb Stratum (Plot size:)	- V Cou	UPL species x 5 =
1. Cohum maculatum	<u>ZY</u> FACW	Column Totals: (A) (B)
2.		
3		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
4	· · · · · · · · · · · · · · · · · · ·	Dominance Test is >50%
5	·····	
6	······································	Prevalence Index is ≤3.0 ¹
7		Morphological Adaptations ¹ (Provide supporting
8		data in Remarks or on a separate sheet)
8	2 = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
http://www.chatemarkum.com		
Woody Vine Stratum (Plot size:)		¹ Indicators of hydric soil and wetland hydrology must
1		be present, unless disturbed or problematic.
2		
	= Total Cover	Hydrophytic
089 110	ADVAN DUNA D	Vegetation Present? Yes No No
% Bare Ground in Herb Stratum 38% % Cover	of Biotic Crust	
Remarks:		

S	DIL
---	-----

Sampling Point:	¥.	PU

Profile Desci Depth	Matrix			x Feature						
(inches)		% <u>Colo</u>	r (moist)	%	Type	Loc ²	Texture		Remark	S
0-1	7 SYRONG	20 -			ah berti Mannahana manangga		Idam			.
DAN.	10YR 3/2 L	10					10am			
1-14	1001	<u>,</u> の				<u> </u>	10am			
14-110		/00					1 -			
<u> </u>					·	······································	(Dainy S.	ano		
		<u> </u>		•						
·										
	1919 - C.	<u> </u>				<u> </u>				
Type: C=Cor	ncentration, D=Depletior	n, RM=Reduced	d Matrix, CS	S=Covered	or Coate	d Sand Grai	ns. ² Loc	ation: PL	Pore Lining,	M=Matrix.
lydric Soil in	idicators: (Applicable	to all LRRs, u	nless other	wise note	id.)		Indicators	for Proble	matic Hydri	: Soils ³ :
Histosol (/	,		Sandy Redo				1 cm M	uck (A9) (LRR C)	
	pedon (A2)		Stripped Ma				2 cm M	uck (A10)	(LRR B)	
Black Hist	· ·		oamy Muci				Reduce	d Vertic (I	⁼ 18)	
	Sulfide (A4)		oamy Gley		(F2)		Red Pa	rent Mater	rial (TF2)	
	Layers (A5) (LRR C)		Depleted Ma				Other (I	Explain in	Remarks)	
	k (A9) (LRR D)		Redox Dark	•	,					
	Below Dark Surface (A1		Depleted Da		• •					
	s Surface (A12)		Redox Depre		8)				ytic vegetatio	
	cky Mineral (S1)	\	ernal Pools	(F9)					nust be prese	nt,
	yed Matrix (S4)						unless dis	turbed or	problematic.	
astructive La	yer (if present):									
Туре:										\sim
Type: Depth (inche	es):				-		Hydric Soil P	Present?	Yes	<u>No X</u>
Type: Depth (incho emarks:	es):				•		Hydric Soil P	Present?	Yes	No <u>×</u>
Type: Depth (inche emarks: DROLOG	es): Y				-		Hydric Soil P	Present?	Yes	<u>No X</u>
Type: Depth (inche omarks: DROLOG	es): Y blogy Indicators:		that apply/		-					<u>No X</u>
Type: Depth (inche emarks: DROLOG etland Hydro mary Indicate	es): Υ Vogy Indicators: ors (minimum of one req	uired; check all			-		Seconda	ary Indicat	ors (2 or mor	
Type: Depth (inche emarks: DROLOG etiand Hydro mary Indicato Surface Wa	es): Y plogy Indicators: prs (minimum of one req ater (A1)	uired; check al	Salt Crust (E	311)	-		<u>Seconda</u>	ary Indicat ler Marks	ors (2 or mor (B1) (Riverin	e)
Type: Depth (inche emarks: DROLOG etland Hydro mary Indicato Surface Wa High Water	es): Y plogy Indicators: prs (minimum of one req ater (A1) Table (A2)	uired; check al	Salt Crust (E Biotic Crust	311) (B12)	-		<u>Seconda</u> Wat Sed	ary Indicat ter Marks liment Dep	ors (2 or mor (B1) (Riverin posits (B2) (R	e) iverine)
Type: Depth (inche emarks: DROLOG atland Hydro mary Indicato Surface Wa High Water Saturation (es): Y blogy Indicators: prs (minimum of one req ater (A1) Table (A2) (A3)	<u>uired; check all</u>	Salt Crust (E Biotic Crust Aquatic Inve	311) (B12) rtebrates (<u>Seconda</u> Wat Sed Drift	ary Indicat ter Marks liment Dep t Deposits	ors (2 or mor (B1) (Riverin posits (B2) (R (B3) (Riverir	e) iverine)
Type: Depth (inche emarks: DROLOGY etland Hydro mary Indicato Surface Wa High Water Saturation (Water Mark	Y Slogy Indicators: ors (minimum of one req ater (A1) Table (A2) (A3) (A3) (Nonriverine)	<u>uired; check all</u> S E <i>F</i>	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Su	311) (B12) rtebrates (ulfide Odor	r (C1)		Seconda Wat X Sed Drift Drai	ary Indicat ter Marks liment Dep t Deposits inage Patt	ors (2 or mor (B1) (Riverin posits (B2) (R (B3) (Riverin erns (B10)	e) iverine) ie)
Type: Depth (inche emarks: DROLOG DROLOG Etland Hydro mary Indicato Surface Wa High Water Saturation (Water Mark Sediment D	es): Y blogy Indicators: ors (minimum of one req ater (A1) Table (A2) (A3) is (B1) (Nonriverine) beposits (B2) (Nonriverine)	Uired; check all S E A H nø) C	Sall Crust (E Biotic Crust Aquatic Inve Iydrogen Su Dxidized Rhi	311) (B12) rtebrates (ulfide Odor izospheres	r (C1) s along Liv	ring Roots (<u>Seconda</u> Wat <u>X</u> Sed Drift Drai C3) Dry-	ary Indicat ter Marks liment Dep t Deposits inage Patt Season V	ors (2 or mor (B1) (Riverin posits (B2) (R (B3) (Riverir erns (B10) vater Table (C	e) iverine) ie)
Type: Depth (inche emarks: DROLOG DROLOG Stland Hydro mary Indicato Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi	es): Y blogy Indicators: Drs (minimum of one req ater (A1) Table (A2) (A3) (A3) (S (B1) (Nonriverine) Peposits (B2) (Nonriverine)	<u>uired; check all</u> S E F nø)C	Salt Crust (E Stotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of	311) (B12) rtebrates (ulfide Odor izospheres Reduced I	r (C1) s along Liv Iron (C4)	ving Roots (Seconda Wat Sed Drift C3) Dry- Cray	ary Indicat ter Marks liment Dep t Deposits inage Patt Season W rfish Burro	ors (2 or mor (B1) (Riverin oosits (B2) (R (B3) (Riverin erns (B10) vater Table (C ows (C8)	e) iverinø) iø) 22)
Type: Depth (inche emarks: DROLOG Dtland Hydro mary Indicato Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi	es): Y blogy Indicators: Drs (minimum of one req ater (A1) Table (A2) (A3) (A3) (S (B1) (Nonriverine) Peposits (B2) (Nonriverine) I Cracks (B6)	uired: check all S E F nø)C F	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction	r (C1) s along Liv Iron (C4) in Tilled S	ving Roots (Seconda Wat Sed Drift C3) Dry- Cray	ary Indicat ter Marks liment Dep t Deposits inage Patt Season W rfish Burro	ors (2 or mor (B1) (Riverin posits (B2) (R (B3) (Riverir erns (B10) vater Table (C	e) iverinø) iø) 22)
Type: Depth (inche emarks: DROLOG etland Hydro mary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \	es): Y plogy Indicators: prs (minimum of one req ater (A1) Table (A2) (A3) (A) (A3) (A) (A) (A) (A) (A) (A) (A) (A	uired: check all S E F nø)C F	Salt Crust (E Stotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction	r (C1) s along Liv Iron (C4) in Tilled S	ving Roots (<u>Seconda</u> Wat Sed Drift C3) Dry- Cray Satu	ary Indicat ter Marks liment Dep t Deposits inage Patt Season W rfish Burro	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial	e) iverinø) iø) 22)
Type: Depth (inche emarks: DROLOG) etland Hydro mary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain	es): Y plogy Indicators: prs (minimum of one req ater (A1) Table (A2) (A3) (uired; check all E E F ne) C F F / (B7) T	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I	311) (B12) rlebrates (ulfide Odor izospheres Reduced I Reduction urface (C7	r (C1) s along Liv Iron (C4) in Tilled S)	ving Roots (<u>Seconda</u> Wat Drift Drift Drai C3)Dry- Cray Satu Shal	ary Indicat ler Marks liment Dep t Deposits inage Patt Season W yfish Burro iration Vis	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3)	e) iverinø) iø) 22)
Type: Depth (inche emarks: DROLOG) etland Hydro mary Indicato Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain Id Observati	es): Y blogy Indicators: brs (minimum of one req ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (B1) (Nonriverine) (A3) (B2) (Nonriverine) (A3) (B3) (Nonriverine) (Cracks (B6) (Jisible on Aerial Imagery ed Leaves (B9) ons:	uired; check all S E F nø)C F / (B7)T	Sall Crust (E Siotic Crust Aquatic Inve Hydrogen St Dxidized Rhi Presence of Recent Iron I hin Muck St Uther (Explai	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ving Roots (<u>Seconda</u> Wat Drift Drift Drai C3)Dry- Cray Satu Shal	ary Indicat ler Marks liment Dep Deposits inage Patt Season V yfish Burro uration Vis llow Aquita	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3)	e) iverine) ie) 22)
Type: Depth (inche emarks: DROLOG) etland Hydro imary Indicato Surface Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain Id Observati face Water P	es): Y blogy Indicators: Drs (minimum of one req ater (A1) Table (A2) (A3) (A5) (uired; check all E E F ne) C F F / (B7) T	Sall Crust (E Siotic Crust Aquatic Inve Hydrogen St Dxidized Rhi Presence of Recent Iron I hin Muck St Uther (Explai	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ving Roots (<u>Seconda</u> Wat Drift Drift Drai C3)Dry- Cray Satu Shal	ary Indicat ler Marks liment Dep Deposits inage Patt Season V yfish Burro uration Vis llow Aquita	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3)	e) Iverine) Ie) 22)
Type: Depth (inche emarks: DROLOG) etland Hydro imary Indicato Surface Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain Id Observati face Water P	es): Y blogy Indicators: Drs (minimum of one req ater (A1) Table (A2) (A3) (S (B1) (Nonriverine) Peposits (B2) (Nonriverine) I Cracks (B6) /isible on Aerial Imagery ed Leaves (B9) ons: resent? Yes	Uired; check all S F nø)C F / (B7)T	Sall Crust (E Slotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I hin Muck Su ther (Explai	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 In in Rema	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ving Roots (<u>Seconda</u> Wat Drift Drift Drai C3)Dry- Cray Satu Shal	ary Indicat ler Marks liment Dep Deposits inage Patt Season V yfish Burro uration Vis llow Aquita	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3)	e) Iverine) Ie) 22)
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Water Saturation (Water Mark Sediment D Drift Deposi Surface Sol Inundation \ Water-Stain Id Observati face Water P ter Table Pre	es): Y plogy Indicators: prs (minimum of one req ater (A1) Table (A2) (A3) is (B1) (Nonriverine) is (B3) (Nonriverine) i Cracks (B6) /isible on Aerial Imagery ed Leaves (B9) ons: resent? Yes sent? Yes	uired: check all S F nø)C F / (B7)T C	Sall Crust (E Slotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I hin Muck Si Other (Explain Depth (Inche	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema es):	r (C1) s along Liv iron (C4) in Tilled S) arks)	ving Roots (Soils (C6)	Seconda Wat X Sed Drift Drai C3) Dry- Cray Satu Shal FAC	ary Indicat ler Marks liment Dep t Deposits inage Patt Season W /fish Burro uration Vis llow Aquita -Neutral T	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3) fest (D5)	e) iverinë) ie) :2) Imagery (C9
Type: Depth (inche emarks: DROLOG) etland Hydro imary Indicato Surface Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain Id Observati face Water P ter Table Pre- turation Prese ludes capillar	es): Y blogy Indicators: brs (minimum of one req ater (A1) Table (A2) (A3) ts (B1) (Nonriverine) teposits (B2) (Nonriverine) ts (B3) (Nonriverine) t Cracks (B6) /isible on Aerial Imagery ed Leaves (B9) ons: resent? Yes sent? Yes trace trace trace trace trace trace trace y fringe)	uired; check all S F F nø)C F / (B7)T C Nof Nof	Sall Crust (E Slotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I hin Muck Su ther (Explai Depth (Inche Depth (Inche	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema es): es):	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ring Roots (Soils (C6)	<u>Seconda</u> Wat Drift Drai C3)Dry- Cray Statu Shal FAC	ary Indicat ler Marks liment Dep t Deposits inage Patt Season W /fish Burro uration Vis llow Aquita -Neutral T	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3) fest (D5)	e) iverine) ie) :2) Imagery (C9
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain Id Observati face Water P ter Table Pre- uration Prese udes capillar	es): Y plogy Indicators: prs (minimum of one req ater (A1) Table (A2) (A3) is (B1) (Nonriverine) is (B3) (Nonriverine) i Cracks (B6) /isible on Aerial Imagery ed Leaves (B9) ons: resent? Yes sent? Yes	uired; check all S F F nø)C F / (B7)T C Nof Nof	Sall Crust (E Slotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I hin Muck Su ther (Explai Depth (Inche Depth (Inche	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema es): es):	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ring Roots (Soils (C6)	<u>Seconda</u> Wat Drift Drai C3)Dry- Cray Statu Shal FAC	ary Indicat ler Marks liment Dep t Deposits inage Patt Season W /fish Burro uration Vis llow Aquita -Neutral T	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3) fest (D5)	e) iverine) ie) :2) Imagery (C9
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain Id Observati face Water P ter Table Pre- uration Prese udes capillar	es): Y blogy Indicators: brs (minimum of one req ater (A1) Table (A2) (A3) ts (B1) (Nonriverine) teposits (B2) (Nonriverine) ts (B3) (Nonriverine) t Cracks (B6) /isible on Aerial Imagery ed Leaves (B9) ons: resent? Yes sent? Yes trace trace trace trace trace trace trace y fringe)	uired; check all S F F nø)C F / (B7)T C Nof Nof	Sall Crust (E Slotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I hin Muck Su ther (Explai Depth (Inche Depth (Inche	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema es): es):	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ring Roots (Soils (C6)	<u>Seconda</u> Wat Drift Drai C3)Dry- Cray Statu Shal FAC	ary Indicat ler Marks liment Dep t Deposits inage Patt Season W /fish Burro uration Vis llow Aquita -Neutral T	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3) fest (D5)	e) iverine) ie) :2) Imagery (C9
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain Id Observati face Water P ter Table Pre- uration Prese udes capillar	es): Y blogy Indicators: brs (minimum of one req ater (A1) Table (A2) (A3) ts (B1) (Nonriverine) teposits (B2) (Nonriverine) ts (B3) (Nonriverine) t Cracks (B6) /isible on Aerial Imagery ed Leaves (B9) ons: resent? Yes sent? Yes trace trace trace trace trace trace trace y fringe)	uired; check all S F F nø)C F / (B7)T C Nof Nof	Sall Crust (E Slotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I hin Muck Su ther (Explai Depth (Inche Depth (Inche	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema es): es):	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ring Roots (Soils (C6)	<u>Seconda</u> Wat Drift Drai C3)Dry- Cray Statu Shal FAC	ary Indicat ler Marks liment Dep t Deposits inage Patt Season W /fish Burro uration Vis llow Aquita -Neutral T	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3) fest (D5)	e) iverine) ie) :2) Imagery (C9
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato 	es): Y blogy Indicators: brs (minimum of one req ater (A1) Table (A2) (A3) ts (B1) (Nonriverine) teposits (B2) (Nonriverine) ts (B3) (Nonriverine) t Cracks (B6) /isible on Aerial Imagery ed Leaves (B9) ons: resent? Yes sent? Yes trace trace trace trace trace trace trace y fringe)	uired; check all S F F nø)C F / (B7)T C Nof Nof	Sall Crust (E Slotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I hin Muck Su ther (Explai Depth (Inche Depth (Inche	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema es): es):	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ring Roots (Soils (C6)	<u>Seconda</u> Wat Drift Drai C3)Dry- Cray Statu Shal FAC	ary Indicat ler Marks liment Dep t Deposits inage Patt Season W /fish Burro uration Vis llow Aquita -Neutral T	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3) fest (D5)	e) iverine) ie) :2) Imagery (C9
Type: Depth (inche emarks: DROLOGY etland Hydro mary Indicato Surface Water Saturation (Water Mark Sediment D Drift Deposi Surface Soi Inundation \ Water-Stain Id Observati face Water P ter Table Prese uration Prese ludes capillar scribe Record	es): Y blogy Indicators: brs (minimum of one req ater (A1) Table (A2) (A3) ts (B1) (Nonriverine) beposits (B2) (Nonriverine) ts (B3) (Nonriverine) t Cracks (B6) /isible on Aerial Imagery ed Leaves (B9) ons: resent? Yes sent? Yes trace trace trace trace trace trace trace y fringe)	uired; check all S F F nø)C F / (B7)T C Nof Nof	Sall Crust (E Slotic Crust Aquatic Inve Hydrogen Su Dxidized Rhi Presence of Recent Iron I hin Muck Su ther (Explai Depth (Inche Depth (Inche	311) (B12) rtebrates (ulfide Odor izospheres Reduced I Reduction urface (C7 in in Rema es): es):	r (C1) s along Liv Iron (C4) in Tilled S) arks)	ring Roots (Soils (C6)	<u>Seconda</u> Wat Drift Drai C3)Dry- Cray Statu Shal FAC	ary Indicat ler Marks liment Dep t Deposits inage Patt Season W /fish Burro uration Vis llow Aquita -Neutral T	ors (2 or mor (B1) (Riverin bosits (B2) (R (B3) (Riverir erns (B10) Vater Table (C wws (C8) ible on Aerial ard (D3) fest (D5)	e) iverine) ie) :2) Imagery (C9

WETLAND DETERMINATION DATA FORM – Arid West Region

.

	_ City/County: City/County: Sampling Date:
Applicant/Owner: SCE	State: Sampling Point:
investigator(s): <u>M. Rores</u> <u>D. Miller</u>	_ Section, Township, Range:
Landform (hillslope, terrace, etc.): dramage	_ Local relief (concave, convex, none): (Dycave Slope (%): (
Subregion (LRR): Lat:	33.96051331 Long:117.50363149 Datum:
Soil Map Unit Name: Terrace Escarpments	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of y Are Vegetation, Soil, or Hydrology significantl Are Vegetation, Soil, or Hydrology naturally p SUMMARY OF FINDINGS – Attach site map showin	ly disturbed? Are "Normal Circumstances" present? Yes No
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	- Is the Sampled Area - within a Wetland? Yes No
Remarks:	

VEGETATION – Use scientific names of plants.

 $\{ i_{i} \}$

	Absolute	Dominant Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30</u>) 1. <u>Solix</u> zood (1. zia)		<u>Species?</u> <u>Status</u>	Number of Dominant Species	(A)
2 3		· · · · · · · · · · · · · · · · · · ·	Total Number of Dominant Species Across All Strata:	(B)
4	<u> </u>	_= Total Cover	Percent of Dominant Species	(A/B)
Sapling/Shrub Stratum (Plot size: 15)			Prevalence Index worksheet:	
1			Total % Cover of: Multiply by:	
2			OBL species x1 =	
3			FACW species	
4		· · · · · · · · · · · · · · · · · · ·	FAC species x 2 =	
5			FACU species x 4 =	
Herb Stratum (Plot size: 5)		= Total Cover	UPL species x5 =	
			Column Totals: (A)	
· · · · · · · · · · · · · · · · · · ·				_ (0)
2			Prevalence Index = B/A =	_
3			Hydrophytic Vegetation Indicators:	
4			Dominance Test is >50%	
5			Prevalence Index is ≤3.0 ¹	
6 7			Morphological Adaptations ¹ (Provide suppor data in Remarks or on a separate sheet)	ting
8			Problematic Hydrophytic Vegetation ¹ (Explai	n)
		= Total Cover		
Woody Vine Stratum (Plot size:) 1			¹ Indicators of hydric soil and wetland hydrology n be present, unless disturbed or problematic.	nust
2			Hydrophytic	
% Bare Ground in Herb Stratum <u>100</u> % Cover	r of Biolic C	Total Cover	Vegetation Present? Yes No	
Remarks: NO Shkub ov herb 4-5 inches of woody	, strad debris	in in dram in Ohani	nel bottom	

SOI	L	

ing Point:	515

Depth <u>Matrix</u> (inches) <u>Color (moist) %</u>	Redox Features	Texture Remarks
0-16 7.5 3/3 100		loam 20% undermosed
· · · · · · · · · · · · · · · · · · ·		- arganic matter a
······································		- top & sample pet.
ype: C=Concentration, D=Depletion, RM= ydric Soil Indicators: (Applicable to all	Reduced Matrix, CS=Covered or Coated Sand	
_ Histosol (A1)	•	Indicators for Problematic Hydric Soils ³ :
_ Histic Epipedon (A2)	Sandy Redox (S5) Stripped Matrix (S6)	1 cm Muck (A9) (LRR C)
_ Black Histic (A3)	Loamy Mucky Mineral (F1)	2 cm Muck (A10) (LRR B) Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
_ 1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	
_ Thick Dark Surface (A12)	Redox Depressions (F8)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) strictive Layer (if present):		unless disturbed or problematic.
Type:		1
Depth (Inches)		
Depth (inches):		Hydric Soil Present? Yes No <u>}</u>
marks:		Hydric Soil Present? Yes No /
marks: DROLOGY tland Hydrology Indicators:	•	Hydric Soil Present? Yes No /
marks: DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required;	•	
marks: DROLOGY tland Hydrology Indicators:	chęck all that apply)	Secondary Indicators (2 or more required)
marks: DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1)	•	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine)
marks: DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3)	<u>check all that apply)</u>	Secondary Indicators (2 or more required)
marks: DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3)	<u>check all that apply)</u> Salt Crust (B11) Biotic Crust (B12)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Scift Deposits (B3) (Riverine)
marks: DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	<u>check all that apply)</u> Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Trift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
marks: DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	<u>check all that apply)</u> Salt Crust (B11) Biotic Crust (B12) Aquatic invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required) — Water Marks (B1) (Riverine) — Sediment Deposits (B2) (Riverine) M Drift Deposits (B3) (Riverine) — Drainage Patterns (B10)
DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	<u>check all that apply)</u> <u>Salt Crust (B11)</u> <u>Biotic Crust (B12)</u> <u>Aquatic invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living Roc</u>	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ts (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
marks: DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	<u>check all that apply)</u> Salt Crust (B11) Biotic Crust (B12) Aquatic invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ts (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	<u>check all that apply)</u> Salt Crust (B11)Biotic Crust (B12)Aquatic Invertebrates (B13)Hydrogen Sulfide Odor (C1)Oxidized Rhizospheres along Living RocPresence of Reduced Iron (C4)Recent Iron Reduction in Tilled Soils (C6)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C
DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	<u>check all that apply)</u> <u>Salt Crust (B11)</u> <u>Biotic Crust (B12)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres atong Living Roc</u> <u>Presence of Reduced Iron (C4)</u> <u>Recent Iron Reduction in Tilled Soils (C6</u> <u>Thin Muck Surface (C7)</u>	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Trift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) d Observations;	<u>check all that apply)</u> <u>Salt Crust (B11)</u> <u>Biotic Crust (B12)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres atong Living Roc</u> <u>Presence of Reduced Iron (C4)</u> <u>Recent Iron Reduction in Tilled Soils (C6</u> <u>Thin Muck Surface (C7)</u>	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Trift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
marks: DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) d Observations: ace Water Present? Yes No	<u>check all that apply)</u> Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced iron (C4) Recent Iron Reduction in Tilled Soils (C6 Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Trift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
marks: DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) d Observations: ace Water Present? Yes No er Table Present? Yes No	check all that apply)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)
marks: DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) d Observations: ace Water Present? Yes No er Table Present? Yes No ration Present? Yes No ration Present? Yes No	check all that apply)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)
DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) d Observations: ace Water Present? Yes No part Table Present? Yes No ration Present? Yes No ra	check all that apply)	Secondary Indicators (2 or more required)
DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) d Observations: ace Water Present? Yes No er Table Present? Yes No ration Present<	check all that apply)	Secondary Indicators (2 or more required)
DROLOGY ttland Hydrology Indicators: mary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) d Observations: ace Water Present? Yes No er Table Present? Yes No water Capillary fringe) No water Capillary fringe) Stream gauge, monitor	check all that apply)	Secondary Indicators (2 or more required)
DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) d Observations: ace Water Present? Yes No er Table Present? Yes No ration Present<	check all that apply)	Secondary Indicators (2 or more required)

WETLAND DETERMINATION DATA FORM -- Arid West Region

Project/Site: RTRP UWA 005	(City/County	<u>. Ru</u>	1erside County Sampling Date: 5/18/17
Applicant/Owner: <u>SCE</u>				State:(A Sampling Point:SP(
Investigator(s): M. Aves D. M. Her				
Landform (hillslope, terrace, etc.): <u>+errace</u>		Local relief	f (concave, c	convex, none): CONICAUE Slope (%):
Subregion (LRR):	1 at 33	95900	03	Long: -117,5287 9483 Datum:
Subregion (LRR):	d Dauli	denie	1 05') which a t-MAR classification:
Are climatic / hydrologic conditions on the site typical for this				(if no, explain in Remarks.)
Are Vegetation $\underline{N}_{}$, Soil $\underline{N}_{}$, or Hydrology $\underline{N}_{}$ si	gnificantly o	disturbed?		Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology n				eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	showing	samplin	g point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>×</u> No	»	le th	e Sampled	Area
Hydric Soil Present? Yes No	·	ł	in a Wetlan	D
Wetland Hydrology Present? Yes No				
Remarks: Sample at low point on terr	ace of	P RW	er w	vere top layer of sand has
been removed by hydrology.		F.A.		
VEGETATION – Use scientific names of plant	s.			
	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
HOG Olivitation (1999)	40	Y	FACW	Number of Dominant Species (A)
1. Salik goudingi				
3				Total Number of Dominant Species Across All Strata:
4			<u> </u>	Percent of Dominant Species
	<u> </u>	= Total Co	ver	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:) 1AMndoADNGA	ID	V	FACW	Prevalence Index worksheet:
			<u> </u>	Total % Cover of: Multiply by:
3.				OBL species x 1 =
4.				FACW species x 2 =
5				FAC species x 3 =
Useb Obsetum (Platiciza)		= Total Co	ver	FACU species x 4 =
		X.		UPL species x 5 =
1. Poly gonum Lapath follow	<u> </u>	$-\frac{\gamma}{\sqrt{2}}$		Column Totals: (A) (B)
2. Typha domingensis	20	<u> </u>	OBL	Prevalence Index = B/A =
3. Veronica and gallis - aquiatio	<u></u>	<u>_/v</u>	FAC	Hydrophytic Vegetation Indicators:
4. Xanthuym strunarium	-20-	<u> </u>		_X Dominance Test is >50%
5. Melitotis 32.	<u> </u>	-2	OBL	Prevalence Index is ≤3.0 ¹
6. <u>Seepmonteer flower</u> - Minutus gutt	18		FACE	Morphological Adaptations ¹ (Provide supporting
			+	data in Remarks or on a separate sheet)
8	74	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)	<u>6</u>			
1				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				
	_	= Total Co	ver	Hydrophytic Vegetation
% Bare Ground in Herb Stratum _ 2.6 % Cover	of Biolic Cru	ust(2	Present? Yes <u>No</u>
Remarks:			<u> </u>	

Inchesition Stature Remarks Color (most) Stature Include Include </th <th>OIL .</th> <th></th> <th>Sampling Point:</th>	OIL .		Sampling Point:
Indices Color (moist) % Type: Loc 0-1 Image: Color (moist) % Color (moist) % Type: Loc 1-1 (c) IOX (c) AMA (compressed) for any standard (compressed) for any standard (compressed) for any standard (compressed) 1-1 (c) IOX (c) B/H 48 IOX (c) AMA (compressed) for any standard (compressed) 1-1 (c) IOX (c) B/H 48 IOX (c) AMA (compressed) for any standard (compressed) for any standard (compressed) 1-1 (c) IOX (c) B/H AMA (compressed) for any standard (compressed) for any standard (compressed) for any standard (compressed) for any standard (compressed) ytes C-Concentration, D=Depletion, RM-Reduced Mutic, CS=Covered or Coaled Stand Grains *foradicators (c) for any standard (c) for any	Profile Description: (Describe to the dept	h needed to document the indicator or col	
On-1 Horte-H/2 Colong Antics Control Conte			
1-16 10YR 3/4 98 10YR 3/4 22 R/M PL 10 amy, and District ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Mydric Solie': Indicators for Problematic Mydric Solie': ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Mydric Solie': histos (A1) X_Sandy Redox (S5) 1 on Muck (A0) (LRR B) Back Histic, (A3) Loamy Mucky Matrix (S6) 2 on Muck (A0) (LRR B) Hydrogen Sulfide (A4) Loamy Mucky Matrix (F3) Other (Explain In Remarks) Tom Muck (A0, (LRR D) Redox Dark Surface (F1) Depleted Dark Surface (F2) Tom Muck (A0, (LRR D) Redox Depressions (F8) Other (Explain In Remarks) Sandy Mucky Mineral (S1) Vermal Pools (F8) Other (Explain In Remarks) Sandy Mucky Mineral (S1) Vermal Pools (F8) Indicators of hydrophylic vegetation and wetland hydrology multip present, unless disturbed or problematic. Type:			
ype: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Srains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Srains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Srains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Srains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Srains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Srains. *Location: PL=Pore Lining, M=Matrix, OS=Covered or Coaled Sand Srains. *Location: PL=Pore Lining, M=Matrix, OS=Covered Sand Srains. *Location: PL=Pore Lining			
ydrfc Soll Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Solls?:	1-16 10YR 9/1 48	104R 314 2 RM P	L loamy sand Distinct
ydrfc Soll Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Solls?:			
ydrfc Soll Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Solls?:			
ydrfc Soll Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Solls?:			· · · · · · · · · · · · · · · · · · ·
ydrfc Soll Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Solls?:			
ydrfc Soll Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Solls?:			
ydrfc Soll Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Solls?:			
ydrfc Soll Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Solls?:	ype: C=Concentration, D=Depletion, RM=F	Reduced Matrix, CS=Covered or Coated San	d Grains. ² Location: PI =Pore Lippo M=Matrix
Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Red duced Vertic (F18) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Red Parent Material (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Red Parent Material (F2) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Other (Explain in Remarks) 2 cm Muck (A10) (LRR D) Redox Dark Surface (F6) Tridicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) Vernal Pools (F6) wetland hydrology must be present, unless disturbed or problematic. Strictive Layer (If present): Type: Hydric Soll Present? Yos X No X	dric Soil Indicators: (Applicable to all L	RRs, unless otherwise noted.)	
Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Suffide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A6) (LRR C) Depleted Matrix (F2) Red Parent Material (TF2) 1 om Muck (A9) (LRR D) Redox Dark Surface (F6) Other (Explain in Remarks) Depleted Betw Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Gleyed Matrix (S1) Vernal Pools (F9) wetland hydrology must be present. Sandy Gleyed Matrix (S4) unless disturbed or problematic. strictive Layer (If present): Type: Hydric Soil Present? Yes X no X Type:		_X Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A6) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 orn Muck (A6) (LRR D) Redox Depleted Matrix (F3) Other (Explain in Remarks) 1 orn Muck (A6) (LRR D) Redox Depressions (F8) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky (Stay Vernal Pools (F9) wetland hydrology must be present, unless disturbed or problematic. Sandy Octeyed Matrix (S4) Vernal Pools (F9) wetland hydrology must be present, unless disturbed or problematic. Stratic Layer (If present): Type: Hydric Soil Present? Yes X no X Depth (inches): Matrix (S1) Starts within . Us in ch. 4 of (LASI 15 ¹ 4hidc: (In ¹ H45 Sample DRCLOGY Starts within . Us in ch. 4 of (LASI 15 ¹ 4hidc: (In ¹ H45 Sample Stratee Water (A1) Sail Crust (B11) Water Marks (B1) (Riverine) High Water Table (A2) Biolic Crust (B12) Sectiment Deposits (B2) (Riverine) Saturation (A3) Aquatic Invertebrates (B13) Dift Deposits (B2) (Riverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Surface Soil Cracks (B6) Recent Iron Reducet			
Stratlind Layers (AS) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) ¹ Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic. Sandy Cleyed Matrix (S4) unless disturbed or problematic. Type:	,		
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)		, , ,	<u> </u>
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Micky Mineral (S1) Vernal Pools (F9) wetland hydrology must be present, sandy Micky Mineral (S1) Vernal Pools (F9) wetland hydrology must be present; Type: Depth (inches): marks: £e& 0X = D (Strinck) Stractive Layer (If present): Type: marks: £e& 0X = D (Strinck) Stractive Layer (IA1) Start S with it is unich, it and trans (S1) (Riverine) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biolic Crust (B12) Saturation (A3) Aqualic Invertebrates (B13) Water Marks (B1) (Nonriverine) Aqualic Invertebrates (B13) Strace Sile (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Surface Sile (B3) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Surface K8(B) Other (Explain in Remarks) Surface Sile Cacks (B6) Recent Iron Reduction in Titled Soils (C6) Surface Sile Cacks (B6) Recent Iron Reduction in Titled Soils (C6) Surface Sile Cacks (B6) Other (Explain in Rema	• • • • •		Other (Explain in Remarks)
Thick Dark Surface (A12)		• •	
Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) unless disturbed or problematic. Type:			³ Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4) unless disturbed or problematic. strictive Layer (If present):	Sandy Mucky Mineral (S1)		
Type:			unless disturbed or problematic.
Depth (inches): Hydric Soil Present? Yes X to X marks: Red by <= D1Stinct;	strictive Layer (if present):		
marks: Lediox = Distinct; Starts whin: Lench + at least is "Hhide: In Huis Sample DROLOGY Itand Hydrology Indicators: Secondary Indicators (2 or more required) Surface Water (A1)	True at		
CROLOGY tiand Hydrology Indicators: may Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Surface Water (B6) Sediment Deposits (B2) (Nonriverine) Oxidzed Rhizospheres along Living Roots (C3) Drift Deposits (B2) (Nonriverine) Oxidzed Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Water Present? Yes No Ace Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes		_	
tiand Hydrology Indicators: Secondary Indicators: mary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine) High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Jrift Deposits (B3) (Nonriverine) Oxidized Rhizospheres along Living Roots (C6) Saturation Visible on Aerial Imagery (C9) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) d Observations: Mo Depth (inches): No aret Water Present? Yes No Depth (inches): No udes capillary fringe) Yes No Depth (inches): No No<	Depth (inches):	Structe while laund at and	
mary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1)	Depth (inches):	; starts whin which + at	
Surface Water (A1)	Depth (inches):	; starts whin which + at	
Surface Water (A1)	Depth (inches): marks: Redux = Distinct DROLOGY	; starts whin heinch + at	
High Water Table (A2)	Depth (inches): marks: Ledox = Distinct DROLOGY tland Hydrology Indicators:	· · · ·	least 15 "thick in this sample
Saturation (A3)	Depth (inches): marks: Ledox = Distinct DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; c	heck all that apply)	least 15 "thick in this sample Secondary Indicators (2 or more required)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Image Patterns (B10) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) d Observations: ace Water Present? Yes No aration Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No aration Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No aration Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Mo aration Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Mo Mo Mo Mo Mo Mo Mo Mo Mo	Depth (inches): marks: Led 0X = DISTINCT DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; c Surface Water (A1)	heck all that apply) Sait Crust (B11)	Least 15 "Hick In His Sample Secondary Indicators (2 or more required) Water Marks (B1) (Riverine)
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) d Observations: Depth (inches): Recent (inches): ace Water Present? Yes No Depth (inches): er Table Present? Yes No Depth (inches): ration Present? Yes No Depth (inches): udes capillary fringe) Wetland Hydrology Present? Yes No wides capillary fringe) Stail photos, previous inspections), if available: No	Depth (inches): marks: Letox = Distinct DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2)	heck all that apply) Sait Crust (B11) Biotic Crust (B12)	Least 15 "Hide In His Sample Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Surface Soil Cracks (B6)	Depth (inches): marks: Led 0X = DISTINCT DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3)	heck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic invertebrates (B13)	Least 15 "Hick: IN Huis Sample <u>Secondary Indicators (2 or more required)</u> Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) d Observations: ace Water Present? Yes No X ace Water Present? Yes No X Depth (inches):	Depth (inches): marks: Letox = Distinct DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	heck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Least 15 "Hick: In Huis Sample <u>Secondary Indicators (2 or more required)</u> — Water Marks (B1) (Riverine) — Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) X Drainage Patterns (B10)
Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) d Observations:	Depth (inches): marks: Letox = Distinct DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	heck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R	Least 15 'Hick: In Huis Sample <u>Secondary Indicators (2 or more required)</u> — Water Marks (B1) (Riverine) — Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) X Drainage Patterns (B10) oots (C3) _ Dry-Season Water Table (C2)
d Observations: ace Water Present? Yes No _X_ Depth (inches): er Table Present? Yes No _X_ Depth (inches): iration Present? Yes No _X_ Depth (inches): udes capillary fringe) Wetland Hydrology Present? Yes No cribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inches): marks: Letox = Distinct DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	heck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4)	Least 15 "Huck: IN His Sample Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Crainage Patterns (B10) oots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
ace Water Present? Yes <u>No X</u> Depth (inches): <u></u> er Table Present? Yes <u>No X</u> Depth (inches): <u></u> ration Present? Yes <u>No X</u> Depth (inches): <u></u> udes capillary fringe) Wetland Hydrology Present? Yes <u>No X</u> No <u></u> roibe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inches): marks: Ledox = Distinct DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	heck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Thin Muck Surface (C7)	Least 15 "Hick: IN His Sample Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) oots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) C6) Saturation Visible on Aerial Imagery (C9)
er Table Present? Yes NoX Depth (inches): Iration Present? Yes NoX Depth (inches): Wetland Hydrology Present? Yes No udes capillary fringe) Udes capillary fringe) Cribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inches): marks: Let UX = DISTINCT DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	heck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Thin Muck Surface (C7)	Least 15 "Hick: IN His Sample Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) oots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
Iration Present? Yes <u>No K</u> Depth (inches): <u>Wetland Hydrology Present? Yes K</u> No <u>Sections</u> No <u>Sections</u> , if available:	Depth (inches): marks: Redux = Distinct DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Id Observations:	heck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Thin Muck Surface (C7) Other (Explain in Remarks)	Least 15 "Hick: IN His Sample Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) oots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
cribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inches):	check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Thin Muck Surface (C7) Other (Explain in Remarks) X Depth (inches):	Least 15 "Hick: In His Sample Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) oots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
cribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inches):	heck all that apply)	Least 15 Hick: In His Sample
	Depth (inches):	heck all that apply)	Least 15 "Hick: In His Sample <u>Secondary Indicators (2 or more required)</u> Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) X Drift Deposits (B3) (Riverine) Drainage Patterns (B10) oots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
	Depth (inches):	heck all that apply)	Least 15 Hick: In His Sample

Project/Site:RTRP CWACO	5 City/County: RW	uside County_ sampling Date: _5/18/17						
Applicant/Owner: <u>SCIF</u>		State: <u>CA</u> Sampling Point: <u>SP-7</u>						
Investigator(s): Marisa Morei		ange:						
Landform (hillslope, terrace, etc.):	Local relief (concave,	, convex, none):/) ഗുപ്പ Slope (%): _< \						
Subregion (LRR):	_ Lat: <u>33, 959985</u>	_ Long: <u>-いつ、528933</u> Datum:						
Soil Map Unit Name: Dello loamy Sand, 1	scorly drained Oto	2 fercent NWI classification:						
Are climatic / hydrologic conditions on the site typical for thi	is time of year? Yes <u>X</u> No	(If no, explain in Remarks.)						
Are Vegetation \underline{N} , Soil \underline{N} , or Hydrology \underline{P}	significantly disturbed? Are	"Normal Circumstances" present? Yes <u>></u> No						
Are Vegetation \underline{N} , Soil \underline{N} , or Hydrology \underline{P}	naturally problematic? (If n	eeded, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								
	lo Is the Sample	d Area						
VEGETATION – Use scientific names of plan	its.							
Tree Stratum (Plot size: 35)	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet:						
1. Salur goodingsi	45 Y FACU	Number of Dominant Species That Are OBL, FACW, or FAC:						
		Total Number of Dominant						
3		Species Across All Strata: (B)						
4	45 = Total Cover	Percent of Dominant Species (OO						
Sapling/Shrub Stratum (Plot size: 151)	$-\frac{7}{2}$ = Total Cover	That Are OBL, FACW, or FAC: (A/B)						
1		Prevalence Index worksheet:						
2		Total % Cover of: Multiply by:						
3	<u> </u>	OBL species x 1 = FACW species x 2 =						
5.	······································	FAC species X2 =						
	= Total Cover	FACU species x 4 =						
Herb Stratum (Plot size: <u>5</u> ')		UPL species x 5 =						
		Column Totals: (A) (B)						
2		Prevalence Index = B/A =						
3 4		Hydrophytic Vegetation Indicators:						
5		X Dominance Test is >50%						
6		Prevalence Index is ≤3.0 ¹						
7		Morphological Adaptations ¹ (Provide supporting						
8		data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)						
Woody Vine Stratum (Plot size:)	= Total Cover							
1		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.						
% Bare Ground in Herb Stratum 100 % Cover	r of Biotic Crust	Hydrophytic Vegetation Present? Yes No						
Remarks: Who are prospland and	- dad af i i							
Remarks: Nonative grassland at a	20 ge of Aparias	s, bud antside						

WETLAND DETERMINATION DATA FORM – Arid West Region

SOIL

50-7 Sampling Point:

Profile Desc	ription: (Describe to	the depth needed to docur	nent the indicator	or confirm	the absence of inc	licators.)	
Depth	Matrix	Redo	x Features			- ·	
_(inches) 	Color (moist)	<u>%</u> <u>Color (moist)</u>	<u>% Type¹</u>			Remarks	
	·		· ·				
		ion, RM=Reduced Matrix, CS		d Sand Gra		PL=Pore Lining, M=M	
Histosol Histosol Histosol Histoc Ep Black Histoc Ep Hydrogel Stratified 1 cm Mur Depleted Thick Da Sandy M Sandy G	(A1) ipedon (A2)	Loamy Gley Depleted M Redox Dark A11) Depleted Da	ox (S5) atrix (S6) ky Mineral (F1) ved Matrix (F2) atrix (F3) s Surface (F6) ark Surface (F7) ressions (F8)		 1 cm Muck (a) 2 cm Muck (a) Reduced Ve Red Parent I Other (Explation) ³Indicators of hydrol 	roblematic Hydric Soil A9) (LRR C) A10) (LRR B) rtic (E18) — Material (TF2) in in Remarks) rophytic vegetation and ogy must be present, ed or problematic.	
Туре:							X
Depth (inc Remarks:		ised of sand,	no color	taker	Hydric Soil Prese	mur tes N	0_/
IYDROLO	GY						
Wetland Hyd	Irology Indicators:						
Primary Indic	ators (minimum of one	required; check all that apply	v)		Secondary I	ndicators (2 or more red	quired)
Surface Water (A1) Salt Crust (B11)				Water Marks (B1) (Riverine)			
High Water Table (A2) Biotic Crust (B12)			Sediment Deposits (B2) (Riverine)				
Saturation (A3) Aquatic Invertebrates (B13)				Drift Deposits (B3) (Riverine)			
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)					Drainage Patterns (B10)		

- Oxidized Rhizospheres along Living Roots (C3) ___ Dry-Season Water Table (C2)
 - ____ Crayfish Burrows (C8)
 - ____ Saturation Visible on Aerial Imagery (C9)
 - Shallow Aquitard (D3)

Inundation Visible on Aerial Imagery (B7)		Thin Muck Surface (C7) Shallow Aquitard (D3)	
Water-Stained Leaves (B9)		Other (Explain in Rei	marks) FAC-Neutral Test (D5)	
Field Observations:				
Surface Water Present?	Yes No _	$\underline{\lambda}$ Depth (inches):		
Water Table Present?	Yes No _	<u> と</u> Depth (inches):		(
Saturation Present? (includes capillary fringe)	Yes No _	∠ Depth (inches):	Wetland Hydrology Present? Yes	- No 📈
Describe Recorded Data (stre	eam gauge, monito	ring well, aerial photos, pre	evious inspections), if available:	
Remarks: No Mu	1 drology	indicators pr	event	

Recent Iron Reduction in Tilled Soils (C6)

Presence of Reduced Iron (C4)

Sediment Deposits (B2) (Nonriverine)

Drift Deposits (B3) (Nonriverine)

Surface Soil Cracks (B6)