Aquatic Resources Survey Report

Ramon Substation Expansion

Thousand Palms, California

August 3, 2023

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1 Introduction

This report integrates information collected from a variety of literature sources and a field survey to describe the aquatic resources within the vicinity of the Ramon Substation (project) located in an unincorporated portion of Riverside County, California (Figure 1). The Imperial Irrigation District (IID) is proposing improvements to the existing Ramon Substation as part of the VEGA SES 6 Solar and Battery Storage Project (VEGA 6) in unincorporated Imperial County, CA.

Energy generated by the VEGA 6 project will be transmitted to IID's existing 161 kV "L" Line, with ultimate delivery to IID's Ramon Substation in Riverside County. IID has identified that upgrades to the Ramon Substation will be required in order to accommodate several planned utility-scale projects, including the VEGA 6 project. Implementation of the proposed project would require upgrades to the existing IID Ramon Substation. The upgrades would involve an expansion of the existing developed area of the substation, generally expanding to include 4 additional acres of a currently undisturbed area at the substation site.

1.1 Project Location

The proposed project is located east of Palm Springs near the City of Thousand Palms, approximately 2.1 miles east of Interstate 10 (I-10) and immediately north of Ramon Road (Figure 1). The project is located in Section 16 of Township 4 South, Range 6 East of the United States Geological Survey (USGS) 7.5-minute series *Myoma, California* topographic quadrangle (Figure 2). The project is located within the boundaries of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), adjacent to the Thousand Palms Conservation Area. The CVMSHCP covers approximately 240,000 acres of land in Coachella Valley with the purpose to balance growth while conserving sensitive habitats and species.

1.2 Project Description

Ramon Substation Improvements

The IID owns and operates the existing Ramon Substation. The Ramon Substation is located on a single parcel (Assessor Parcel Number 651-230-015) in unincorporated Riverside County, generally northeast of Cathedral City, north of the I-10 Freeway. The existing substation currently occupies approximately 6.7 acres of the 11.26-acre parcel, and contains equipment typically associated with electrical substations including power lines, transformers, and switching gear. Access to the existing substation is provided by Ramon Road, which is immediately south of the existing substation.

Upgrades to the existing Ramon Substation are proposed which would add additional capacity to the substation in order to accommodate electricity generated by planned utility-scale solar projects, which would tie into the substation, and then energy converted would be added to the electrical grid. This includes, but is not limited to, the proposed VEGA 6 solar energy project. The VEGA 6 solar energy project is located in an unincorporated portion of Imperial County.

The upgrades would involve an expansion of the existing developed area of the substation, generally expanding to include 4 additional acres of a currently undisturbed area at the substation site. During

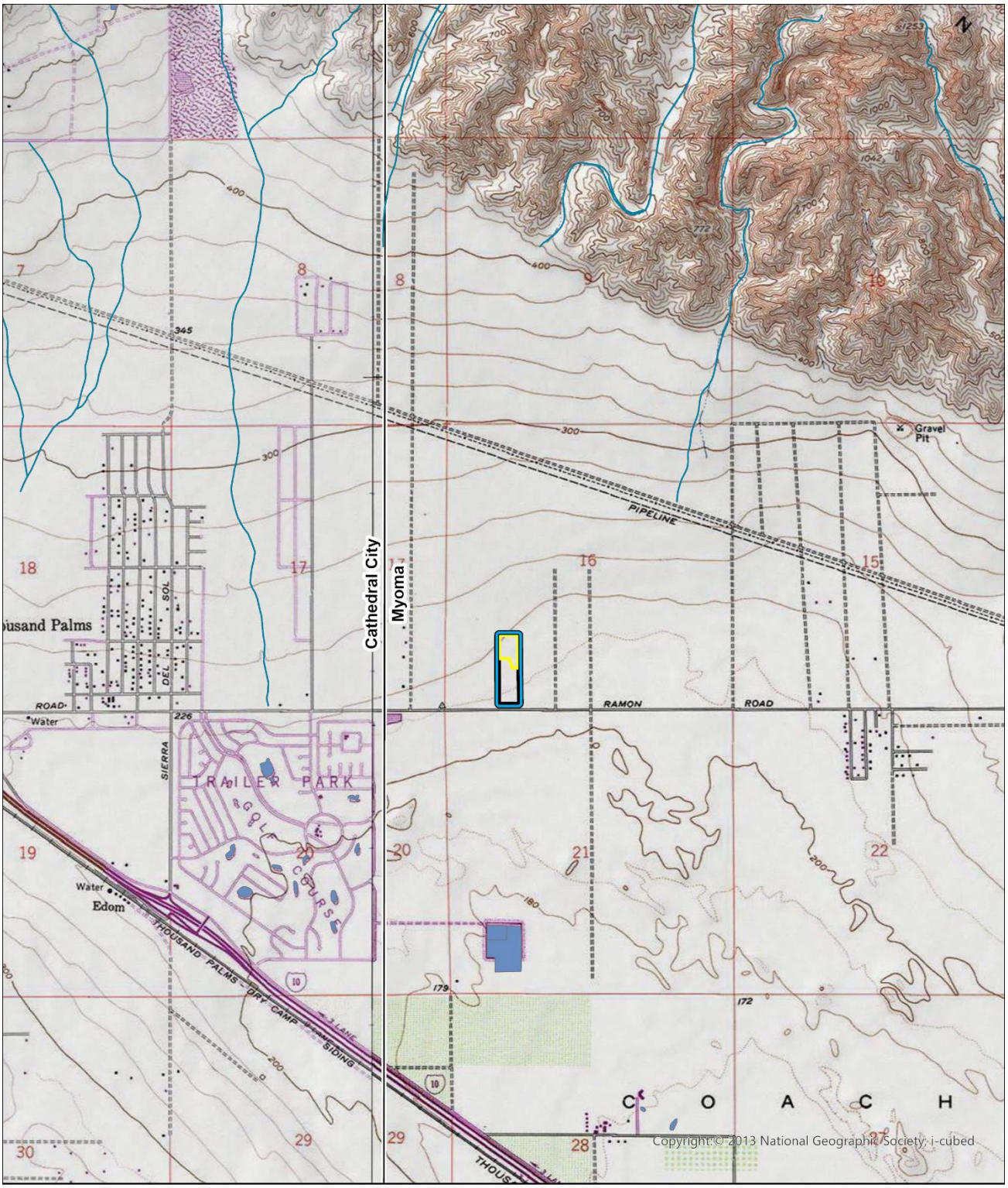
construction, access to the proposed expansion area would be through the existing substation site, via existing dirt roads located on the west and east of the existing substation, or a combination thereof.

IID CEQA Responsible Agency

The IID is a Responsible Agency as defined by CEQA Guideline Section 15381 as it relates to the proposed Ramon Substation improvements. In this capacity, the IID has the discretionary authority to approve improvements to the existing Ramon Substation, and would utilize the information contained in the VEGA 6 Environmental Impact Report, as prepared by the County of Imperial as the CEQA Lead Agency, as the CEQA clearance for the substation improvements.

Figure 1. Project Location Map

Figure 2. USGS 7.5-Minute Quadrangle Map



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2 Regulatory Background

2.1 United State Army Corps of Engineers

2.1.1 Section 404 of the Clean Water Act

Section 404 of the CWA establishes a program for USACE to regulate the discharge of dredge and fill material into waters of the U.S. (WOUS), including wetlands. Activities regulated under this program include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and conversion of wetlands to uplands for farming and forestry. An individual Section 404 permit or authorization to use an existing USACE nationwide permit must be obtained if any portion of an activity would result in dredge or fill impacts on a river or stream that has been determined to be jurisdictional under Section 404 of the CWA. When applying for a permit, a company or organization must show that they would either avoid wetlands where practicable, minimize wetland impacts, or provide compensation for any unavoidable destruction of wetlands.

Waters of the United States

Pursuant to Section 404 of the CWA, USACE regulates the discharge (temporary or permanent) of dredged or fill material into waters of the U.S. (WOUS) including wetlands.

There have been multiple Supreme Court decisions and regulatory definitions recently concerning the proper standard for how to determine whether a wetland or stream that is not navigable in fact is properly considered a WOUS. Most recently, on May 25, 2023, the U.S. Supreme Court, issued its opinion in Sackett v. Environmental Protection Agency, 598 U.S. (Sackett). The opinion addresses the definition of WOUS pursuant to the CWA, 33 U.S.C. Section 1251 et seq. and defines the geographic reach of USACE's and the U.S. Environmental Protection Agency's (EPA) authority in regulating streams, wetlands and other water bodies under the CWA.

In light of Sackett, the agencies announced that they are developing a rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published in the Federal Register on January 18, 2023, to be consistent with the U.S. Supreme Court's May 25, 2023 decision in Sackett. They intend to issue a final rule by September 1, 2023. In the meantime, the agencies will interpret the phrase "waters of the United States" consistent with the Supreme Court's decision in Sackett.

The prior definitions and regulatory guidance to identify WOUS in California were the pre-2015 definitions which included significant nexus evaluations for adjacent wetlands, as described in the Rapanos guidance. The Supreme Court ruling in Sackett effectively nullifies the use of the Rapanos significant nexus evaluation in future jurisdictional determinations (JDs). Under the Sackett ruling, WOUS only include navigable waters, impoundments of navigable waters, relatively permanent tributaries of navigable waters, and contiguous or adjoining wetlands (Sackett v. Environmental Protection Agency, 2023). Ephemeral streams and other water bodies that are not relatively permanent, and wetlands or aquatic habitats that do not have a continuous surface connection with a RPW or navigable water (i.e., isolated wetlands) would not be federally jurisdictional and would not be considered WOUS considering the Court's ruling.

Revised Definition of 'Waters of the United States' Rule (January 2023)

On January 18, 2023, EPA published the final "Revised Definition of 'Waters of the United States' Rule", which became effective on March 20, 2023. This rule establishes a clear and reasonable definition of waters of the United States, which is founded upon the familiar 1986 regulations, with amendments informed by the Clean Water Act and statute as a whole, the scientific record, relevant Supreme Court precedent, and the agencies' expertise. The rule returns the definition of "waters of the United States" to that which existed prior to 2015. The Revised Definition Rule defines the term waters of the "United States" in USACE regulations at 33 Code of Federal Regulations Part 328.3(a) as:

1) Traditional Navigable Waters, the territorial seas, and interstate waters (paragraph (a)(1) waters)
2) Impoundments of "waters of the United States" (paragraph (a)(2) waters)
3) Tributaries to traditional navigable waters, the territorial seas, interstate waters or paragraph (a)(2) impoundments when the tributaries meet either relatively permanent standard or the significant nexus standard ("jurisdictional tributaries");
4) Wetlands adjacent to paragraph (a)(1) waters; wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments or jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard; and wetlands adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard ("jurisdictional adjacent wetlands" and
5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (a)(4) that meet either the relatively permanent standard or the significant nexus standard ("paragraph (a)(5) waters").

Paragraph (b) of the Revised Definition Rule identifies specific exclusions to waters of the United States, including:

1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;
3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or

excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

The limits of USACE jurisdiction in nontidal waters extends to the ordinary high water mark (OHWM) which is defined at 33 CFR 328.3(e) as:

> "…that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

In practice, examples of a discharge of fill material may include, but are not limited to, grading, placing riprap for erosion control, pouring concrete, and stockpiling excavated material into waters of the U.S. Activities that generally do not involve a regulated discharge (if performed specifically in a manner to avoid discharges) include driving pilings, performing certain drainage channel maintenance activities, constructing temporary mining and farm/forest roads, and excavating without stockpiling.

Since an Approved Jurisdictional Determination (AJD) will not be processed by the USACE until guidance for the Sackett ruling is issued, and then likely take several months or more based on USACE backlog, other options for project proponents to advance may include a Preliminary Jurisdictional Determination (PJD) or relying on professional opinions and legal counsel. Under a PJD, the USACE will verify delineations and assume all, or the majority of, the aquatic features are WOUS for permitting purposes. Advancing a project without USACE guidance, an AJD or PJD / Section 404 permit is a compliance risk that each client should consider with legal counsel, when based on professional judgement, and weighing the likely schedule ramifications.

Wetlands

The term wetlands (a subset of WOUS) is defined at 33 Code of Federal Regulations 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987, USACE published a manual to guide its field personnel in determining jurisdictional wetland boundaries followed by the *Arid West Supplement* in 2008 (USACE 2008a). The methodology set forth in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* generally requires that to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual provides great detail in methodology and allows for varying special conditions, a wetland should normally meet each of the following three criteria (three parameter definition). The plant community must be determined to by hydrophytic based on:

1. The dominance test applied using the 50/20 rule,[1] or where the vegetation fails the dominance test and wetland hydrology and hydric soils are present, vegetation is determined to be hydrophytic

[1] If a particular species accounts for more than 50 percent of the total coverage of vegetation in the stratum, or for at least 20 percent of the total coverage in the stratum which the species was found, that species is defined as dominant.

using the Prevalence Index test[2] based upon the indicator status (i.e., rated as facultative or wetter in the 2018 National List of Plant Species that Occur in Wetlands [USACE 2020]);

2. Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., redoximorphic features with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
3. Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for a sufficient period to cause: the formation of hydric soils; and establishment of a hydrophytic plant community. A positive test for wetland hydrology is based on the presence of one primary or two secondary indicators.

2.2 Regional Water Quality Control Board

In California, the State Water Resources Control Board (SWRCB) and nine RWQCBs regulate activities within state and federal waters under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. SWRCB is responsible for setting statewide policy, coordinating and supporting RWQCB efforts, and reviewing petitions that contest RWQCB actions. Each RWQCB is semiautonomous and has the authority to set water quality standards, issue Section 401 certifications and waste discharge requirements, and take enforcement action for projects occurring within its boundary. However, when a project crosses multiple RWQCB jurisdictional boundaries, SWRCB becomes the regulating agency that issues project permits.

2.2.1 Section 401 of the Clean Water Act

Section 401 specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into WOUS. A federal permit or license cannot be issued that may result in a discharge to WOUS unless certification under Section 401 of the CWA is granted or waived by the U.S. Environmental Protection Agency, state, or tribe where the discharge would originate (SWRCB 2014). The aquatic resources study area (ARSA) is located within the boundaries of the Colorado River (Region 7) RWQCB, which would have the authority to grant, grant with conditions, deny, or waive water quality certification for the Project.

Under Section 401, all activities regulated at the federal level by USACE are also regulated at the state level. Therefore, state jurisdiction usually includes all waters or tributaries to waters that are determined to be WOUS and, similar to WOUS, are typically delineated at the OHWM.

2.2.2 Porter-Cologne Water Quality Control Act

RWQCB also regulates discharge of waste to Waters of the State (WOS), pursuant to California's Porter Cologne Water Quality Control Act enacted in 1969, which provides the legal basis for water quality regulation within California. Under this act, WOS are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code Section 13050(e)). Should RWQCB determine that discharge of pollutants (including fill) is proposed to waters that meet the definition of WOS but not WOUS, waste discharge requirements may be required.

[2] A Prevalence Index is calculated using wetland indicator status and relative abundance for each vascular plant species present.

2.2.3 State Wetland Definition and Procedures for the Discharge or Dredge or Fill Material to Waters of the State

On April 2, 2019, SWRCB adopted the State Wetland Definition and Procedures for the Discharge of Dredged or Fill Material to WOS. The procedures became effective May 28, 2020. These rules define what SWRCB considers a wetland and include a framework for determining if a feature that meets the SWRCB wetland definition is a WOS, subject to regulation. Second, the rules clarify requirements for permit applications to discharge dredged or fill material to any WOS.

SWRCB defines an area as wetland as follows:

> An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation (SWRCB 2019).

SWRCB considers the following wetlands (as determined using methodology in the USACE *Wetland Delineation Manual* [USACE Environmental Laboratory 1987]) as WOS:

1. Natural wetlands
2. Wetlands created by modification of a surface water of the state
3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts on other WOS, except where the approving agency explicitly identifies the mitigation as being of limited duration
    b. Specifically identified in a water quality control plan as a wetland or other water of the state
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape
    d. Greater than or equal to 1 acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not WOS unless they also satisfy the criteria set forth in 2, 3a, or 3b):
        i. Industrial or municipal wastewater treatment or disposal
        ii. Settling of sediment
        iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program
        iv. Treatment of surface waters
        v. Agricultural crop irrigation or stock watering
        vi. Fire suppression
        vii. Industrial processing or cooling

viii. Active surface mining – even if the site is managed for interim wetlands functions and values

ix. Log storage

x. Treatment, storage, or distribution of recycled water

xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits)

xii. Fields flooded for rice growing

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

2.3 California Department of Fish and Wildlife

2.3.1 California Fish and Game Code Section 1600 et seq.

The State of California regulates water resources under Section 1600 et seq. of the California Fish and Game Code. Section 1602 states:

> An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated, or to the limit of the adjacent riparian habitat located contiguous to the watercourse if the stream or lake is vegetated.

3 Methodology

3.1 Literature Review

The following literature and materials were reviewed both prior to conducting aquatic resources delineation fieldwork and in the process of determining jurisdictional status of features identified in the field:

- Current and historical aerial photographs (Google Earth 2023; Historic Aerials 2023; USGS Earth Explorer 2023)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil mapping data (USDA NRCS 2023)
- National Hydrography Dataset (USGS 2022)
- U.S. Fish and Wildlife Service National Wetlands Inventory data to identify areas mapped as wetland features (USFWS 2022)

3.2 Field Surveys

HDR Biologist Aaron Newton and Ronell Santos conducted a site visit on June 16, 2023 in order to identify general site conditions, vegetation communities, and suitability of habitat for various special-status species. All aquatic resources within accessible areas of the ARSA, which consists of the Ramon Substation and proposed expansion plus a 50-foot buffer, were investigated on foot. Aquatic resource boundaries were mapped by hand on printed 1:2,400 scale 2023 aerial maps, or widths were recorded (in feet) with locational data using the Esri Collector for ArcGIS application on an Android V.10 phone connected to a global positioning system. Notes describing aquatic resource type, substrate type, flow regime, presence or absence of vegetation, and any other pertinent details regarding observed hydrology were taken at each feature. All features were later digitized using geographic information system software.

Plant species observed were identified by visual characteristics and morphology in the field. Taxonomic nomenclature for plants follows the *Jepson Manual: Vascular Plants of California*, second edition (Baldwin et al. 2012) and the Jepson eFlora database (Jepson Flora Project 2021). Vegetation communities were characterized using *A Manual of California Vegetation, second edition* (Sawyer et al. 2009).

3.2.1 United State Army Corps of Engineers Jurisdiction

Aquatic resources potentially subject to USACE jurisdiction were delineated according to 33 Code of Federal Regulations Part 328.4 and using the methods outlined in the USACE *Wetland Delineation Manual* (USACE Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (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 2008c).

Aquatic features were investigated for evidence of an OHWM or other jurisdictional indicators, such as presence of hydrophytic vegetation. Three wetland sampling points were assessed within the ARSA in areas exhibiting potential wetland conditions, notably potentially hydrophytic vegetation and hydrologic indicators. Wetland indicator status of plant species was determined using the 2020 *USACE National Wetland Plant List, Version 3.5* (USACE 2020). Soils were analyzed using the *Natural Resources Conservation Service Field Indicators of Hydric Soils in the U.S., Version 8.2* (USDA NRCS 2020), the Hydric Soils List for Orange County and Part of Riverside County, California (USDA NRCS 2022), and *Munsell® Soil Color Book* (*Munsell Color X-Rite* 2013).

Ephemeral aquatic features that were constructed in uplands for the sole purpose of managing upland stormwater flows were mapped but are not considered jurisdictional (USACE Guidance Document [USACE 2008d]).

Common plant species were identified by visual characteristics and morphology in the field, while less common or otherwise unknown plant species were collected and identified later with the aid of plant keys. Taxonomic nomenclature for plants follows the Jepson eFlora (Jepson Flora Project 2021).

3.2.2 Regional Water Quality Control Board Jurisdiction

RWQCB jurisdiction, for the purposes of CWA Section 401 regulation, is identical to USACE jurisdiction. In addition, the ARSA was evaluated for isolated features that would not be subject to federal jurisdiction but would be potentially regulated under the Porter-Cologne Water Quality Control Act.

3.2.3 California Department of Fish and Wildlife

The ARSA was surveyed for features that exhibit streambed and stream banks and/or riparian vegetation and would, therefore, be subject to CDFW jurisdiction. Any such features would be mapped from top-of-bank to top-of-bank, or to the extent of riparian vegetation, whichever is greater.

4 Results

4.1 Environmental Setting

4.1.1 Existing and Adjacent Land Use

The project footprint has a General Plan land use designation of general residential. The surrounding land use designations include general residential and one-family dwellings. The project footprint currently consists of a disturbed area north of the existing Ramon substation, sparsely vegetated with low growing creosote bushes in sandy soils. Two large electrical transmission poles are located within the footprint and dumped materials can be found scattered throughout the southern end of the footprint. A small human encampment was also observed during the field visit.

4.1.2 Soils

The online NRCS Web Soil Survey was referenced to identify potential hydric soils occurring within the Biological Resources Study Area (BSA) (USDA NRCS 2023). The following soils are mapped within the BSA (Appendix A).

- **Carsitas:** The soils of the Carsitas series are characterized by very deep, somewhat excessively drained soils formed in alluvium. Carsitas series soils are on 0 to 30 percent slopes on alluvial fans, fan aprons, valley fills, and in drainageways at elevations of -220 to 2,625 feet. Carsitas series soils within the project footprint include Carsitas gravelly sand, 0 to 9 percent slopes.
- **Myoma:** The Myoma series are characterized by somewhat excessively drained soils with rapid permeability. They are nearly level to rolling at elevations of -200 to 1,800 feet. Myoma series soils within the project footprint include Myoma fine sand, 0 to 5 percent slopes.

4.1.3 Hydrology

The BSA is located within the Upper Whitewater River watershed, approximately 201,200 acres in size, which is located within the larger Whitewater River Hydrologic Unit (HUC-8 # 180100201). The major surface water within the watershed includes the Whitewater River and originates within the summit of Mount San Gorgonio in the San Bernardino Mountains. The river travels southeast joining with three other tributaries before ultimately draining into the Salton Sea at the southeastern end of the Coachella Valley (Riverside County Watershed Protection 2020).

4.1.4 Vegetation Communities and Other Land Types

Based on a review of historic aerial photographs [Historic Aerials (1959-2020) and Google Earth (1996-2023)] the survey area was cleared of vegetation prior to May 2002 for the creation of the existing Ramon Substation and associated transmission line poles and portions been routinely disturbed since that time.

The figure and acreages correspond with the BSA, which includes the project footprint plus a 500-plus buffer. Vegetation onsite consisted of three land cover types with the predominant land cover type as Developed/Ornamental. A description of each vegetation community occurring within the BSA is

provided below and depicted in Figure 3. All botanical species observed are listed in Appendix B. Photographs of the site from the June 16, 2023 visit are included in Figure 4.

Developed/Ornamental

Developed/Ornamental land is comprised of areas of intensive use with much of the land constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is highly modified and characterized by permanent or semi-permanent structures, pavement, unvegetated areas, and landscaped areas that require irrigation. Developed/Ornamental areas typically provide high value or function for human use but provide little habitat value to wildlife. Ornamental plantings can provide some use for wildlife movement or use by species adapted to human presence.

Within the BSA, Developed/Ornamental land includes paved roads, electric substations, areas where non-native ornamental species and landscaping have been installed, and bare ground with compacted soils that no longer support vegetation. A total of 17.15 acres of Developed/Ornamental land occur within the BSA. A strip of land just north of Ramon Road, in front of the substation has planted ornamental vegetation, approximately 1.56 acres of land.

Creosote Bush Scrub (*Larrea tridentata* Alliance)

Within the Creosote Bush Scrub community (*Larrea tridentata* Alliance), creosote bush is dominant in the shrub canopy with several sub-dominant desert shrub species such as four-wing saltbush (*Atriplex canescens*), burrobrush (*Ambrosia salsola*), brittlebush (*Encelia farinosa*), and Mediterranean grass (*Schismus barbatus*).

Within the BSA, Creosote Bush Scrub occurs primarily in the north and east of the existing Ramon Substation and covers a total of 35.02 acres of the BSA.

Disturbed-Creosote Bush Scrub (*Larrea tridentata* Alliance)

The disturbed-Creosote Bush Scrub community (*Larrea tridentata* Alliance) is composed of similar species as Creosote Bush Scrub but receives regular disturbance from offroad activity and illegal dumping. The vegetation community is dominated by creosote bush with sub-dominant desert shrub species such as four-wing saltbush (*Atriplex canescens*), burrobrush (*Ambrosia salsola*), brittlebush (*Encelia farinosa*), and Mediterranean grass (*Schismus barbatus*).

Within the BSA, disturbed-Creosote Bush Scrub occurs to the north of the existing Ramon Substation and covers a total of 11.57 acres of the BSA.

Special-Status Vegetation Communities

Special status natural communities are those that are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special status plants or animals occurring in those habitats. Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA and its equivalents.

None of the vegetation communities within the project footprint is considered sensitive or of special concern.

Figure 3. Vegetation Communities and Other Land Cover Types in the BSA

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4.2 Aquatic Resources Delineation Results

4.2.1 United States Army Corps of Engineers

No aquatic resources were observed within the ARSA during the field visit. The area is entirely upland dominated by creosote bush scrub with no features exhibiting any hydrologic indicators or containing hydrophytic plants. No soil samples were taken during the field visit.

4.2.2 Regional Water Quality Control Board

The ARSA is within the jurisdiction of the Colorado River RWQCB (Region 7). Within the ARSA, WOS, as defined by the SWRCB's procedures are generally equivalent to WOUS. No aquatic resources were observed within the ARSA during the field visit. The area is entirely upland dominated by creosote bush scrub with no features exhibiting any hydrologic indicators or containing hydrophytic plants.

4.2.3 California Department of Fish and Wildlife Jurisdiction

Features within the ARSA were assessed for CDFW jurisdiction based on whether they exhibited a stream bed and bank, provided habitat value for terrestrial and/or aquatic wildlife, and/or associated with a naturally occurring drainage feature. No aquatic resources were observed within the ARSA during the field.

5 Conclusions

No aquatic features that would be potentially subject to USACE/RWQCB/CDFW jurisdiction occur within the ARSA. The project would not result in direct impacts that include discharge of fill to USACE/RWQCB jurisdictional features or substantial modification of CDFW jurisdictional features and would not require authorization and mitigation for impacts.

Figure 4. Site Photographs

Photo 1: View of the project footprint looking south towards existing Ramon Substation, showing disturbed Creosote Bush Scrub habitat.

Photo 2: View of the project footprint towards east, showing Creosote Bush Scrub Habitat.

Photo 3: View of the construction debris piles in the disturbed Creosote Bush Scrub habitat within the project footprint.

Photo 4: View of the offroad activity in the disturbed Creosote Bush Scrub habitat within the project footprint.

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Appendix A. Soils Report

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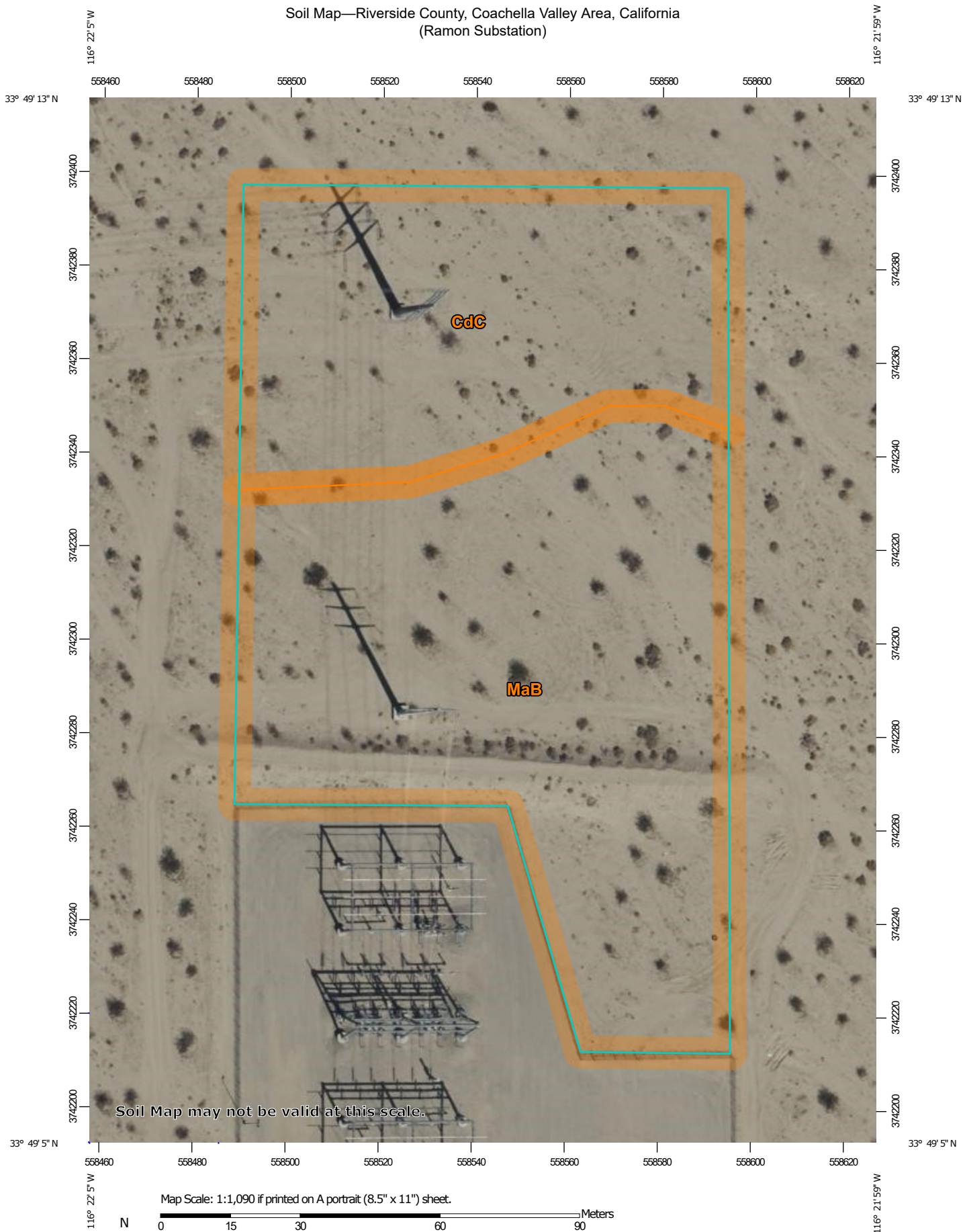
Soil Map—Riverside County, Coachella Valley Area, California
(Ramon Substation)



Map Scale: 1:1,090 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Riverside County, Coachella Valley Area, California
Survey Area Data: Version 14, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 15, 2022—May 28, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CdC	Carsitas gravelly sand, 0 to 9 percent slopes	1.5	37.1%
MaB	Myoma fine sand, 0 to 5 percent slopes	2.5	62.9%
Totals for Area of Interest		**4.0**	**100.0%**

Appendix B. Plant and Wildlife Species Observed

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Species	Common Name	Special-Status	Wetland Rank	Weed Rank
EUDICOTS				
ASTERACEAE – SUNFLOWER FAMILY				
Ambrosia salsola var. salsola	common burrobrush			
Encelia farinosa	brittlebush			
CHENOPODIACEAE – GOOSEFOOT FAMILY				
Atriplex canescens	four-wing saltbush			
FABACEAE – LEGUME FAMILY				
*Parkinsonia aculeata**	Mexican palo verde		FAC	
Psorothamnus emoryi	Emory's indigo-bush			
Psorothamnus spinosus	smoke tree			
Senna armata	spiny senna			
LAMIACEAE – MINT FAMILY				
Salvia dorrii	Dorr's sage			
MYRTACEAE – MYRTLE FAMILY				
*Eucalyptus camaldulensis**	red gum		FAC	
SIMMONDSIACEAE – JOJOBA FAMILY				
Simmondsia chinensis	jojoba			
TAMARICACEAE – TAMARISK FAMILY				
*Tamarix ramosissima**	saltcedar			4500
ZYGOPHYLLACEAE – CALTROP FAMILY				
Larrea tridentata	creosote bush			
MONOCOTS				
POACEAE – GRASS FAMILY				
*Schismus barbatus**	barbed Mediterranean grass			

Legend

Symbols:

* Non-native species
cf. confer: This designation is used when a species or infraspecific taxon cannot be confirmed, but is believed to be the selected species of infraspecific taxon based on available anatomy

Federal Designations:

U.S. Fish and Wildlife Service:

FE Endangered
FT Threatened
FC Candidate Species

U.S. Forest Service:

FSS Forest Service Sensitive
WL Watch List

U.S. Army Corps of Engineers Wetland Rank:

OBL: Obligate Wetland - Almost always occur in wetlands. With few exceptions, these plants are found in standing water or seasonally saturated soils near the surface.
FACW: Facultative Wetland - Usually occur in wetlands, but may occur in non-wetlands. These plants predominately occur with hydric soils, often in geomorphic settings where water saturates the soils or floods the soil surface at least seasonally.
FAC: Facultative - Occur in wetlands and non-wetlands. These plants can grow in hydric, mesic, or xeric habitats.
FACU Facultative Upland - Usually occur in non-wetlands, but may occur in wetlands. These plants predominately occur on drier or more mesic sites in geomorphic settings where water rarely saturates the soils or floods the soil surface seasonally.
None (UPL): Upland - Almost never occur in wetlands. These plants occupy mesic to xeric non-wetland habitats. They almost never occur in standing water or saturated soils.

Other Designations:

California Invasive Plant Council Rank:

High These species have severe ecological impacts on the surrounding habitat. They have moderate to high rates of dispersal and establishment, and most are widely distributed.
Moderate These species have substantial and apparent—but generally not severe—ecological impacts on the surrounding habitat. They have moderate to high rates of dispersal. Distribution may range from limited to widespread.
Limited These species are invasive, but their ecological impacts are minor on a statewide level. They have low to moderate rates of colonization. Although their distribution is generally limited, these species may be locally persistent and problematic.
Watch List These species are predicted to become invasive if no further actions are taken. Distribution may range from limited to widespread in specific regions.

State of California Designations:

California Department of Fish and Wildlife:

SE Endangered
ST Threatened
SR Rare

California Rare Plant Rank:

1A Plants presumed extirpated in California and either rare or extinct elsewhere
1B Plants Rare, Threatened, or Endangered in California and elsewhere
2A Plants presumed extirpated in California, but more common elsewhere
2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere
3 Plants about which we need more information - review list
4 Plants of limited distribution - watch list

Threat Code Extensions:

None Plants lacking any threat information
.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2 Moderately threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)
.3 Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

California Department of Food and Agriculture Weed Rank:

A eradication, containment, rejection, or other holding action at the state-County level is mandated
B eradication, containment, control, or other holding action is at the discretion of the commissioner
C no state action is required except to retard the speed of spreading
4500 this plant is included in CCR Section 4500 list of state noxious weeds