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July 14, 2026
Project No: 25-18263

Jon Boyer
Vaca Dixon BESS LLC and Arges BESS LLC
4350 Executive Drive, Suite 320
San Diego, California 92121

Subject: Botanical Survey Report for the Vaca Dixon Power Center Project in Solano County, California

Dear Mr. Boyer:

Rincon Consultants, Inc. (Rincon) is pleased to provide this report in support of the Vaca Dixon Power Center Project (Project), located near the City of Vacaville, Solano County, California. This report documents the results of a botanical survey effort conducted in the portion of the Project Area north of Interstate 80 (I-80), where the overhead interconnection (gen-tie) lines are proposed. Though the proposed gen-tie corridor for this Project only encompasses a small portion of the parcel north of I-80, the botanical survey area was extended to include the entire western portion of the overall parcel, and a 100-foot buffer (survey area), to account for any future changes to Project design and ensure all potential impact areas were adequately surveyed.

This report documents the existing conditions of the survey area, including the presence of sensitive vegetation communities and special-status plants, as applicable. This evaluation is based on the results of a desktop assessment of site conditions, including soil types, hydrologic conditions, reviews of special-status plant observations documented in the regional vicinity in previous years, and floristic botanical surveys conducted in spring 2026.

Project Location and Description

The proposed Vaca Dixon Power Center Project is made up of two major components: the battery energy storage system (BESS) facilities and transmission intertie (gen-tie) lines. The BESS facilities are proposed to be installed on an approximately 10-acre site, south of Interstate 80 (I-80) in the City of Vacaville in Solano County, California, within Assessor's Parcel Number (APN) 0133-060-060. The Project's proposed gen-tie lines cross I-80 to the north to connect the BESS facilities to the existing Pacific Gas & Electric (PG&E) Vaca-Dixon Substation located on the western portion of APN 0133-060-070 in unincorporated Solano County. This report provides findings specific to the portion of the Project Area north of I-80, where the overhead gen-tie lines are proposed.

The survey area is located on the border of the Sacramento Valley and Inner North Coast Ranges geographic subdivisions of California (Jepson Flora Project 2026) and within the *Allendale, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle. The Public Land Survey System depicts the survey area in Township 06 North, Range 01 West, Section 01 of the Mount Diablo Base and Meridian. The center point of the survey area is located at 38.39893°, -121.92335°. The survey area is bordered by backyards of residential areas to the west, PG&E facilities to the east, the I-80 corridor to the south, and Gibson Canyon Creek to the north. Adjacent land uses include agricultural land, PG&E facilities associated with the Vaca-Dixon Substation, and backyards of residential areas. Provided in Attachment 1, Figure 1 displays the regional location of the survey area, and Figure 2 displays the survey area boundary. Figure 3 depicts the survey area on the California USGS 7.5-minute topographic quadrangle map.

Regulatory Overview

Local, state, and federal agencies regulate protected plant species and may require an assessment of their presence or potential presence be conducted on-site prior to the approval of proposed development on a property. For the purpose of this report, special-status plant species are those plants listed, proposed for listing, or candidates for listing as threatened or endangered by the United States Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (USFWS 1973); those listed or candidates for listing as rare, threatened, or endangered by CDFW under the California Endangered Species Act or Native Plant Protection Act (CDFW 2026a); those recognized by the CDFW under the California Native Plant Society (CNPS) California Rare Plant Rank system (Table 1 and 2; CNPS 2026a); and locally significant plants, which are not rare from a statewide perspective but are rare or uncommon in a local context, such as within a county or region.

Table 1 California Special-Status Plant Rank Definitions

Rank	Definition
1A	Presumed Extinct in California
1B	Rare, Threatened, or Endangered in California and elsewhere
2	Rare, Threatened, or Endangered in California, but more common elsewhere
3	Need more information (a Review List)
4	Plants of Limited Distribution (a Watch List)

Table 2 California Special-Status Plant Rank Threat Code Extensions

Threat Rank	Definition
.1	Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2	Fairly endangered in California (20–80% occurrences threatened)
.3	Not very endangered in California (<20% of occurrences threatened)

Methodology

A database search and literature review was conducted to identify special-status plants recorded in the project vicinity. Field surveys were conducted to determine whether any such species were observed in the survey area. The methods used for the database search/literature review and field surveys are described below.

Database Search and Literature Review

Prior to conducting the field surveys of the survey area, recent aerial photography (Google Earth Pro 2026) was reviewed, and California Natural Diversity Database (CDFW 2026b), CNPS online Inventory of Rare and Endangered Plants of California (CNPS 2026a), USFWS Critical Habitat Portal (USFWS 2026a), and USFWS Information for Planning and Consultation (IPac; USFWS 2026b) were consulted for information on general botanical resources, special-status plant species occurrences, and critical habitat designations within the regional vicinity of the survey area (*Allendale, California* USGS 7.5-minute topographic quadrangle and the surrounding eight quadrangles comprising a “nine-quad search”). Special-status plant species documented within the nine-quad search area of the survey area reported from the scientific literature review and database queries are provided in Attachment 2.



In addition, the Web Soil Survey (United States Department of Agriculture, Natural Resources Conservation Service; USDA NRCS 2026) was reviewed to better characterize the survey area and the surroundings from a geologic and topographic perspective. The National Wetlands Inventory (USFWS 2026c) and the National Hydrography Dataset (USGS 2026) were reviewed to understand the hydrology of the survey area.

Field Surveys

Botanical field surveys were conducted within the survey area. The botanical surveys were floristic in nature and generally followed the *CNPS Botanical Survey Guidelines* (CNPS 2001), the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018), and *USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (USFWS 2000). Nomenclature follows *The Jepson Manual, Second Edition* (Baldwin et al. 2012) with updates available in the online Jepson eFlora (Jepson Flora Project 2026), with status updates provided in the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2026c), and the online Inventory of Rare and Endangered Plants of California (CNPS 2026a).

Natural and semi-natural vegetation community classification was conducted using the systems provided in *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009), which establishes systematic classifications and definitions of vegetation communities, in conjunction with the *California Natural Communities List* (CDFW 2026d), which provides currently recognized alliances and associations. Each vegetation mapping unit, with a minimum mapping unit of 0.01 acre, was analyzed for characteristics to define the applicable vegetation community, such as dominant or co-dominant plant species and community membership rules and classified to the association level. Community classifications were modified as needed based on species dominance to most accurately describe the existing vegetation communities and land cover types within the survey area. Additionally, land covers were characterized in areas that appeared to be altered by anthropogenic activities and were unvegetated or dominated by ornamental vegetation (e.g., developed, disturbed).

Field surveys were scheduled during the appropriate blooming period to optimize detection of special-status plant species with potential to occur within the survey area. Field survey details are provided in (Table 3).

Table 3 Field Survey Information

Date	Personnel	Time	Temperature Range (°F)	Average Wind Speed (mph)	Average Cloud Cover (%)
April 28, 2026	Nicole Carpenter	0715–0930	49 – 60	0 – 5	20
May 19, 2026	Nicole Carpenter	0715–0845	59 – 70	5 – 10	10
June 16, 2026	Nicole Carpenter	0715–0900	61 – 70	0 – 5	10

The surveys were conducted using systematic field techniques by walking meandering transects, where safe and accessible to attain 100 percent visual coverage of the survey area. Special attention was given to areas with a high potential to support special-status plant species (e.g., vegetation community interfaces, aquatic features, suitable soils, and topography). All plant species observed on-site were recorded.



Existing Setting

Topography and Hydrology

The survey area is located in a relatively flat area, which ranges in elevation between 79 to 84 feet above mean sea level (Attachment 1, Figure 3). The survey area is located within the Ulati Creek Watershed (Hydrologic Unit Code [HUC]-10 1802016305) and within the Gibson Canyon Creek-Sweany Creek Subwatershed (HUC-12 180201630502) (USGS 2026). The National Wetlands Inventory (USFWS 2026c) and National Hydrography Dataset (USGS 2026) map Gibson Canyon Creek north of the Project parcel. A pond is mapped adjacent to the Project parcel to the west.

Soil Types

According to the United States Department of Agriculture, Natural Resources Conservation Service Web Soil Survey data for Solano County, California (USDA 2026a), three soil types are present in the survey area (Attachment 1, Figure 4). The survey area contains Clear Lake clay, 0 to 2 percent slopes, MLRA 17, San Ysidro sandy loam, 0 to 2 percent slopes, and San Ysidro sandy loam, thick surfaces, 0 to 2 percent slopes. Of the three soil map units, the Clear Lake clay, 0 to 2 percent slopes, MRLA 17 soil type is considered hydric (USDA 2026b).

Clear Lake Series

The Clear Lake series is a soil series composed of very deep, poorly drained soils on flood basin floors and valleys. This soil type is derived from basin alluvium derived from igneous, metamorphic and sedimentary rock. The mean annual precipitation is approximately 20 inches. This soil series has negligible to high runoff with slow to very slow permeability. Clear Lake clay, 0 to 2 percent slopes, MRLA is considered hydric (USDA 2026b).

San Ysidro Series

The San Ysidro series consists of very deep, moderately well drained soils on terraces. This soil type is derived from alluvium derived from sedimentary rocks. The mean annual precipitation is approximately 20 inches. This soil series has slow to medium runoff with very slow permeability and is not considered hydric (USDA 2026b).

Results

A total of 79 plant species were observed within the survey area during the 2026 botanical surveys. Of these, 24 are native and 55 are introduced. No special-status plant species were observed. A comprehensive floral compendium documenting all plant species observed is presented in Attachment 3. Representative site photographs are provided in Attachment 4.



Vegetation Communities

The survey area contains zero natural vegetation alliances, two semi-natural vegetation alliances and associations, and two land cover types (Table 4, Attachment 1, Figure 5).

Table 4 Vegetation Communities and Land Cover Types within the Survey Area

Vegetation Community or Land Cover Type	Global and State Rank	Acreage
Semi-Natural Communities		
<i>Perennial Rye Grass Field</i>	GNA/SNA	1.19
<i>Wild Oats and Annual Brome Grassland</i>	GNA/SNA	27.29
Land Cover		
Developed	N/A	13.31
Landscaped	N/A	2.11
Open Water	N/A	0.95
Total		44.85

¹ Associations are indicated in *italics*.

GNA/SNA – Not applicable; community is not a suitable target for conservation

N/A – Not a vegetation community

Semi-Natural Communities

Perennial Rye Grass Field (*Lolium perenne* Herbaceous Semi-Natural Alliance)

The survey area contains approximately 1.19 acres of perennial rye grass fields (Sawyer et al. 2009). This vegetation community occurs in association with an ephemeral drainage and depressional aquatic features throughout the survey area. This vegetation community is similarly highly disturbed, and evidence of mowing and tire tracks were observed throughout the survey area. The plant species composition between each feature varies; however, perennial ryegrass (*Festuca perennis* [*Lolium perenne*]) appears as a dominant species. Additional species observed in this community included common spike rush (*Eleocharis macrostachya*), Mediterranean barley (*Hordeum marinum*), and bird foot's trefoil (*Lotus corniculatus*).

Wild Oats and Annual Brome Grassland (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance)

Non-native grassland covers approximately 27.29 acres of the survey area. This vegetation community most closely resembles the wild oats and annual brome grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance) described in MCV2 (Sawyer et al. 2009). This community is present throughout the survey area and is dominated by non-native grasses and forbs. Vegetation within this community is highly disturbed due to vegetation management activities on the parcel. Non-native annual grass species observed include wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and Italian ryegrass (*Festuca perennis*). Non-native herbaceous species include yellow star-thistle (*Centaurea solstitialis*), stinkwort (*Dittrichia graveolens*), bristly ox-tongue (*Helminthotheca echinoides*), and rose clover (*Trifolium hirtum*).



Land Cover Types

Developed

The developed land cover type encompasses approximately 13.31 acres of the survey area. This land cover type is not naturally occurring and is not described in the MCV2 (Sawyer et al. 2009). This land cover type consists of areas that have been modified and are built up such that most or all vegetation has been removed and/or minimal ornamental trees and shrubs are present. Within the survey area, this land cover type consists of paved roads, Interstate 80, dirt roads, building structures, and other infrastructure associated with the Vaca Dixon Substation.

Landscaped

Landscaped areas cover approximately 2.11 acres of the survey area. This land cover type is not naturally occurring and is not described in the MCV2 (Sawyer et al. 2009). This land cover type consists of areas that have been modified and are built up such that non-native ornamental trees and shrubs are present. Within the survey area, this land cover type consists of landscaped areas associated with the CalPeak Power Vaca Dixon Peaker Plant in the central portion of the survey area and the PG&E Vaca-Dixon Substation in the east portion of the survey area. Species observed include rosemary (*Rosmarinus officinalis*) and coast redwood (*Sequoia sempervirens*) surrounding the CalPeak Power Vaca Dixon Peaker Plant, crimson bottlebrush (*Melaleuca citrina*) and oleander (*Nerium oleander*) along the southern boundary of the survey area, and a single row of planted California sycamore (*Platanus racemosa*) in the southern portion of the survey area.

Open Water

Open water covers approximately 0.95 acres of the survey area. This land cover type is not naturally occurring and is not described in the MCV2 (Sawyer et al. 2009). This land cover type consists of Gibson Canyon Creek north of the Project parcel, within the 100-foot survey buffer. The creek channel contains water year-round. The dominant species observed on the edges of the creek channel included broadleaf cattail (*Typha latifolia*).

Discussion

The botanical surveys included surveys in mid spring, late spring, and early summer to capture the blooming period of all target special status plant species with potential to occur in the survey area. Annual herbaceous species and geophytes (perennial bulbs) have populations that can vary widely from year to year based on climactic and other conditions. Overall plant germination and growth in 2026 occurred earlier than typical years, likely due to an abnormal heatwave experienced by Solano County in March 2026, as well as long-term regional drought conditions. This may have led to reduced germination and/or accelerated flower production of some plant species, particularly for annual species. Currently, large swaths of the survey area are dominated by herbaceous non-native plants and are regularly disturbed by herbicide application and mowing as part of PG&E's vegetation management of the survey area. This disturbance may suppress the germination and growth of special-status plants.

Rincon appreciates the opportunity to provide the information summarized in this report. Please do not hesitate to reach out to the undersigned with questions related to the contents herein.



Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink that reads 'Nicole Carpenter'.

Nicole Carpenter
Biologist

A handwritten signature in blue ink that reads 'Robin Murray'.

Robin Murray
Supervising Biologist
Certified Consulting Botanist #0053

A handwritten signature in black ink that reads 'Susan Dewar'.

Susan Dewar
Principal Biologist

Attachments

- Attachment 1 Figures
- Attachment 2 Regionally Occurring Special-Status Plant Species
- Attachment 3 Floral Compendium
- Attachment 4 Representative Site Photographs

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Attachment 1

Figures

Figure 1 Regional Location



Basemap provided by Esri and its licensors © 2026. Map created by Rincon Consultants, Inc., 2026.

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Fig 1 Regional Location

★ Project Location

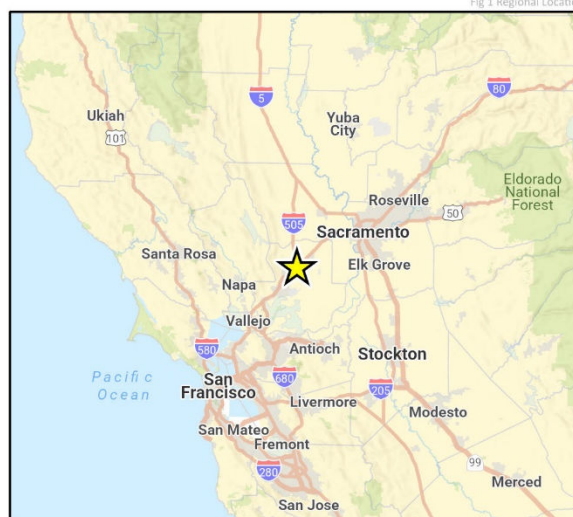


Figure 2 Survey Area



Imagery provided by Esri and its licensors © 2026.

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Fig 2 Study Area

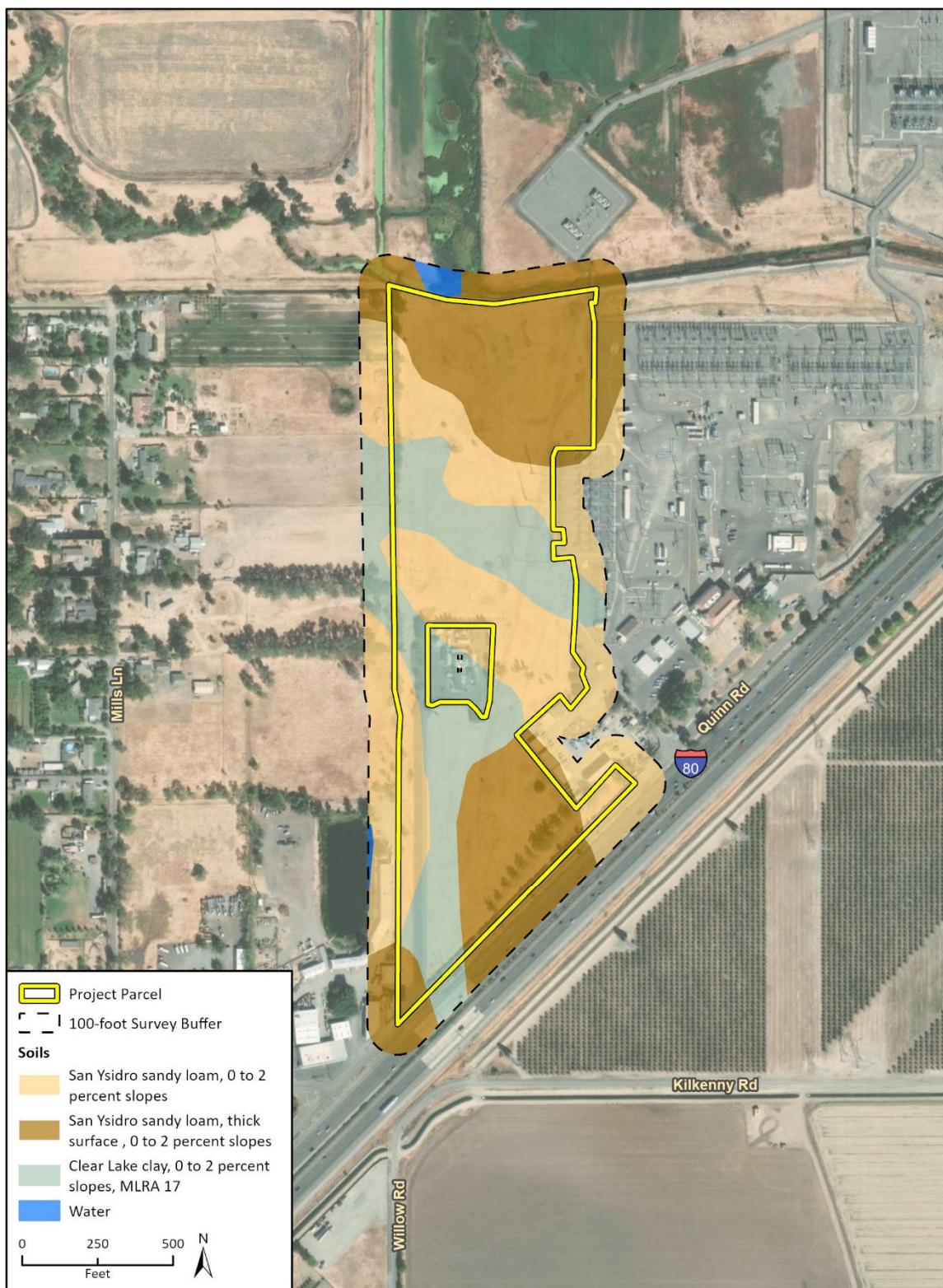
Figure 3 Survey Area Topography



Imagery provided by USGS, Esri, and their licensors © 2026.

25_17851 Bio
 Fig 3 Survey Area Topography

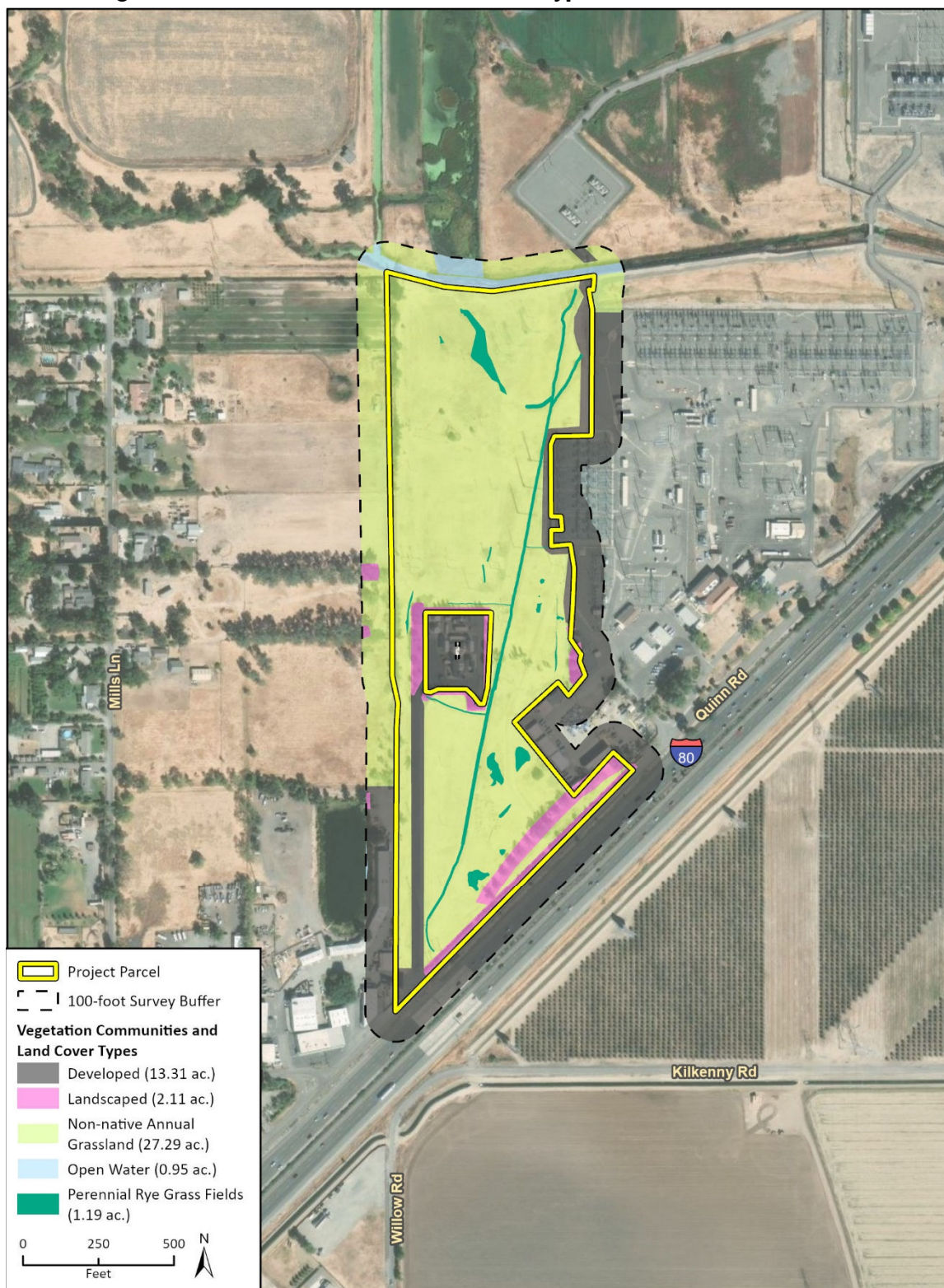
Figure 4 Soils



Imagery provided by Esri and its licensors © 2026.
Additional data provided by the Natural Resource Conservation Service Soil Survey Geography, 2025.

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Fig 4 Soils

Figure 5 Vegetation Communities and Land Cover Types



Imagery provided by Esri and its licensors © 2026.

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Fig 5 Vegetation Communities and Land Cover Types

Attachment 2

Regionally Occurring Special-Status Plant Species



Regionally Occurring Special-Status Plant Species

Scientific Name Common Name	Status	Habitat Requirements
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	None/None G2T1/S1 1B.1	Annual herb. Meadows and seeps, valley and foothill grassland. Subalkaline flats on overflow land in the Central Valley; usually seen in dry, adobe soil. Elevations: 5-245 feet (2-75 meters). Blooms Apr-May.
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	None/None G2T1/S1 1B.2	Annual herb. Playas, valley and foothill grassland, vernal pools. Alkaline. Elevations: 5-195 feet (1-60 meters). Blooms Mar-Jun.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	None/None G3T2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, valley and foothill grassland, wetlands. Alkaline (sometimes). Elevations: 0-1835 feet (0-560 meters). Blooms Apr-Oct.
<i>Atriplex depressa</i> brittlescale	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools, wetlands. Alkaline, clay soils. Elevations: 5-1050 feet (1-320 meters). Blooms Apr-Oct.
<i>Atriplex persistens</i> vernal pool smallscale	None/None G2/S2 1B.2	Annual herb. Vernal pools, wetlands. Alkaline vernal pools, clay loam soils. Elevations: 35-375 feet (10-115 meters). Blooms Jun-Oct.
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	None/None G3T2/S2 1B.2	Annual herb. Chaparral, coastal prairie, marshes and swamps, meadows and seeps, seasonal wetlands, valley and foothill grassland. Alkaline (often). Elevations: 0-1380 feet (0-420 meters). Blooms May-Nov.
<i>Chloropyron molle</i> ssp. <i>hispidum</i> hispid salty bird's-beak	None/None G2T1/S1 1B.1	Annual herb (hemi-parasitic). Meadows and seeps, playas, vernal pools, valley and foothill grassland. Alkaline. Elevations: 5-510 feet (1-155 meters). Blooms Jun-Sep.
<i>Cicuta maculata</i> var. <i>bolanderi</i> Bolander's water-hemlock	None/None G5T4T5/S2? 2B.1	Perennial herb. Marshes and swamps. In fresh or brackish water. Elevations: 0-655 feet (0-200 meters). Blooms Jul-Sep.
<i>Delphinium recurvatum</i> recurved larkspur	None/None G2?/S2 1B.2	Perennial herb. Chenopod scrub, cismontane woodland, valley and foothill grassland. Alkaline. Elevations: 10-2590 feet (3-790 meters). Blooms Mar-Jun.
<i>Downingia pusilla</i> dwarf downingia	None/None GU/S2 2B.2	Annual herb. Valley and foothill grassland, vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. Elevations: 5-1460 feet (1-445 meters). Blooms Mar-May.
<i>Extriplex joaquinana</i> San Joaquin spearscale	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> , <i>Frankenia</i> , etc. Elevations: 5-2740 feet (1-835 meters). Blooms Apr-Oct.
<i>Fritillaria liliacea</i> fragrant fritillary	None/None G2/S2 1B.2	Perennial bulbiferous herb. Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Often on serpentine; various soils reported though usually on clay, in grassland. Elevations: 10-1345 feet (3-410 meters). Blooms Feb-Apr.
<i>Fritillaria pluriflora</i> adobe-lily	None/None G2G3/S2S3 1B.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, valley and foothill grassland. Usually on clay soils; sometimes serpentine. Elevations: 195-2315 feet (60-705 meters). Blooms Feb-Apr.

Scientific Name Common Name	Status	Habitat Requirements
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	None/SE G2/S2 1B.2	Annual herb. Marshes and swamps, vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. Elevations: 35-7790 feet (10-2375 meters). Blooms Apr-Aug.
<i>Hesperolinon breweri</i> Brewer's western flax	None/None G2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Often in rocky serpentine soil in serpentine chaparral and serpentine grassland. Elevations: 100-3100 feet (30-945 meters). Blooms May-Jul.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	None/None G5T3/S3 1B.2	Perennial rhizomatous herb (emergent). Marshes and swamps. Moist, freshwater-soaked river banks and low peat islands in sloughs; can also occur on riprap and levees. In California, known from the delta watershed. Elevations: 0-395 feet (0-120 meters). Blooms Jun-Sep.
<i>Isocoma arguta</i> Carquinez goldenbush	None/None G1/S1 1B.1	Perennial shrub. Valley and foothill grassland. Alkaline soils, flats, lower hills. On low benches near drainages and on tops and sides of mounds in swale habitat. Elevations: 5-65 feet (1-20 meters). Blooms Aug-Dec.
<i>Lasthenia chrysantha</i> alkali-sink goldfields	None/None G2/S2 1B.1	Annual herb. Vernal pools. Alkaline. Elevations: 0-655 feet (0-200 meters). Blooms Feb-Apr.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE/None G1/S1 1B.1	Annual herb. Cismontane woodland, playas, valley and foothill grassland, vernal pools. Vernal pools, swales, low depressions, in open grassy areas. Elevations: 0-1540 feet (0-470 meters). Blooms Mar-Jun.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	None/None G4T2/S2 1B.1	Annual herb. Marshes and swamps, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. Elevations: 5-4005 feet (1-1220 meters). Blooms Feb-Jun.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	None/None G5T2/S2 1B.2	Perennial herb. Marshes and swamps. In freshwater and brackish marshes. Often found with <i>Typha</i> , <i>Aster lentus</i> , <i>Rosa californica</i> , <i>Juncus</i> spp., <i>Scirpus</i> , etc. Usually on marsh and slough edges. Elevations: 0-15 feet (0-5 meters). Blooms May-Jul (Aug-Sep).
<i>Layia septentrionalis</i> Colusa layia	None/None G2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Scattered colonies in fields and grassy slopes in sandy or serpentine soil. Elevations: 330-3595 feet (100-1095 meters). Blooms Apr-May.
<i>Legenere limosa</i> legenere	None/None G2/S2 1B.1	Annual herb. Vernal pools. In beds of vernal pools. Elevations: 5-2885 feet (1-880 meters). Blooms Apr-Jun.
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	None/None G4T1/S1 1B.2	Annual herb. Valley and foothill grassland. Grassland, and sometimes vernal pool edges. Alkaline soils. Elevations: 5-655 feet (2-200 meters). Blooms Mar-May.
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	None/None G2G3/S2S3 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Open to partially shaded grassy slopes. On volcanics or the periphery of serpentine substrates. Elevations: 330-1640 feet (100-500 meters). Blooms Mar-May.

Scientific Name Common Name	Status	Habitat Requirements
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	None/SR G2/S2 1B.1	Perennial rhizomatous herb. Marshes and swamps, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or riverbank erosion. In brackish or freshwater. Elevations: 0-35 feet (0-10 meters). Blooms Apr-Nov.
<i>Limosella australis</i> Delta mudwort	None/None G4G5/S2 2B.1	Perennial stoloniferous herb. Marshes and swamps, riparian scrub. Usually on mud banks of the Delta in marshy or scrubby riparian associations; often with <i>Lilaeopsis masonii</i> . Elevations: 0-10 feet (0-3 meters). Blooms May-Aug.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	None/None G4T2/S2 1B.1	Annual herb. Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools. Vernal pools and swales; adobe or alkaline soils. Elevations: 15-5710 feet (5-1740 meters). Blooms Apr-Jul.
<i>Neostapfia colusana</i> Colusa grass	FT/SE G1/S1 1B.1	Annual herb. Vernal pools. Usually in the bottoms of large, or deep vernal pools; adobe soils. Elevations: 15-655 feet (5-200 meters). Blooms May-Aug.
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	FT/SE G1/S1 1B.1	Annual herb. Vernal pools. Elevations: 35-2475 feet (10-755 meters). Blooms Apr-Sep.
<i>Plagiobothrys hystriculus</i> bearded popcornflower	None/None G2/S2 1B.1	Annual herb. Valley and foothill grassland, vernal pools. Wet sites. Elevations: 0-900 feet (0-274 meters). Blooms Apr-May.
<i>Puccinellia simplex</i> California alkali grass	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools. Alkaline, vernal mesic. Sinks, flats, and lake margins. Elevations: 5-3050 feet (2-930 meters). Blooms Mar-May.
<i>Sidalcea keckii</i> Keck's checkerbloom	FE/None G2/S2 1B.1	Annual herb. Cismontane woodland, valley and foothill grassland. Grassy slopes in blue oak woodland. On serpentine-derived, clay soils, at least sometimes. Elevations: 245-2135 feet (75-650 meters). Blooms Apr-May.
<i>Spergularia macrotheca</i> var. <i>longistyla</i> long-styled sand-spurrey	None/None G5T2/S2 1B.2	Perennial herb. Marshes and swamps, meadows and seeps. Alkaline. Elevations: 0-835 feet (0-255 meters). Blooms Feb-May.
<i>Stuckenia filiformis</i> ssp. <i>alpina</i> northern slender pondweed	None/None G5T5/S2S3 2B.2	Perennial rhizomatous herb (aquatic). Marshes and swamps. Shallow, clear water of lakes and drainage channels. Elevations: 985-7055 feet (300-2150 meters). Blooms May-Jul.
<i>Symphyotrichum lentum</i> Suisun Marsh aster	None/None G2/S2 1B.2	Perennial rhizomatous herb. Marshes, swamps and wetlands. Most often seen along sloughs with <i>Phragmites</i> , <i>Scirpus</i> , blackberry, <i>Typha</i> , etc. Elevations: 0-10 feet (0-3 meters). Blooms May-Nov.
<i>Trifolium amoenum</i> two-fork clover	FE/None G1/S1 1B.1	Annual herb. Coastal bluff scrub, valley and foothill grassland. Sometimes on serpentine soil, open sunny sites, swales. Most recently cited on roadside and eroding cliff face. Elevations: 15-1360 feet (5-415 meters). Blooms Apr-Jun.

Scientific Name Common Name	Status	Habitat Requirements
<i>Trifolium hydrophilum</i> saline clover	None/None G2/S2 1B.2	Annual herb. Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. Elevations: 0-985 feet (0-300 meters). Blooms Apr-Jun.
<i>Tuctoria mucronata</i> Crampton's tuctoria or Solano grass	FE/SE G1/S1 1B.1	Annual herb. Valley and foothill grassland, vernal pools. Clay bottoms of drying vernal pools and lakes in valley grassland. Elevations: 15-35 feet (5-10 meters). Blooms Apr-Aug.
<i>Viburnum ellipticum</i> oval-leaved viburnum	None/None G4G5/S3 2B.3	Perennial deciduous shrub. Chaparral, cismontane woodland, lower montane coniferous forest. Elevations: 705-4595 feet (215-1400 meters). Blooms May-Jun.

Regional Vicinity refers to within a 9-quad search radius of site.

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
SE = State Endangered
ST = State Threatened
SR = State Rare

CRPR (CNPS California Rare Plant Rank)

1B = Rare, Threatened, or Endangered in California and elsewhere
2B = Rare, Threatened, or Endangered in California, but more common elsewhere
3 = Need more information (Review List)
4 = Limited Distribution (Watch List)

CRPR Threat Code Extension

.1 = Seriously endangered in California (>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 endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant
GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

Additional notations may be provided as follows

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q – Questionable taxonomy that may reduce conservation priority
? – Inexact numeric rank

Attachment 3

Floral Compendium



Plant Species Observed Within the Survey Area

Scientific Name	Common Name	Family	Origin	Status
<i>Achyrrachaena mollis</i>	blow wives	Asteraceae	Native	None
<i>Acmispon americanus</i> var. <i>americanus</i>	Spanish lotus	Fabaceae	Native	None
<i>Aegilops triuncialis</i>	goatgrass	Poaceae	Introduced	Cal-IPC High
<i>Amaranthus albus</i>	tumbleweed	Amaranthaceae	Introduced	None
<i>Amsinckia intermedia</i>	common fiddleneck	Boraginaceae	Native	None
<i>Amsinckia menziesii</i>	fiddleneck	Boraginaceae	Native	None
<i>Asclepias fascicularis</i>	narrow-leaf milkweed	Apocynaceae	Native	None
<i>Avena fatua</i>	wild oat	Poaceae	Introduced	Cal-IPC Moderate
<i>Brachypodium distachyon</i>	purple false brome	Poaceae	Introduced	Cal-IPC Moderate
<i>Brodiaea terrestris</i> ssp. <i>terrestris</i>	dwarf brodiaea	Themidaceae	Native	None
<i>Bromus diandrus</i>	ripgut brome	Poaceae	Introduced	Cal-IPC Moderate
<i>Bromus hordeaceus</i>	soft chess	Poaceae	Introduced	Cal-IPC Limited
<i>Bromus madritensis</i>	foxtail chess	Poaceae	Introduced	None
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	Asteraceae	Introduced	Cal-IPC Moderate
<i>Centaurea solstitialis</i>	yellow star-thistle	Asteraceae	Introduced	Cal-IPC High
<i>Centromadia fitchii</i>	spikeweed	Asteraceae	Native	None
<i>Chenopodium album</i>	lamb's quarters	Amaranthaceae	Introduced	None
<i>Cichorium intybus</i>	chicory	Asteraceae	Introduced	None
<i>Cirsium vulgare</i>	bull thistle	Asteraceae	Introduced	Cal-IPC Moderate
<i>Convolvulus arvensis</i>	field bindweed	Convolvulaceae	Introduced	None
<i>Croton setiger</i>	turkey-mullein	Euphorbiaceae	Native	None
<i>Cynodon dactylon</i>	bermuda grass	Poaceae	Introduced	Cal-IPC Moderate
<i>Cyperus eragrostis</i>	tall cyperus	Cyperaceae	Native	None
<i>Digitaria sanguinalis</i>	crabgrass	Poaceae	Introduced	None
<i>Dittrichia graveolens</i>	stinkwort	Asteraceae	Introduced	Cal-IPC Moderate
<i>Eleocharis macrostachya</i>	common spike rush	Cyperaceae	Native	None
<i>Elymus caput-medusae</i>	medusa head	Poaceae	Introduced	Cal-IPC High
<i>Erigeron canadensis</i>	Canada horseweed	Asteraceae	Native	None
<i>Erodium botrys</i>	big heron bill	Geraniaceae	Introduced	None
<i>Erodium cicutarium</i>	redstem fillaree	Geraniaceae	Introduced	Cal-IPC Limited
<i>Eryngium aristulatum</i> var. <i>aristulatum</i>	Jepson's button celery	Apiaceae	Native	None
<i>Euphorbia maculata</i>	spotted spurge	Euphorbiaceae	Introduced	None
<i>Festuca perennis</i>	Italian rye grass	Poaceae	Introduced	Cal-IPC Moderate
<i>Fraxinus latifolia</i>	Oregon ash	Oleaceae	Native	None
<i>Geranium dissectum</i>	wild geranium	Geraniaceae	Introduced	Cal-IPC Limited
<i>Helminthotheca echioides</i>	bristly ox-tongue	Asteraceae	Introduced	Cal-IPC Limited

Scientific Name	Common Name	Family	Origin	Status
<i>Hirschfeldia incana</i>	mustard	Brassicaceae	Introduced	Cal-IPC Moderate
<i>Hordeum marinum</i>	Mediterranean barley	Poaceae	Introduced	None
<i>Hordeum murinum</i>	wall barley	Poaceae	Introduced	None
<i>Hypochaeris glabra</i>	smooth cat's ear	Asteraceae	Introduced	Cal-IPC Limited
<i>Hypochaeris radicata</i>	hairy cat's ear	Asteraceae	Introduced	Cal-IPC Moderate
<i>Juglans nigra</i>	black walnut	Juglandaceae	Introduced	None
<i>Kickxia elatine</i>	sharp point fluellin	Plantaginaceae	Introduced	None
<i>Lactuca serriola</i>	prickly lettuce	Asteraceae	Introduced	None
<i>Lotus corniculatus</i>	bird's foot trefoil	Fabaceae	Introduced	None
<i>Lupinus bicolor</i>	miniature lupine	Fabaceae	Native	None
<i>Lythrum hyssopifolia</i>	hyssop loosestrife	Lythraceae	Introduced	Cal-IPC Moderate
<i>Melaleuca citrina</i>	crimson bottlebrush	Myrtaceae	Introduced	None
<i>Nerium oleander</i>	oleander	Apocynaceae	Introduced	None
<i>Olea europaea</i>	olive	Oleaceae	Introduced	Cal-IPC Limited
<i>Panicum capillare</i>	old witch grass	Poaceae	Native	None
<i>Phalaris aquatica</i>	Harding grass	Poaceae	Introduced	Cal-IPC Moderate
<i>Phyla nodiflora</i>	common lippia	Verbenaceae	Native	None
<i>Pistacia atlantica</i>	pistachio	Anacardiaceae	Introduced	None
<i>Plantago lanceolata</i>	ribwort	Plantaginaceae	Introduced	Cal-IPC Limited
<i>Platanus racemosa</i>	California sycamore	Platanaceae	Native	None
<i>Polygonum aviculare</i> ssp. <i>aviculare</i>	prostrate knotweed	Polygonaceae	Introduced	None
<i>Populus fremontii</i> ssp. <i>fremontii</i>	cottonwood	Salicaceae	Native	None
<i>Portulaca oleracea</i>	common purslane	Portulacaceae	Introduced	None
<i>Proboscidea louisianica</i> ssp. <i>louisianica</i>	common devil's claw	Martyniaceae	Introduced	None
<i>Pyrus calleryana</i>	callery pear	Rosaceae	Introduced	Cal-IPC Watch
<i>Quercus lobata</i>	valley oak	Fagaceae	Native	None
<i>Raphanus sativus</i>	jointed charlock	Brassicaceae	Introduced	Cal-IPC Limited
<i>Rosa multiflora</i>	multiflora rose	Rosaceae	Introduced	None
<i>Rosmarinus officinalis</i>	rosemary	Lamiaceae	Introduced	None
<i>Rubus armeniacus</i>	Himalayan blackberry	Rosaceae	Introduced	Cal-IPC High
<i>Rumex crispus</i>	curly dock	Polygonaceae	Introduced	Cal-IPC Limited
<i>Salix gooddingii</i>	Gooding's willow	Salicaceae	Native	None
<i>Sequoia sempervirens</i>	coast redwood	Cupressaceae	Native	None
<i>Sonchus asper</i> ssp. <i>asper</i>	sow thistle	Asteraceae	Introduced	None
<i>Tragopogon porrifolius</i>	salsify	Asteraceae	Introduced	None
<i>Trichostema lanceolatum</i>	vinegarweed	Lamiaceae	Native	None
<i>Trifolium dubium</i>	little hop clover	Fabaceae	Introduced	None
<i>Trifolium hirtum</i>	rose clover	Fabaceae	Introduced	Cal-IPC Limited



Scientific Name	Common Name	Family	Origin	Status
<i>Triteleia hyacinthina</i>	wild hyacinth	Themidaceae	Native	None
<i>Typha latifolia</i>	broadleaf cattail	Typhaceae	Native	None
<i>Vicia villosa</i> ssp. <i>villosa</i>	hairy vetch	Fabaceae	Introduced	None
<i>Washingtonia robusta</i>	Mexican fan palm	Arecaceae	Introduced	Cal-IPC Moderate
<i>Xanthium spinosum</i>	spiny cocklebur	Asteraceae	Introduced	None

California Invasive Plant Council (Cal-IPC) Status:

Cal-IPC (2026)

Limited = Ecological impacts are minor on a statewide level

Moderate = substantial and apparent ecological impacts

High = Severe ecological impacts

Attachment 4

Representative Site Photographs



Photograph 1. View of wild oat and annual brome grassland along with landscaped vegetation with the Vaca Dixon Peaker Plant in the background, facing northwest. June 16, 2026.



Photograph 2. View of perennial rye grassland community within the ephemeral drainage, facing north. May 19, 2026.



Photograph 3. View of ephemeral drainage in center of survey area, facing south. April 28, 2026.



Photograph 4. View of recently mowed vegetation along western boundary of the survey area, facing north. April 28, 2026.



Photograph 5. View of landscaped vegetation in southern survey area, facing southwest. April 28, 2026.



Photograph 6. View of wild oat and annual brome grassland and Vaca-Dixon Substation along eastern boundary of the survey area, facing east. June 16, 2026.