INSIGNIA ENVIRONMENTAL

LS POWER GRID CALIFORNIA, LLC

MANNING 500/230 KILOVOLT SUBSTATION PROJECT

BIOLOGICAL RESOURCES TECHNICAL REPORT ADDENDUM

MAY 2025

PREPARED FOR:

LS POWER GRID CALIFORNIA

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1 – INTRODUCTION

LS Power Grid California, LLC (LSPGC) retained Insignia Environmental (Insignia) to conduct a habitat assessment and preliminary jurisdictional delineation for the Manning 500/230 Kilovolt (kV) Substation Project (Proposed Project). The Proposed Project would involve the construction of a new 500/230 kV substation (Manning Substation), the construction of one new 230 kV transmission line, extension of Pacific Gas and Electric Company's (PG&E's) existing 500 kV and 230 kV transmission lines to interconnect with the proposed LSPGC Manning Substation, and reconductoring of an existing PG&E 230 kV transmission line. The Proposed Project's general location is depicted in Figure 1: Project Overview Map, and the Proposed Project components located within the survey area are depicted in Figure 2: Project Components Map. A Biological Resources Technical Report (BRTR) was prepared for the Proposed Project in April 2024 to identify any existing or potentially sensitive biological resources (e.g., vegetation communities, hydrologic features, and special-status plant and animal species and their associated habitats) that may be present within or adjacent to the Proposed Project. Since the completion of the BRTR, the Proposed Project design has undergone changes, including the addition of two PG&E transposition structures and one additional PG&E staging yard. Further, the habitat assessment and preliminary jurisdictional delineation conducted in support of the BRTR were limited, as approximately 945 acres of the survey area, scattered across several non-contiguous land parcels, were inaccessible to the survey team due to lack of landowner approval.

The two new PG&E transposition structures (hereafter referred to as the North Tower and the South Tower or collectively the Towers) and the staging yards are located outside of the survey area evaluated in the BRTR. To accommodate supplemental habitat assessment and preliminary waters surveys for the Towers and additional staging yards, the Proposed Project survey area has since been expanded by approximately 170 acres. Additionally, field surveys were conducted on the approximately 945 acres of the survey area where landowner access was previously not granted or where lack of landowner access prevented assessment from adjacent parcels. The additional survey areas and previously unsurveyed areas are depicted in Attachment A: Vegetation Communities, Wetlands, Drainages, and Land Cover Types. Collectively, the additional survey areas evaluated at PG&E towers and staging yards, along with areas revisited following newly acquired landowner access, are referred to as the addendum survey area. When considered together with the survey area evaluated in the BRTR, the total combined area surveyed is referred to as the Proposed Project survey area.

This BRTR Addendum includes the findings from the supplemental surveys conducted within the addendum survey area, which are integrated with those presented in the BRTR and discussed in Section 6 – Results to reflect the full findings of the Proposed Project survey area. As presented in Section 7 – Recommendations, the recommendations are based on this combined set of findings.

2 – PROJECT DESCRIPTION

2.0 PROJECT OVERVIEW

With the exception of the addition of the Towers, the main components of the Proposed Project remain largely unchanged from the BRTR and include the following:

- Constructing an approximately 11-acre 500/230 kV substation;
- Constructing an approximately 11.5-mile-long, double-circuit 230 kV transmission line from the proposed LSPGC Manning Substation to PG&E's existing Tranquillity Switching Station;
- Extending the following PG&E transmission lines into the proposed LSPGC Manning Substation:[1]
  - Los Banos-Midway #2 500 kV Transmission Line (approximately 0.9 mile),
  - Los Banos-Gates #1 500 kV Transmission Line (approximately 0.9 mile), and
  - Panoche-Tranquillity Sw. Sta. #1 and #2 230 kV Transmission Lines (approximately 4.5 miles each); and
- Reconductoring approximately 7 miles of PG&E's existing Panoche-Tranquillity Sw. Sta. #1 and #2 230 kV Transmission Lines.

2.1 PROJECT LOCATION

As depicted in Figure 1: Project Overview Map, the Proposed Project is located in the westernmost portions of Fresno and Merced Counties in California. The Proposed Project components are depicted in more detail in Figure 2: Project Components Map. While the additional PG&E staging yards would be located adjacent to the existing Proposed Project footprint, the North Tower and South Tower would be located at two distinct locations along PG&E's existing Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV transmission lines.
The North Tower is located approximately 13 miles south of the City of Los Banos in Merced County and 23 miles northwest of the Proposed Project components associated with the Manning Substation (Manning Alignment). The addendum survey area associated with the North Tower is approximately 25 acres.

[1] PG&E would be responsible for extending the existing Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV Transmission Lines and the Panoche-Tranquillity Sw. Sta. #1 and #2 230 kV Transmission Lines into the proposed LSPGC Manning Substation. PG&E would route these transmission line extensions to a point within 100 feet of the proposed LSPGC Manning Substation wall, where they would terminate on dead-end structures owned by PG&E. PG&E would also be responsible for reconductoring approximately 7 miles of its Panoche-Tranquillity Sw. Sta. #1 and #2 230 kV Transmission Lines and making any necessary adjustments to the existing series capacitors on the Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV Transmission Lines.

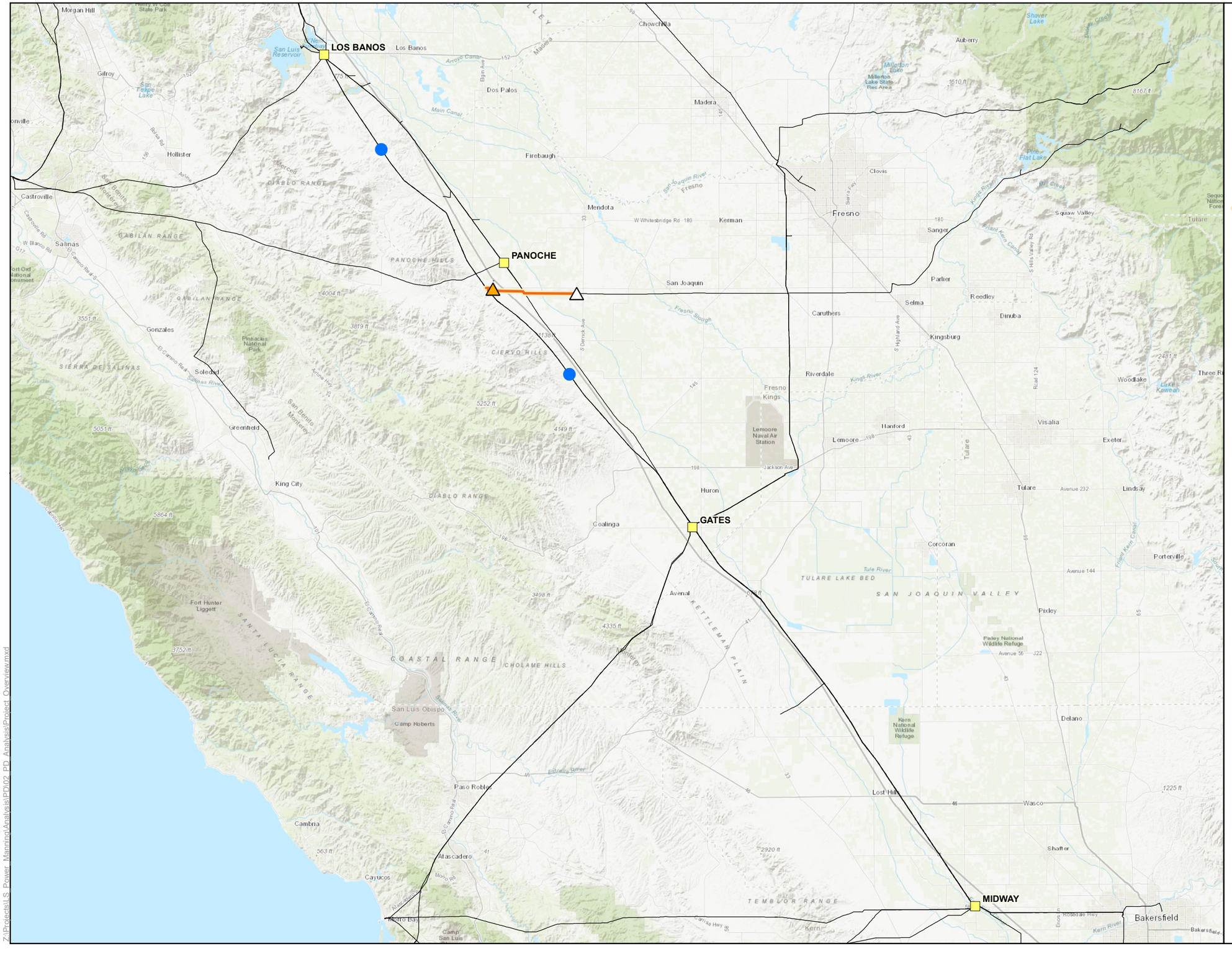

Figure 1: Project Overview Map

Manning 500/230 Kilovolt Substation Project

- Existing PG&E Substation
- Existing PG&E Tranquillity Switching Station
- Existing PG&E Transmission Line
- Proposed LSPGC Substation
- Proposed PG&E Transposition Structures
- Proposed Transmission Lines and Interconnections

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1:800,000

0 10 20 Miles

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Figure 2: Project Components Map

Manning 500/230 Kilovolt Substation Project

- Proposed Transposition Structures
- Proposed LSGC 230 kV Transmission Line
- Proposed PG&E 12 kV Distribution Line
- Proposed PG&E 230 kV Interconnection Line
- Proposed PG&E 500 kV Interconnection Line
- Proposed PG&E 230 kV Transmission Line Rebuild
- Proposed LSPGC Manning Substation Site
- Existing PG&E Transmission Line to be Removed
- Existing PG&E Transmission Line
- Existing Panoche Substation
- Existing Tranquility Switching Station

W South Ave
W Manning Ave
S Fairfax Ave
S Hudson Ave
S Jerrold Ave
Existing Panoche-Tranquillity SW STA 230 kV #1 & #2
Existing Los Banos-Midway 500 kV
Existing Los Banos-Gates 5
Dinuba Ave
W Dinuba Ave
W Panoche Rd
Existing PG&E Panoche Substation
Existing Panoche-Tranquillity SW STA 230 kV #1 & #2
33
S Ohio Ave
Existing PG&E Tranquility Switching Station
Existing Gates-Panoche 230 kV #1 & #2
Existing Panoche-Excelsior 115 kV #1 & #2
5

COASTAL RANGE
Salinas
Fresno
San Joaquin
CALIFORNI
Visal
VALLE

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1:210,000
0 1.5 3 6 Miles

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The South Tower is located approximately 40 miles southeast of the North Tower and 11 miles south of the Manning Alignment. It is approximately 5 miles southwest of the community of Three Rocks in Fresno County. The addendum survey area associated with the South Tower is approximately 31 acres.

3 – REGULATORY FRAMEWORK

The regulatory framework applicable to the addendum survey area is largely consistent with the framework established in the BRTR. The following federal, state, and local regulations are relevant to the addendum survey area:

- Federal
  - Federal Endangered Species Act (FESA)
  - Migratory Bird Treaty Act
  - Bald and Golden Eagle Protection Act
  - Clean Water Act Sections 404, 402, and 401
  - Plant Protection Act of 2000

- State
  - California Fish and Game Code Section 1600
  - California Fish and Game Code Sections 3511, 4700, 5050, and 5515
  - California Fish and Game Code Sections 3503, 3503.5, and 3513
  - Porter-Cologne Water Quality Control Act
  - Native Plant Protection Act (California Fish and Game Code Sections 1900-1913)
  - California Code of Regulations (Title 14, Sections 251.1, 670.2, and 670.5)

- Local
  - Fresno County General Plan
  - PG&E San Joaquin Valley Operation & Maintenance Habitat Conservation Plan

Due to the additions of the transposition structures, which are located in a county that was not included in the BRTR, Merced County regulations are relevant to this addendum and are summarized in Section 3.0 Local.

3.0 LOCAL

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-E, Section XI.B:

> "local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the Commission's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters. In instances where the public 23 utilities and local agencies are unable to resolve their differences, the Commission shall set a hearing no later than 30 days after the utility or local agency has notified the Commission of the inability to reach agreement on land use matters."

Consequently, public utilities are directed to consider local regulations and consult with local agencies, but county land use regulations are not applicable as the County of Fresno and Merced County do not have jurisdiction over the Proposed Project. This section includes a summary of local biological resources-related policies, plans, or programs for informational purposes. LSPGC and PG&E are not subject to local discretionary permitting; ministerial permits would be secured as appropriate.

3.0.0 Merced County General Plan

The Merced County General Plan (Merced County 2013) includes the following policies that may be applicable to resources affected by the Proposed Project:

- **Policy NR-1.4: Important Vegetative Resource Protection (SO)** Minimize the removal of vegetative resources which stabilize slopes, reduce surface water runoff, erosion, and sedimentation.

- **Policy NR-1.12: Wetland Avoidance (RDR/PSR/MPSP)** Avoid or minimize loss of existing wetland resources by careful placement and construction of any necessary new public utilities and facilities, including roads, railroads, high speed rail, sewage disposal ponds, gas lines, electrical lines, and water/wastewater systems

4 – PRELIMINARY AGENCY CONSULTATION

No pre-survey contact with applicable wildlife agencies was conducted regarding this BRTR Addendum. No agency approvals were required for biologists conducting surveys. Agency protocols and best practices applied to the survey effort are detailed in Section 5 – Methods.

5 – METHODS

Consistent with the methods and definitions outlined in the BRTR, Insignia performed a records search, habitat assessment, and a preliminary jurisdictional delineation within the addendum survey area.

Surveys within the addendum survey area were conducted on March 24 through 27, 2025. Insignia biologists searched for areas of potential habitat by walking meandering transects that covered 100 percent of the addendum survey area that was accessible. Areas that were inaccessible due to lack of landowner permission were surveyed through binoculars to the greatest extent feasible from accessible rights-of-way or adjacent parcels for which access had been granted.

While surveys were primarily confined to the addendum survey area, surveyors also documented any obvious changes in land cover type or vegetation communities that were incidentally observed within the survey area originally evaluated in the BRTR.

6 – RESULTS

6.0 SURVEY CONDITIONS

Surveys were conducted during daylight hours with clear to partly cloudy skies and did not occur in inclement weather conditions or fog cover. Temperatures ranged from 54 to 88 degrees Fahrenheit (°F) with wind speeds between 0 and 10 miles per hour.

6.1 GEOGRAPHY, CLIMATE, AND HYDROLOGY

Precipitation, average air temperature, and elevation data for each tower location, as well as for the Manning Alignment within the Proposed Project survey area, are provided in Table 1: Geography, Climate, and Hydrology within the Proposed Project Survey Area.

Table 1: Geography, Climate, and Hydrology within the Proposed Project Survey Area

Metric	Manning Alignment*	North Tower**	South Tower*
Average Rainfall (inches)	7.1	9.6	7.1
Period of Highest Rainfall	December-February	December-March	December-February
Average Annual Temperature Range (°F)	65.7	63.5	65.7
Elevation Range (feet)***	190-796	925-1,004	635-763

Sources: (*National Oceanic and Atmospheric Administration [NOAA] 2025a, **NOAA 2025b, ***Cal Topo 2025)

6.2 RECORDS SEARCH

Results of the initial desktop analysis indicated that the majority of the Proposed Project survey area consists of agricultural fields. Relatively small grassland habitats were found in the far western portions of the Proposed Project survey area associated with the Manning Alignment surrounding PG&E's existing Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV Transmission Lines. The addendum survey area surrounding the Towers consists primarily of grassland habitats.

From this records search, Insignia compiled a list of 18 special-status plant species and 51 special-status wildlife species that have the potential to occur within 5 miles of the addendum survey area. Four potentially jurisdictional water features were identified within the addendum survey area during a United States (U.S.) Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) database review. All but one of these features (within the addendum survey area associated with the South Tower) were previously identified in the records search for the BRTR. Special-status species and water features found during the records search are broken down by North Tower, South Tower, and Manning Alignment and are detailed in Table 2: Special-Status Plant and Wildlife Species Identified During Records Search within 5 Miles of the Proposed Project Survey Area and Table 3: Aquatic Resources Identified During Records Search of Water Features within the Proposed Project Survey Area.

Table 2: Special-Status Plant and Wildlife Species Identified During Records Search within 5 Miles of the Proposed Project Survey Area

Alignment or Tower	Special-Status Occurrences	
	Plants	Wildlife
Manning Alignment	9	50
North Tower	13	14
South Tower	13	6
Total	**18**	**51**

Note: The totals represent the cumulative special-status species count for the Manning Alignment and Towers. The total does not sum as the records search independently recorded the same species within their respective search areas.

Table 3: Aquatic Resources Identified During Records Search of Water Features within the Proposed Project Survey Area

Alignment or Tower	Water Features
Manning Alignment	12
North Tower	0
South Tower	1
Total	**18**

6.3 VEGETATION COMMUNITIES

As presented in Table 4: Vegetation Community Alliances and Land Cover Types, 10 vegetation communities and land cover types were identified within the addendum survey area. When combined with the findings from surveys documented in the BRTR, the cumulative total of vegetation communities within the Proposed Project survey area is 11.

All portions of the addendum survey area that were inaccessible due to a lack of landowner permission were successfully assessed using binoculars from accessible rights-of-way or adjacent parcels, allowing land cover types and vegetation communities to be accurately mapped. The natural communities observed in the Proposed Project survey area are ranked S4, S5, and Semi-Natural Alliance (SNA) (i.e., semi-natural stands dominated by non-native species). An S4 ranking is classified as “apparently secure” statewide, while an S5 ranking is classified as “demonstrably secure” based on statewide abundance (California Native Plant Society [CNPS] 2025b).

The addendum survey area supports non-native grasses, fragmented shrublands, agriculture, and cattle grazing. None of the natural communities observed are considered sensitive. The following subsections describe each vegetation community and land cover type identified within the Proposed Project survey area. Photographs are provided in Attachment B: Habitat Assessment Photographs.

Table 4: Vegetation Community Alliances and Land Cover Types

Vegetation Community Alliance or Land Cover Type	Approximate Size in Proposed Project Survey Area (acres)
Active Agriculture	2,239.5
Amsinkia (menziesii, tessellata) – Phacelia spp. Herbaceous Alliance*	373.4
Atriplex canescens Shrubland Alliance**	0.1
Atriplex lentiformis Shrubland Alliance**	7.1
Atriplex polycarpa Shrubland Alliance**	0.1
Avena spp. – Bromus spp. Herbaceous SNA	178.6
Brassica nigra – Centaurea (solstitialis, melitensis) Herbaceous SNA	73.3
Bromus rubens – Schismus (*arabicus*, *barbatus*) Herbaceous SNA	64.5
Developed	66.3
Disturbed	670.2
Dry Lake/Mudflats/Playa	1.1
Open Water	3.8
Total	**3,677.9**

Note: Due to rounding, totals may not sum.
*S5: demonstrably secure due to statewide abundance (CNPS 2025b)
**S4 apparently secure statewide (CNPS 2025b)

6.3.0 Active Agriculture

Active agriculture areas constitute approximately 60.9 percent of the Proposed Project survey area and are those areas that are farmed, harvested, or tended. This cover type includes areas where recent crop harvest or soil tilling was evident; and it consists largely of almond orchards, specifically the nonpareil varieties (*Prunus dulcis*). Active agriculture within the Proposed Project survey area also contained pomegranate orchards (*Punica granatum*), hemp fields (*Cannabis sativa*), cotton fields (*Gossypium* spp.), and grape vineyards (*Vitis vinifera*). This land cover type covered the vast majority of the accessible survey area east of PG&E's existing Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV Transmission Lines.

6.3.1 *Amsinkia (menziesii, tessellata) Phacelia spp.* Herbaceous Alliance (S5)

The *Amsinkia-Phacelia* alliance constitutes approximately 10.2 percent of the Proposed Project survey area and can be found in upland slopes, broad valleys, grazed or recently burned hills, and fallow fields with generally well-draining and loamy soils. This vegetation community is often subject to frequent bioturbation. Typically, fiddlenecks (*Amsinkia* spp.) or phacelia (*Phacelia* spp.) are co-dominant or seasonally characteristic of the alliance, making up at least 50 percent of the herbaceous layer. Fiddlenecks (var. *menziesii, tessellata*) and phacelia (*Phacelia ciliate, Phacelia distans, Phacelia tanacetifolia*) are accompanied by squirreltail fescue (*Vulpia bromoides*), red brome (*Bromus rubens*), and great brome (*Bromus diandrus*). The *Amsinkia-Phacelia* alliance was found in the westernmost portion of the accessible survey area in close

proximity to PG&E's existing Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV Transmission Lines, as well as parcels immediately adjacent to Interstate (I-) 5.

6.3.2 *Atriplex canescens* Shrubland Alliance (S4)

The *Atriplex canescens* alliance constitutes less than 0.1 percent of the Proposed Project survey area and is found on playas, old beaches and shores, lake deposits, dissected alluvial fans, rolling hills, or channel beds. Soils in these areas are typically carbonate-rich, alkaline, and composed of sandy or sandy clay loams. Fourwing saltbush (*Atriplex canescens*) is present with greater than 2 percent absolute cover and more than 50 percent relative cover in the shrub canopy. The herbaceous layer is highly variable and typically dominated by non-native grasses or seasonal herbs. This alliance was found primarily in habitats immediately adjacent to I-5, where it formed highly fragmented patches of shrub cover.

6.3.3 *Atriplex lentiformis* Shrubland Alliance (S4)

The *Atriplex lentiformis* alliance constitutes approximately 0.2 percent of the Proposed Project survey area and is found on gentle to steep southeast- and southwest-facing slopes with clay soils. Typically, big saltbush (*Atriplex lentiformis*) accounts for more than 50 percent relative cover in the shrub canopy, with a highly variable herbaceous layer that is also tolerant of alkaline conditions. This alliance was found primarily in habitats immediately adjacent to I-5, where it formed highly fragmented patches of shrub cover. It also comprised the dominant vegetation community within the ephemeral channel of the D-1 drainage.

6.3.4 *Atriplex polycarpa* Shrubland Alliance (S4)

The *Atriplex polycarpa* alliance constitutes less than 0.1 percent of the Proposed Project survey area and is found on washes, playa lake beds and shores, dissected alluvial fans, rolling hills, terraces, and the edges of large, low-gradient washes. Soils in these areas may be carbonate-rich, alkaline, sandy, or sandy clay loams. Allscale scrub (*Atriplex polycarpa*) accounts for more than 2 percent absolute cover and greater than 50 percent relative cover in the shrub canopy, with a highly variable herbaceous layer. This alliance occurred in only one isolated patch adjacent to the D-21 drainage within the addendum survey area associated with the South Tower.

6.3.5 *Avena spp. – Bromus spp.* Herbaceous Semi-Natural Alliance

The *Avena* spp. and *Bromus* spp. alliance constitutes approximately 4.9 percent of the Proposed Project survey area and occurs in foothills, waste places, rangelands, and openings in woodlands. Wild oat (*Avena* spp.) and brome grasses (*Bromus* spp.) make up the dominant characteristic species of the herbaceous layer, being at least 50 percent of the cover collectively. In low cover, emergent trees and shrubs may be present. Some non-native species that may also be co-dominant are Australian saltbush (*Atriplex semibaccata*) and barleys (*Hordeum* spp.). This alliance was found in the westernmost portion of the accessible survey area in close proximity to PG&E's existing Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV Transmission Lines, as well as throughout the addendum survey area associated with the North Tower. Throughout the Proposed Project survey area, this community was observed in areas showing evidence of frequent disking, cattle grazing, or other anthropogenic disturbance.

6.3.6 *Brassica nigra – Centaurea* (*solstitialis, melitensis*) Herbaceous Semi-Natural Alliance

The *Brassica nigra – Centaurea* (*solstitialis*, *melitensis*) alliance constitutes approximately 2.0 percent of the Proposed Project survey area and is known to occur in fallow fields, rangelands, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, cleared roadsides, and waste places. Soils are typically clays to sandy loams. This community is typically associated with disturbed areas where black mustard (*Brassica nigra*) and short-pod mustard (*Hirshfeldia incana*) achieve 80 percent relative cover in the herbaceous layer. Similar ruderal forbs, including tocolote (*Centaurea melitensis*) and yellow star thistle (*Centaurea solstitialis*), may achieve dominance or co-dominance. This community was observed in habitats adjacent to I-5, as well as in fallow agricultural plots east of the Governor Edmund G. Brown California Aqueduct (California Aqueduct). Notably, areas within the fallow agricultural plots were being actively grazed by sheep as part of a vegetation management effort at the time of the survey. During a separate, unrelated survey visit on April 8, 2025, incidental observations of the habitats adjacent to I-5 indicated that areas previously recorded as supporting mustard had been disked by the landowner, and this land cover was no longer present.

6.3.7 *Bromus rubens – Schismus (arabicus, barbatus)* Herbaceous Semi-Natural Alliance

The *Bromus rubens – Schismus* (*arabicus*, *barbatus*) alliance constitutes approximately 1.8 percent of the Proposed Project survey area and is known to occur across a wide range of soil textures and topographies throughout California. *Bromus rubens*, *Schismus arabicus*, and/or *Schismus barbatus* are dominant or co-dominant in the herbaceous layer, with one of these species comprising at least 80 percent of total herbaceous cover. In areas of low herbaceous cover, emergent trees and shrubs may also be present. This alliance was found primarily in habitats immediately adjacent to I-5, as well as throughout the addendum survey area associated with the South Tower. Within habitats adjacent to I-5, this community was observed in areas showing evidence of frequent disking or other anthropogenic disturbance, whereas habitats within the addendum survey area associated with the South Tower did not appear to experience similar levels of disturbance.

6.3.8 Developed

Developed areas constitute approximately 1.8 percent of the Proposed Project survey area; they are highly modified and contain some form of human-constructed infrastructure. Maintained paved roads, highways, or buildings may be included in this cover type. Within the Proposed Project survey area, developed land cover was found along the I-5 corridor and the California Aqueduct.

6.3.9 Disturbed

Disturbed areas constitute approximately 18.2 percent of the Proposed Project survey area and are those areas that have been changed from their natural state by human influence. This cover type lacks vegetation and includes all dirt roads, unmaintained paved roads, cleared areas, barren pasturelands, and agricultural plots with no evidence of recent activity. Potential vegetation, if any, that may grow in this cover type includes Russian thistle (*Salsola tragus*), brome grasses, wild oat, fiddlenecks, or phacelia. Disturbed areas were observed throughout the Proposed

Project survey area as most agricultural plots were segregated by dirt roads; however, the majority of disturbed land cover was found in the westernmost portion of the Proposed Project survey area in close proximity to PG&E's existing Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV Transmission Lines and the proposed LSPGC Manning Substation site.

6.3.10 Dry Lake/Mudflats/Playa

The dry lake/mudflats/playa alliance constitutes less than 0.1 percent of the Proposed Project survey area and has minimal vegetation, if any. This alliance contains very dry, cracked sediment that was once the substrate at the bottom of a pool of water. It is highly probable that the evaporated pools of water were once large ditches and rarely become rehydrated. Potential vegetation that may grow nearby includes Russian thistle. The sediment tends to be very dense and clay-like. One dry pond was observed within agricultural land immediately west of I-5.

6.4 SPECIAL-STATUS PLANT SPECIES

Background research conducted for the Proposed Project generated a list of 18 special-status plant species that have potential to occur in the addendum survey area. This list was generated by comparing the species' ranges and habitat requirements with the location of the Proposed Project and habitat types within it. **Error! Reference source not found.** provides the relevant listing codes, and Table 6: Special-Status Plant Species with the Potential to Occur provides detailed information on each of the 18 species. California Natural Diversity Database (CNDDB) occurrences of special-status plants are depicted in Attachment C: CNDDB Occurrences of Special-Status Plant Species. Of the 18 species evaluated, one species—Lost Hills crownscale (*Atriplex coronata* var. *vallicola*)—was determined to have a high potential to occur within the Proposed Project survey area, and four species—Hall's tarplant (*Deinandra halliana*), Panoche pepper-grass (*Lepidium jaredii* ssp. *album*), recurved larkspur (*Delphinium recurvatum*), and showy golden madia (*Madia radiata*)—were determined to have a moderate potential to occur within the Proposed Project survey area. The remaining 13 special-status plant species have a low or no potential to occur.

6.5 SPECIAL-STATUS WILDLIFE SPECIES

Based on the literature and database review, 51 special-status wildlife species were identified that have the potential to occur within the addendum survey area. **Error! Reference source not found.** provides the relevant listing codes, and Table 7: Special-Status Wildlife Species with the Potential to Occur provides detailed information on each of the 51 species. CNDDB occurrences of special-status wildlife are depicted in Attachment D: CNDDB Occurrences of Special-Status Wildlife Species. Of the 51 species evaluated, the following 14 species were determined to have a moderate or high potential to occur within the Proposed Project survey area:

- Blunt-nosed leopard lizard (*Gambelia sila*)
- Burrowing owl (*Athene cunicularia*)
- California glossy snake (*Arizona elegans occidentalis*)
- California horned lark (*Eremophila alpestris actia*)
- Crotch's bumble bee (*Bombus crotchii*)
- Giant kangaroo rat (*Dipodomys ingens*)

- Prairie falcon (*Falco mexicanus*)
- San Joaquin coachwhip (*Masticophis flagellum ruddocki*)
- San Joaquin kit fox (*Vulpes macrotis mutica*)
- Short-eared owl (*Asio flammeus*)
- Swainson's hawk (*Buteo swainsoni*)
- Tricolored blackbird (*Agelaius tricolor*)
- Western spadefoot (*Spea hammondii*)
- Yellow-billed magpie (*Pica nuttalli*)

All other special-status species assessed were found to have a low or no potential to occur.

Table 5: Special-Status Species Listing Codes

Code	Description
Federal Listing Codes	
FE	Federally listed as endangered
FT	Federally listed as threatened
PT	Proposed to be federally listed as threatened
C	Candidate for listing
BCC	USFWS Bird of Conservation Concern
State Listing Codes	
SE	State-listed as endangered
ST	State-listed as threatened
SCE	State candidate for listing as endangered
SSC	California Department of Fish and Wildlife (CDFW) Species of Special Concern
FP	Fully protected species
WL	California Watch List species
WBWG-H	The high designation from the Western Bat Working Group (WBWG) represents those species considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.
WBWG-M	The medium designation represents a level of concern that should warrant closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.
California Rare Plant Rank (CRPR) 1B	Plants that are rare, threatened, or endangered in California or elsewhere
CRPR 2B	Plants that are rare, threatened, or endangered in California, but more common elsewhere

Code	Description
CRPR 0.1	Plants that are seriously threatened in California (over 80 percent of occurrences threatened; high degree and immediacy of threat)
CRPR 0.2	Plants that are moderately threatened in California (20 to 80 percent of occurrences threatened; moderate degree and immediacy of threat)

6.6 GENERAL WILDLIFE SPECIES

As identified in Table 8: Wildlife Species Observed within the Proposed Project Survey Area, 19 wildlife species were incidentally identified during the surveys and included two reptiles, two insects, four mammals, and 11 birds. Noted wildlife species were identified by direct observation, vocalizations, or the observance of scat and tracks. The wildlife identified are not necessarily comprehensive accounts of all species that utilize the Proposed Project survey area, because species that are nocturnal, secretive, or seasonally absent may not have been observed.

With a significant amount of the Proposed Project survey area being currently used or previously used for agriculture and heavy cattle grazing, many of the wildlife species occupying the area are known to adapt well to disturbed habitats. Areas being used for active agriculture, specifically orchards, are able to support larger communities of birds, providing food, shelter, and potential nesting habitat. California ground squirrels (*Otospermophilus beechyi*) were spotted frequently near their burrows in non-vegetated areas, particularly near the edges of parcels not actively being used for agriculture, or near steep declines, like walls of large ditches.

6.7 CRITICAL HABITAT

No critical habitat for any special-status wildlife species occurs within the Proposed Project survey area. The nearest critical habitat is for the Fresno kangaroo rat (*Dipodomys nitratoides exilis*) and is located approximately 10 miles northeast of the Manning Alignment.

6.8 NATIVE WILDLIFE CORRIDORS AND NURSERY SITES

The Proposed Project survey area associated with the Manning Alignment, North Tower, and South Tower (i.e., the entirety of the Proposed Project survey area) lies outside of any mapped Natural Landscape Blocks (CDFW 2021). Though the Manning Alignment and South Tower are not located within mapped Essential Connectivity Areas, the North Tower is located within one such area, as shown in Attachment E: Essential Connectivity Areas (CDFW 2021).

Table 6: Special-Status Plant Species with the Potential to Occur

Common Name	Scientific Name	Listing Status	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area		
						Manning Alignment	North Tower	South Tower
Alkali-sink goldfields	*Lasthenia chrysantha*	1B.1	This species occurs in vernal pools and valley grasslands at elevations between 0 and 655 feet (CNPS 2025a).	February to April	Annual herb	Marginal habitat and conditions for this species are present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. No recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. No recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Arburua Ranch jewelflower	*Streptanthus insignis* ssp. *lyonii*	1B.2	This species occurs in coastal scrub at elevations between 755 and 2,805 feet (CNPS 2025a).	March to May	Annual herb	Suitable habitat and conditions for this species are not present within the survey area; scrub habitats are outside of the known elevation range for the species and lack ultramafic soils preferred by the species. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area lacks requisite scrub habitats. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**
Brittlescale	*Atriplex depressa*	1B.2	This species occurs in chenopod scrub, meadows and seeps, playas, valley and foothill grasslands, and vernal pools at elevations between 5 and 1,050 feet (CNPS 2025a).	April to October	Annual herb	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Chaparral ragwort	*Senecio aphanactis*	2B.2	This species occurs in chaparral, cismontane woodlands, and coastal scrub at elevations between 50 and 2,625 feet (CNPS 2025a).	January to May	Annual herb	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area lacks requisite scrub habitats. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**
Hall's tarplant	*Deinandra halliana*	1B.2	This species occurs in chenopod scrub, cismontane woodland, valleys, and foothill grasslands at elevations between 855 and 3,115 feet (CNPS 2025a).	March May	Annual herb	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the known elevation range of this species. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**
Heartscale	*Atriplex cordulata* spp. *Cordulata*	1B.2	This species occurs in chenopod scrub, meadows and seeps, and valleys and foothill grasslands at	April to October	Annual herb	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented

Common Name	Scientific Name	Listing Status	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area		
						Manning Alignment	North Tower	South Tower
			elevations between 0 and 1,835 feet (CNPS 2025a).			within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Indian Valley bushmallow	*Malacothamnus aboriginum*	1B.2	This species occurs in chaparral and cismontane woodland at elevations between 492 and 5,577 feet (CNPS 2025a).	April to October	Perennial deciduous shrub	Suitable habitat and conditions for this species are not present within the survey area; the survey area lacks requisite woodland and chaparral habitats. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area lacks requisite woodland and chaparral habitats. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area lacks requisite woodland and chaparral habitats. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Lesser saltscale	*Atriplex minuscula*	1B.1	This species occurs in chenopod scrub, playas, valleys, and foothill grasslands at elevations between 50 and 655 feet (CNPS 2025a).	May to October	Annual herb	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Lost Hills crownscale	*Atriplex coronata* var. *vallicola*	1B.2	This species occurs in chenopod scrub, valleys, foothill grasslands, and vernal pools at elevations between 165 and 2,085 feet (CNPS 2025a).	April to September	Annual herb	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented within 0.25 mile of the survey area based on CNDDB records (CDFW 2025c). **High Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been recently documented within 0.25 mile of the survey area based on CNDDB records (CDFW 2025c). **High Potential**
Munz's tidy-tips	*Layia munzii*	1B.2	This species occurs in chenopod scrub, valleys, and foothill grasslands at elevations between 490 and 2,295 feet (CNPS 2025a).	March to April	Annual herb	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Marginal habitat and conditions for this species are present within the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable habitat and conditions for this species are present within the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**
Pale-yellow layia	*Layia heterotricha*	1B.1	This species occurs in cismontane woodland, coastal scrub, pinyon and juniper woodlands, valleys, and foothill grasslands at elevations between 985 and 5,595 feet (CNPS 2025a).	March to June	Annual herb	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Palmate-bracted bird's-beak	*Chloropyron palmatum*	FE, SE, 1B.1	This species occurs in chenopod scrub, valleys, and foothill grasslands at	May to October	Annual herb	Marginal habitat and conditions for this species are present within the survey area. However, no occurrences of this species have been documented	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range.	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range.

Common Name	Scientific Name	Listing Status	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area		
						Manning Alignment	North Tower	South Tower
			elevations between 15 and 510 feet (CNPS 2025a).			within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Panoche navarretia	*Navarretia panochensis*	1B.3	This species occurs in chenopod scrub and valley and foothill grasslands at elevations between 1,083 and 2,822 feet (CNPS 2025a).	April to August	Annual herb	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area; the survey area is outside of the species' known elevation range. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Panoche pepper-grass	*Lepidium jaredii* ssp. *album*	1B.2	This species occurs in valley and foothill grasslands at elevations between 605 and 2,445 feet (CNPS 2025a).	February to June	Annual herb	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area based on CNDDB records. However, the age status of the CNDDB record was classified as unknown (CDFW 2025c). **Low Potential**
Recurved larkspur	*Delphinium recurvatum*	1B.2	This species occurs in chenopod scrub, cismontane woodland, valleys, and foothill grasslands at elevations between 10 and 2,590 feet (CNPS 2025a).	March to June	Perennial herb	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**
San Joaquin woollythreads	*Monolopia congdonii*	FE; 1B.2	This species occurs in chenopod scrub, valleys, and foothill grasslands at elevations between 195 and 2,625 feet (CNPS 2025a).	February to May	Annual herb	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025). **Low Potential**	Marginal habitat and conditions for this species are present within the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable habitat and conditions for this species are present within the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**
Sanford's arrowhead	*Sagittaria sanfordii*	1B.2	This species occurs in marshes and swamps at elevations between 0 and 2,135 feet (CNPS 2025a).	May to October	Perennial herb	Suitable habitat and conditions for this species are not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Showy golden madia	*Madia radiata*	1B.1	This species occurs in cismontane woodlands, valleys, and foothill grasslands at elevations	March to May	Annual herb	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of	Marginal habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW	Suitable habitat and conditions for this species are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW

Common Name	Scientific Name	Listing Status	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area		
						Manning Alignment	North Tower	South Tower
			between 80 and 3,985 feet (CNPS 2025a).			the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	2025c). **Low Potential**	2025c). **Moderate Potential**

Table 7: Special-Status Wildlife Species with the Potential to Occur

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Amphibians						
California red-legged frog	*Rana draytonii*	FT, SSC	This species has several requirements for suitable habitat, including streams or stock ponds for breeding, neighboring upland areas with insects and invertebrates as prey, and areas with relief from heat during the summer months. Tadpoles rely on algae that grow on top of rocks and vegetation for food and are active during both day and night, whereas adults are generally nocturnal (USFWS 2025d).	Suitable habitat is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
California tiger salamander	*Ambystoma californiense*	FT, ST, WL	This species occupies grassland, savanna, or open woodland habitats and spends much of the year in underground refuges, especially ground squirrel burrows. Vernal pools or other seasonal water sources are required for breeding and egg-laying. Adults may travel hundreds of meters across upland habitat to reach breeding ponds following seasonal rains from November to February. The diet of this species is highly variable and may include invertebrates, amphibians, or small mammals (USFWS 2025d).	Suitable annual grassland habitat is present within the survey area, and suitable refuge burrows were observed during field surveys. However, no suitable vernal pools were observed within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable annual grassland habitat is present within the survey area, and suitable refuge burrows were observed during field surveys. However, no suitable vernal pools were observed within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable annual grassland habitat is present within the survey area, and suitable refuge burrows were observed during field surveys. However, no suitable vernal pools were observed within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**
Foothill yellow-legged frog - central coast Distinct Population Segment	*Rana boylii* pop. 4	FT, SE	This species can be found in foothills and mountain streams at elevations up to 5,000 feet. Adults occur in a variety of vegetation types, including valley-foothill hardwood, hardwood-conifer, and riparian. Ponderosa pine (*Pinus ponderosa*), mixed conifer, mixed chaparral, and wet meadows may also be habitat for this species. Diet includes aquatic and terrestrial invertebrates like snails, moths, flies, water striders, beetles, grasshoppers, hornets, and ants (for adults) (USFWS 2025d).	Suitable stream habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable stream habitat is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable stream habitat is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Western spadefoot	*Spea hammondii*	PT, SSC	This species occurs predominantly in grasslands, but may also occur in valley-foothill hardwood woodlands. The western spadefoot consumes worms, insects, and other invertebrates and requires shallow, temporary pools of water from heavy winter rains for reproduction (CDFW 2025b).	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable grassland habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable grassland habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Birds						
Burrowing owl	*Athene cunicularia*	SCE, SSC, BCC	This species can be found in a variety of open habitat types, including grassland, savanna, desert scrub, agricultural, and urban areas. Breeding occurs from March through October, and nesting takes place within abandoned burrows dug by burrowing mammals. The young leave the nest when they are self-reliant at 12 weeks old. This species preys on large insects and small mammals (USFWS 2025d).	Grassland habitat suitable for foraging is found in the survey area; burrows suitable for species occupation and breeding were observed during the field surveys. Migrating individuals may occur in or near the survey area during winter months. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential (Nesting)**	Grassland habitat suitable for foraging is found in the survey area; burrows suitable for species occupation and breeding were observed during the field surveys. Migrating individuals may occur in or near the survey area during winter months. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential (Nesting)**	Grassland habitat suitable for foraging is found in the survey area; burrows suitable for species occupation and breeding were observed during the field surveys. Migrating individuals may occur in or near the survey area during winter months. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential (Nesting)**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
				Moderate Potential (Foraging/Migration)	**Moderate Potential (Foraging/Migration)**	**Moderate Potential (Foraging/Migration)**
California condor	*Gymnogyps californianu*	FE, SE, FP	This species uses extensive territories in open grasslands, oak savannah foothills, and beaches adjacent to coastal mountains for foraging, roosting, and nesting. Nests are built in caves and ledges in steep, rocky terrain. This species may also use cavities and broken tops of conifers for nesting locations. Juveniles remain dependent on their parents for 1 to 2 years while they learn to forage on their own. The species will consume carrion and carcasses (USFWS 2025d).	Marginal foraging habitat is present, and no nesting habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	Marginal foraging habitat is present, and no nesting habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	Marginal foraging habitat is present, and no nesting habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**
California horned lark	*Eremophila alpestris actia*	WL	This species is found in a variety of open habitats, notably where trees and large shrubs are not present. Its diet consists mostly of snails, insects, and spiders in the breeding season and includes more grass and forb seeds during the rest of the year. California horned lark frequent grasslands and habitats with low, sparse vegetation to take cover and forage. The breeding season is from March to July, with peak activity in May. Young typically leave the nest within 9 to 12 days (CDFW 2025b).	Marginal foraging and breeding habitat is present in the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential (Nesting)** **Low Potential (Foraging)**	Marginal foraging and breeding habitat is present in the survey area, and the survey area is located within the known range of this species (CDFW 2007). However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential (Nesting)** **Low Potential (Foraging)**	Suitable foraging and breeding habitat is present in the survey area, and the survey area is located within the known range of this species (CDFW 2007). However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential (Nesting)** **Moderate Potential (Foraging)**
California thrasher	*Toxostoma redivivum*	BCC	This species occurs from sea level to the upper elevations of montane chaparral and lower-elevation limits of coniferous and pine-oak woodlands (approximately 5,000 feet). California thrashers rely on dense cover and shrub habitats for breeding (CDFW 2025b).	No foraging or breeding habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	No foraging or breeding habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	No foraging or breeding habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Ferruginous hawk	*Buteo regalis*	WL	This species occurs primarily in grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Prey of this species includes lagomorphs, ground squirrels, mice, birds, reptiles, and amphibians. Nesting locations include foothills or prairies, low cliffs, buttes, cut banks, shrubs, trees, or other elevated structures. California is not within the breeding range of this species, and this species occupies California between September and April (CDFW 2025b).	Suitable foraging habitat is present in the survey area. The survey area is not located within the known breeding range of this species. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	Suitable foraging habitat is present in the survey area. The survey area is located within the known range of this species for foraging and overwintering, but not within the known breeding range of this species (CDFW 2025b). However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Low Potential (Foraging)**	Suitable foraging habitat is present in the survey area. The survey area is located within the known range of this species for foraging and overwintering, but not within the known breeding range of this species (CDFW 2025b). However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Low Potential (Foraging)**
Oak titmouse	*Baeolophus inornatus*	BCC	This species occurs primarily in warm, dry oak or oak-pine woodlands. The composition of the oak woodlands varies, but they are generally open. Nests are primarily in natural cavities and woodpecker-excavated cavities in oak (*Quercus* spp.) (CDFW 2025b).	No foraging or breeding habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	No foraging or breeding habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	No foraging or breeding habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**
Northern harrier	*Circus cyaneus*	SSC, BCC	This species is found in a variety of open grassland, wetland, and agricultural habitats. Open wetland habitats used for breeding include marshy meadows, wet and lightly grazed pastures, and freshwater and brackish marshes. Breeding habitat also includes dry upland habitats, such as grassland, cropland, drained marshland, and shrub-steppe in cold deserts. Wintering habitat includes open areas dominated by herbaceous vegetation, such as grassland, pastures, cropland, coastal sand dunes, brackish and freshwater marshes, and estuaries (CDFW 2025b).	Suitable foraging and nesting habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	Suitable foraging and nesting habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	Suitable foraging and nesting habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**
Prairie falcon	*Falco mexicanus*	WL	This species is highly associated with perennial grasslands, savannahs, rangeland, agricultural fields, and desert scrub areas. Prairie falcons forage in the early morning and late afternoon, except while raising young or when food is scarce. Optimal nesting locations utilize open terrain near canyons, cliffs, escarpments, and rock outcrops. Small mammals make up most of this species' prey, with small birds and reptiles being the remainder. The breeding season takes place from February to September, with peak activity from April to August. The young of this species begin to disperse in June and July (CDFW 2025b).	Suitable nesting habitat is not present within the survey area; however, suitable foraging habitat is present throughout the survey area. This species has recently been documented within 0.25 mile of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **High Potential (Foraging/Migration)**	Suitable nesting habitat is not present within the survey area; however, suitable foraging habitat is present throughout the survey area, and the survey area is located within the known range of this species (CDFW 2025b). This species has recently been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Moderate Potential (Foraging/Migration)**	Suitable nesting habitat is not present within the survey area; however, suitable foraging habitat is present throughout the survey area, and the survey area is located within the known range of this species (CDFW 2025b). This species has recently been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Moderate Potential (Foraging/Migration)**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Short-eared owl	*Asio flammeus*	SSC, BCC	This species occurs in agricultural fields, grazed and ungrazed grasslands, and freshwater and saltwater marshes. Short-eared owls are crepuscular hunters and prefer to consume meadow voles (*Microtus* spp.) and mice (*Mus* spp.), among other mammals and birds. Nestlings consume insects. This species is a ground-nesting bird, sometimes roosting and foraging communally if prey is abundant. The breeding season begins in late winter with fledglings leaving within a month of hatching (CDFW 2025b).	Suitable foraging and breeding habitat is present in the survey area, and the survey area is located within the known range of this species (CDFW 2025b). However, no recent occurrences of this species have been documented between 1 and 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented within 1 mile of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable nesting habitat is not present within the survey area. Suitable foraging habitat is present in the survey area, and the survey area is located within the known range of this species (CDFW 2025b). However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	Suitable nesting habitat is not present within the survey area. Suitable foraging habitat is present in the survey area, and the survey area is located within the known range of this species (CDFW 2025b). However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**
Savannah sparrow (Belding's)	*Passerculus sandwichensis beldingi*	SE, BCC	This species is wetland-dependent and can be found in open areas like grasslands, tundra, meadows, bogs, farmlands, and grassy areas with scattered bushes, but it prefers salt marshes. Nests are built in marshes with dried pickleweed (*Salicornia* spp.). Like other savannah sparrow subspecies, it eats insects and seeds (CDFW 2025b).	Suitable nesting habitat is not present within the survey area; however, suitable foraging habitat is present throughout the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Low Potential (Foraging)**	Suitable nesting habitat is not present within the survey area; however, suitable foraging habitat is present throughout the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Low Potential (Foraging)**	Suitable nesting habitat is not present within the survey area; however, suitable foraging habitat is present throughout the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Low Potential (Foraging)**
Swainson's hawk	*Buteo swainsoni*	ST	This species occurs in open grasslands, prairies, and farmlands that have nearby trees for nesting. Swainson's hawks nest in bushes and in several tree species, including oak, willow (*Salix* spp.), and eucalyptus (*Eucalyptus* spp.), and usually nest in trees in riparian areas near open fields. This species primarily hunts small rodents, rabbits, birds, and reptiles during the breeding season. This species largely lives off insects, such as grasshoppers and beetles, during the non-breeding season. Reproduction is from March through April, incubation lasts 34 to 35 days, and fledging is 6 weeks later (CDFW 2023b).	Marginal nesting habitat with scattered trees is present within the survey area. Suitable foraging habitat for the species is present in the survey area, and the survey area is located within the known range of this species (CDFW 2011). This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable nesting habitat with scattered trees is not present within the survey area. Suitable foraging habitat for the species is present in the survey area the survey area is located within the known range of this species (CDFW 2011). This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Low Potential (Foraging)**	Suitable nesting habitat with scattered trees is not present within the survey area. Suitable foraging habitat for the species is present in the survey area, and the survey area is located within the known range of this species (CDFW 2011). This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Moderate Potential (Foraging)**
Tricolored blackbird	*Agelaius tricolor*	ST, SSC, BCC	This highly colonial species requires open water, protected nesting substrate, and foraging areas adjacent to the colony with insect prey. Breeding occurs near freshwater, often in emergent wetlands with tall, dense cattails (Typha spp.) or tules (*Schoenoplectus* spp.), but also in thickets of willow; blackberry (*Rubus* spp.); wild rose (*Rosa acicularis*); or tall, dense forbs. Seeds and cultivated grains, such as rice and oats, compose most of this species' fall and winter diet. It forages on the ground in croplands, grassy fields, flooded land, and along edges of ponds. The breeding season usually occurs from mid-April to late July (CDFW 2025b).	Suitable foraging habitat is present within the survey area; however, wetlands suitable for nesting are not present within the survey area (CDFW 2025b). This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable foraging habitat is present within the survey area; however, wetlands suitable for nesting are not present within the survey area (CDFW 2025b). No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**	Suitable foraging habitat is present within the survey area; however, wetlands suitable for nesting are not present within the survey area (CDFW 2025b). No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Nesting)** **No Potential (Foraging)**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Yellow-billed magpie	*Pica nuttalli*	BCC	This species has been observed in oak savanna, in open areas with large trees, and along streams. Yellow-billed magpie forage in grasslands, pastures, fields, and orchards. In addition to ground-dwelling invertebrates, this species consumes grains, acorns, carrion, and small mammals. Nests are built in large trees and small colonies (CDFW 2025b).	Suitable foraging habitat is present within the survey area; however, trees suitable for nesting habitat are not present. This species is not tracked by the CNDDB (CDFW 2025c). **No Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable foraging habitat is present within the survey area; however, trees suitable for nesting habitat are not present. This species is not tracked by the CNDDB (CDFW 2025c). **No Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable foraging habitat is present within the survey area; however, trees suitable for nesting habitat are not present. This species is not tracked by the CNDDB (CDFW 2025c). **No Potential (Nesting)** **Moderate Potential (Foraging)**
Invertebrates						
Crotch's bumble bee	*Bombus crotchii*	SCE	This species inhabits grasslands and shrublands and requires hotter, drier environments than other bee species. Due to a short tongue, this species prefers milkweeds (*Asclepias* spp.), dusty maidens (*Chaenactis douglasii*), lupines (*Lupinus* spp.), medics (*Medicago* spp.), phacelias, sages (*Salvia* spp.), clarkias (*Clarkia* spp.), poppies (*Papaver* spp.), and wild buckwheats (*Erigonum* spp.). Nests are frequently located in abandoned rodent nests, tufts of grass, old bird nests, rock piles, or cavities in dead trees (Los Padres Forest Watch [LPFW] 2019).	Suitable habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Longhorn fairy shrimp	*Branchinecta longiantenna*	FE	This species lives in clear to turbid freshwater vernal pools, water-filled depressions in sandstone, grass-bottomed pools, or claypan pools. Longhorn fairy shrimp are opportunistic feeders, ingesting algae, bacteria, protozoa, rotifers, and bits of waste from other plants and animals. Eggs of this species lie at the bottom of the pool and remain viable for several years until the vernal pool refills with water (USFWS 2025d).	No suitable vernal pool habitat is present in the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	No suitable vernal pool habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	No suitable vernal pool habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Monarch butterfly	*Danaus plexippus*	PT, SSC	This species requires milkweed and flowering plants for suitable habitat. Although adults only need to feed on nectar from flowers, milkweed is the only place where they can lay eggs. Most individuals of this species live 2 to 5 weeks, but overwintering individuals may live 6 to 9 months (USFWS 2025d).	Marginal habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Marginal habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Marginal habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	FT	This species is extremely dependent on the elderberry (*Sambucus nigra* ssp. *canadensis*), which is a shrub found in riparian areas and foothill oak woodlands. Adults and juveniles exclusively eat the stems, leaves, and flowers of the elderberry. Individuals are only found on the valley floor and low foothills. The typical lifespan of this species is 1 to 2 years (USFWS 2025d).	Suitable habitat for this species is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat for this species is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat for this species is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	This species occurs within vernal pool habitats throughout California. Female vernal pool fairy shrimp carry fertilized eggs in a sac on the underside of their body. The eggs are either dropped to the pool bottom or remain in the brood sac until the mother dies and sinks to the bottom of the pool. This species opportunistically filter-feeds on various planktonic food sources, including algae and protozoa (USFWS 2025d).	Suitable habitat for this species is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat for this species is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable habitat for this species is not present within the survey area, and no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Mammals						
American badger	*Taxidea taxus*	SSC	This species occurs in open stages of most shrub, forest, and herbaceous habitats. This species consumes fossorial rodents and some reptiles, insects, earthworms, eggs, and birds. The species digs burrows in dry, sandy soil and reuses burrows (CDFW 2025b).	Suitable grassland habitat is present within the survey area; however, no suitable breeding burrows/dens were encountered during the survey, and no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented within 1 mile of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable grassland habitat is present within the survey area; however, no suitable breeding burrows/dens were encountered during the survey, and no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable grassland habitat is present within the survey area; however, no suitable breeding burrows/dens were encountered during the survey, and no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**
Big free-tailed bat	*Nyctinomops macrotis*	SSC, WBWG-M	This insectivorous species occurs in rugged, rocky canyons and roosts in buildings, caves, and occasionally holes in trees. Little is known about this species in California (CDFW 2025b).	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is not present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is not present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is not present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**
California leaf-nosed bat	*Macrotus californicus*	SSC, WBWG-H	This species is confined to lowland Sonoran Desert habitat and forages in open desert wash habitats. The California leaf-nosed bat utilizes caves and mines almost exclusively for roosting (CDFW 2025b).	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is not present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is not present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is not present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**
Fresno kangaroo rat	*Dipodomys nitratoides exilis*	FE, SE	This species inhabits arid grasslands and consumes primarily seeds, but may also forage on green herbaceous vegetation and insects. Burrows of this species are usually found in relatively light, sandy soils in raised areas. The breeding season is assumed to be initiated in winter after the onset of the rainy season (USFWS 2025d).	No suitable habitat is present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	No suitable habitat is present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	No suitable habitat is present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Fringed myotis	*Myotis thysanodes*	WBWG-H	This insectivorous species occurs in pinyon-juniper, valley-foothill hardwood, and hardwood-conifer forests at elevations from 4,000 to 7,000 feet. Fringed myotis forages in open habitats, early successional stages, streams, lakes, and ponds. This species utilizes caves, mines, buildings, or crevices for roosting (CDFW 2025b).	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Giant kangaroo rat	*Dipodomys ingens*	FE, SE	This species eats seeds, small amounts of green foliage like clovers (*Trifolium* spp.) and filaree (*Erodium* spp.), and insects. Giant kangaroo rats often emerge from their burrows around twilight and are mainly active at night. This species mainly inhabits sandy-loam soils located on level and gently sloping ground vegetated with annual grasses and forbs and widely scattered desert shrubs (USFWS 2025d).	Suitable annual grassland habitat is present within the survey area, and small mammal burrows suitable for occupation were also observed. This species has been recently documented within 1 mile of the survey area based on CNDDB records (CDFW 2025c). **High Potential**	Suitable grassland habitat is present within the survey area, and small mammal burrows suitable for occupation were also observed. No recent occurrences of this species have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable grassland habitat is present within the survey area, and small mammal burrows suitable for occupation were also observed. No recent occurrences of this species have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**
Hoary bat	*Lasiurus cinereus*	WBWG-M	This species generally roosts alone or in family groups consisting of a mother and her young. Forest habitats with a mixture of forest and small, open areas that provide edges are ideal for this species. Hoary bats can be found in a variety of places, such as Spanish moss (*Tillandsia usneoides*), squirrel nests, woodpecker holes, and tree trunks. This species forages for food in the early evening and before sunrise, preferring moths, beetles, and sometimes mosquitoes or any other large insect that can be caught in open areas (CDFW 2025b).	No suitable roosting habitat is present in the survey area. Suitable foraging habitat is present within the survey area, and this species has been documented between 1 and 5 miles of the survey area based on CNDDB records. However, the age status of the CNDDB record was classified as unknown (CDFW 2025c). **No Potential (Roosting)** **Low Potential (Foraging)**	No suitable roosting habitat is present in the survey area. Suitable foraging habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area. Suitable foraging habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**
Little brown bat	*Myotis lucifugus*	WBWG-M	This insectivorous species is common in mid- to high-elevation forests. The little brown bat is fairly common in sagebrush, bitterbrush, alkali desert scrub, wet meadow, and montane chaparral and is least common in valley foothill woodlands, redwood, mixed chaparral, low sagebrush, alpine dwarf-shrub, coastal scrub, and grasslands. Individuals may roost in buildings, in trees, under rocks or wood, and occasionally in caves (USFWS 2025d).	No suitable roosting or foraging habitat is present in the survey area. This species is not tracked by the CNDDB (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**	No suitable roosting or foraging habitat is present in the survey area. This species is not tracked by the CNDDB (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**	No suitable roosting or foraging habitat is present in the survey area. This species is not tracked by the CNDDB (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**
Long-eared myotis	*Myotis evotis*	WBWG-M	This insectivorous species occupies a wide range of rocky and forested habitats year-round and roosts in abandoned buildings, bridges, hollow trees, stumps, loose bark, and rock fissures. Long-eared myotis forages in a variety of habitats, including conifer forests ranging from drier Ponderosa pine to humid coastal and montane forests. Non-forested habitats are also used, including shrub steppe, chaparral, and agricultural lands (CDFW 2025b).	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is present within the survey area. However, suitable roosting sites, water sources, and riparian habitats and rock outcroppings are not available nearby. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is present within the survey area. However, suitable roosting sites, water sources, and riparian habitats and rock outcroppings are not available nearby. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is present within the survey area. However, suitable roosting sites, water sources, and riparian habitats and rock outcroppings are not available nearby. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**
Mexican long-tongued bat	*Choeronycteris mexicana*	SSC, WBWG-M	This species occurs in the southernmost part of California in desert and arid scrub habitats and feeds on nectar and pollen. Mexican long-tongued bats roost in caves, crevices, and buildings (New Mexico Department of Fish and Game 2025).	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Nelson's (San Joaquin) antelope squirrel	*Ammospermophilus nelsoni*	ST	This species inhabits arid grassland, shrubland, and alkali sink habitats. This species is an omnivore, ingesting mostly green vegetation, fungi, seeds, and insects. The breeding season lasts from late winter to early spring (CDFW 2025b).	Suitable grassland habitat for this species is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable grassland habitat for this species is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable grassland habitat for this species is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**
Pallid bat	*Antrozous pallidus*	SSC, WBWG-H	This species generally roosts in colonies of 20 to several hundred individuals. Pallid bats prefer to roost in rock crevices, tree hollows, mines, caves, and a variety of anthropogenic structures like buildings. This species consumes insects it can reach on the ground or sometimes in flight. These may include large, flightless arthropods like scorpions, ground crickets, and cicadas (CDFW 2025b).	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is marginal. No recent occurrences of this species have been documented between 1 and 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **Low Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is marginal. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and suitable foraging habitat is marginal. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC, WBWG-M	This insectivorous species inhabits pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis habitats. It prefers rock crevices and cliffs for roosting (CDFW 2025b).	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**
San Joaquin kit fox	*Vulpes macrotis mutica*	FE, ST	This species inhabits a variety of open habitats, including grasslands, chenopod scrublands, and semi-arid regions. Breeding occurs from January to March, with a gestation period of 49 to 55 days. The female constructs a den in the ground, often utilizing existing burrows dug by other animals. Its diet primarily consists of small mammals, such as rodents, rabbits, and ground squirrels (USFWS 2025d).	Grassland habitat suitable for foraging is present within the survey area. This species has been recently documented within 0.25 mile of the survey area based on CNDDB records (CDFW 2025c). **High Potential**	Grassland habitat suitable for foraging is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Grassland habitat suitable for foraging is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**
Silver-haired bat	*Lasionycteris noctivagans*	WBWG-M	This migratory species inhabits coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodlands, and valley foothill and montane riparian habitats in the summer. Silver-haired bats roost in hollow trees, snags, buildings, rock crevices, and caves, as well as under bark (CDFW 2025b).	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**	No suitable roosting or foraging habitat is present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**	No suitable roosting or foraging habitat is present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Spotted bat	*Euderma maculatum*	SSC, WBWG-H	This species occurs in foothills, mountains, and desert regions of Southern California. Its habitat includes arid deserts, grasslands, and mixed conifer forests. Spotted bats prefer to roost in rock crevices and are occasionally found in caves and buildings. Cliffs provide optimal roosting habitat (CDFW 2025b).	No suitable roosting habitat is present in the survey area; however, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **Low Potential (Foraging)**	No suitable roosting habitat is present in the survey area; however, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **Low Potential (Foraging)**	No suitable roosting habitat is present in the survey area; however, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **Low Potential (Foraging)**
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG-H	This insectivorous species occurs in subalpine and alpine habitats and is most abundant in mesic habitat. Townsend's big-eared bat utilizes caves, mines, tunnels, buildings, or other human-made structures for roosting (CDFW 2025b).	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting or foraging habitat is present in the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**
Tulare grasshopper mouse	*Onychomys torridus tularensis*	SSC	This nocturnal species inhabits low, open scrub and semi-scrub habitats. Its diet includes primarily insects, specifically grasshoppers, crickets, caterpillars, moths, scorpions, and beetles. In general, wild individuals are expected to live less than 1 year and are capable of breeding year-round (CDFW 2025b).	Marginally suitable scrub habitat for this species is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	No suitable scrub habitat for this species is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Marginally suitable scrub habitat for this species is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**
Western mastiff bat	*Eumops perotis californicus*	SSC, WBWG-H	This insectivorous species occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban settings. Western mastiff bats utilize cliff faces, high buildings, trees, and tunnels for roosting (CDFW 2025b).	No suitable roosting habitat is present in the survey area, and foraging habitat is marginal. No recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. One occurrence over 30 years old has been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **Low Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and foraging habitat is marginal. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area, and foraging habitat is marginal. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**
Western red bat	*Lasiurus blossevillii*	SSC, WBWG-H	This insectivorous species occurs in many regions of California in edge habitats adjacent to streams and open fields. Western red bats utilize the foliage of trees and shrubs to roost (CDFW 2025b).	No suitable roosting habitat is present in the survey area. However, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area. However, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area. However, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG-H	This insectivorous species occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Western yellow bats utilize trees (e.g., palms) for roosting (CDFW 2025b).	No suitable roosting habitat is present in the survey area. However, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **Low Potential (Foraging)**	No suitable roosting habitat is present in the survey area. However, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**	No suitable roosting habitat is present in the survey area. However, suitable foraging habitat is present. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential (Roosting)** **No Potential (Foraging)**
Reptiles						
Blunt-nosed leopard lizard	*Gambelia sila*	FE, SE, FP	This species lives in central California within arid, open spaces that have patchy or sparse vegetation. These habitats typically have low, drought-tolerant shrubs and elevations below 2,600 feet. Most of this species' diet consists of insects (USFWS 2025d).	Suitable habitat for this species is present within the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented within 0.25 mile of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Marginal habitat for this species is present within the survey area. This species has been documented between 1 and 5 miles of the survey area based on CNDDB records. However, the age status of the CNDDB record was classified as unknown (CDFW 2025c). **Low Potential**	Marginal habitat for this species is present within the survey area. This species has been documented between 1 and 5 miles of the survey area based on CNDDB records. However, the age status of the CNDDB record was classified as unknown (CDFW 2025c). **Low Potential**
California glossy snake	*Arizona elegans occidentalis*	SSC	This species is typically found in desert scrub, grasslands, and rocky areas. This species is primarily nocturnal and seeks shelter in burrows, in crevices, or under rocks during the day. Breeding occurs in the spring and early summer. Females lay eggs in sandy soil or loose substrate, where they are left to incubate. The diet of this species consists mainly of small mammals, including rodents, lizards, and occasionally birds or eggs (CDFW 2025b).	Suitable grassland habitat for this species is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable grassland habitat for this species is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable grassland habitat for this species is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Coast horned lizard	*Phrynosoma blainvillii*	SSC	This species is found frequently near ant hills in open areas of sandy soil and low vegetation in valleys, foothills, and semi-arid mountains. They sometimes eat small invertebrates, such as spiders, beetles, termites, flies, bees, and grasshoppers (CDFW 2025b).	Suitable grassland habitat is present within the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Low Potential**	Suitable grassland habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable grassland habitat is present within the survey area. However, no occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Giant gartersnake	*Thamnophis gigas*	FT, ST	This semi-aquatic species inhabits marshes, wetlands, and slow-moving bodies of water. This species is often closely associated with the water sources that serve as hunting grounds. Breeding typically occurs in the spring and early summer. After mating, females give birth to live young. The diet of this species primarily consists of small fish, amphibians, and aquatic invertebrates (USFWS 2025d).	Suitable wetland habitat or nesting habitat is not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable wetland habitat or nesting habitat is not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable wetland habitat or nesting habitat is not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**

Common Name	Scientific Name	Listing Status	Habitat and Life History	Potential To Occur within the Survey Area		
				Manning Alignment	North Tower	Southern Tower
Northern California legless lizard	*Anniella pulchra*	SSC	This fossorial species utilizes the base of shrubs or other vegetation to forage for prey. The diet of this species includes insect larvae, small insects, and spiders. This species is mainly found in coastal dune, valley-foothill, chaparral, and coastal scrub habitats (CDFW 2023a).	No suitable shrubland habitat for this species is present within the survey area. This species has been recently documented within 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	No suitable shrubland habitat for this species is present within the survey area. No recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	No suitable shrubland habitat for this species is present within the survey area. No recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
Northwestern pond turtle	*Actinemys marmorata*	PT, SSC	This freshwater turtle species primarily inhabits ponds, lakes, and slow-moving streams with suitable basking sites. Northwestern pond turtles spend a significant amount of time basking on logs or rocks. Breeding typically occurs in the spring and early summer. Females dig nests in sandy or gravelly areas near water, where they lay their eggs. The hatchlings emerge several months later and make their way to the water. This species is omnivorous with a diet that consists of various aquatic plants, insects, small fish, and amphibians (USFWS 2025d).	Suitable wetland and nesting habitat are not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable wetland and nesting habitat are not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable wetland and nesting habitat are not present within the survey area. No occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**
San Joaquin coachwhip	*Masticophis flagellum ruddocki*	SSC	This species is observed most in open terrain with abundant grass, desert, scrub, chaparral, and pasture habitats. San Joaquin coachwhips may use rodent burrows, bushes, trees, and rock piles for cover. It feeds on rodents, other reptiles, eggs, and carrion (CDFW 2025b).	Suitable grassland habitat for this species is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable grassland habitat for this species is present within the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**	Suitable grassland habitat for this species is present within the survey area. However, no recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records. Occurrences over 30 years old have been documented between 1 and 5 miles of the survey area based on CNDDB records (CDFW 2025c). **Moderate Potential**
Southwestern pond turtle	*Actinemys pallida*	PT, SSC	This freshwater turtle species primarily inhabits ponds, lakes, and slow-moving streams with suitable basking sites. Southwestern pond turtles spend a significant amount of time basking on logs or rocks. Breeding typically occurs in the spring and early summer. Females dig nests in sandy or gravelly areas near water, where they lay their eggs. The hatchlings emerge several months later and make their way to the water. This species is omnivorous with a diet that consists of various aquatic plants, insects, small fish, and amphibians (USFWS 2025d).	Suitable wetland and nesting habitat are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area based on CNDDB records. However, the age status of the CNDDB record was classified as unknown (CDFW 2025c). **No Potential**	Suitable wetland and nesting habitat are not present within the survey area. No recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**	Suitable wetland and nesting habitat are not present within the survey area. No recent occurrences of this species have been documented within 5 miles of the survey area based on CNDDB records (CDFW 2025c). **No Potential**

Table 8: Wildlife Species Observed within the Proposed Project Survey Area

Common Name	Scientific Name
American crow	*Corvus brachyrhynchos*
Black-tailed jackrabbit	*Lepus californicus*
Brewer's blackbird	*Euphagus cyanocephalus*
California ground squirrel	*Otospermophilus beecheyi*
Common raven	*Corvus corax*
Common side-blotched lizard	*Uta stansburiana*
Coyote	*Canis latrans*
Dark-eyed junco	*Junco hyemalis*
Darkling beetle	*Eleodes* spp.
Desert cottontail	*Sylvilagus audubonii*
Great horned owl	*Bubo virginianus*
Mourning dove	*Zenaida macroura*
Northern mockingbird	*Mimus polyglottos*
Red-tailed hawk	*Buteo jamaicensis*
Savannah sparrow	*Passerculus sandwichensis*
Turkey vulture	*Cathartes aura*
Western fence lizard	*Sceloporus occidentalis*
Western honeybee	*Apis mellifera*
White crowned sparrow	*Zonotrichia leucophrys*

The Proposed Project lies within the Pacific Flyway—an important north-south migration corridor that runs along the Pacific coast of the Americas from Alaska to Patagonia, including all of North America west of the Rocky Mountains. The Pacific Flyway links the breeding grounds of the north with the wintering areas to the south and is used by many different species of birds during migration. Many birds (especially waterfowl) use locations in California's Central Valley as a stopover point or wintering area. Important locations within the Central Valley include wildlife refuges. One wildlife refuge, the Mendota Wildlife Area, is located less than 10 miles from the Proposed Project. The Proposed Project does not occur in any nursery sites.

6.9 AQUATIC FEATURES

Insignia biologists identified 15 new water features within the addendum survey area that are potentially under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Boars (RWQCB), and/or CDFW; and the biologists recorded additional detail for one feature identified in the BRTR. Combined with the six water features assessed in the BRTR, a total of 21 water features are located within the Proposed Project survey area. Table

9: Potentially Jurisdictional Linear Water Feature provides detailed information on each potentially jurisdictional water feature within the addendum survey area and whether it meets the criteria to be classified as a water of the U.S. or a water of the state. The criteria include having an observable ordinary high water mark (OHWM), connection to other waters upstream or downstream, a defined bed and bank, wetland indicators, evidence of water flow, or an adjacent riparian area. Attachment F: Linear Water Feature Photographs presents upstream and downstream photographs of these features. Nineteen of the potentially jurisdictional water features are ephemeral streams located in the western region of the Proposed Project survey area alongside PG&E's existing Los Banos-Midway #2 500 kV and Los Banos-Gates #1 500 kV Transmission Lines, as well as within the addendum survey area associated with the Towers, as depicted in Attachment A: Vegetation Communities, Wetlands, Drainages, and Land Cover Types and Attachment G: Linear Water Features on the Proposed Alignment. The remaining two potentially jurisdictional water features are agricultural ditches located along West Manning Avenue. These water features did not contain observable water flow and were identified using distinct OHWM indicators. Although several NWI features were present (as depicted in Attachment H: National Wetlands Inventory Map), several were not identifiable in the field and deemed not present.

The California Aqueduct would be crossed by the proposed PG&E 230 kV Reconductoring and the proposed LSPGC 230 kV Transmission Line between South Douglas Avenue and South Lyon Avenue. The California Aqueduct falls under the jurisdiction of the California Department of Water Resources.

7 – RECOMMENDATIONS

This section provides recommended pre-construction surveys and monitoring and avoidance and minimization measures to reduce the potential for impacts to special-status species with a moderate or high potential to occur within the Proposed Project area.

7.0 PRE-CONSTRUCTION SURVEYS AND MONITORING

Prior to initiating Proposed Project activities, the following pre-construction surveys would be recommended:

7.0.0 Rare Plants

- Prior to initial vegetation clearing and ground-disturbing activities in annual grassland habitat, a qualified biologist would conduct pre-construction surveys of the Proposed Project work area for special-status plants.
  - For the Manning Alignment, surveys would be timed to coincide with the blooming periods of Lost Hills crownscale (April to September) and Panoche pepper-grass (February to July).
  - For the North Tower, surveys would be conducted during the blooming periods of Hall's tarplant (March to May) and Lost Hills crownscale (April to September).

Table 9: Potentially Jurisdictional Linear Water Features

NWI ID	Drainage ID	Feature Type	Wetland Indications Present	Approximate Length (feet)	Average Measurement (feet)				Jurisdictional Area (acres)			Notes
					OHWM Width	OHWM Depth	Top of Bank (TOB) Width	TOB Depth	USACE	RWQCB	CDFW	
W-8	D-1, eastern section on Manning Alignment	Riverine (NWI), Ephemeral Stream (Field assessment)	N	820	10	3	10	13.33	0.19	0.19	0.03	This feature crosses the Proposed Project survey area in two locations. The eastern section crosses I-5 from the southwest, then the feature is no longer defined at its intersection with W-11 on the downstream side. The eastern section of this feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters upstream and downstream. No wetland indicators or riparian vegetation were observed. No water was present within this feature at the time of observation. The feature was determined to meet the criteria to be classified as a water of the U.S. and a water of the state and is identified in Photographs 1 and 2 of Attachment F: Linear Water Feature Photographs.
W-11	D-1, eastern section on Manning Alignment	Riverine (NWI), Agricultural Ditch (Field assessment)	N	2,400	10	3	10	13.33	0.55	0.55	0.74	Although this feature intersects the Proposed Project survey area at multiple locations, this feature is one of only two drainages observable within the Proposed Project survey area. An OHWM, defined bed and bank, and connecting waters upstream were observed. The drainage associated with this feature is closely associated with W-8 on the upstream side before switching alignments to W-11 and transitioning to an agricultural ditch downstream of the I-5 overpass. The eastern section of this feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters upstream and downstream. No wetland indicators or riparian vegetation were observed. No water was present within this feature at the time of observation. The feature was determined to meet the criteria to be classified as a water of the U.S. and a water of the state and is identified in Photographs 1 and 2 of Attachment F: Linear Water Feature Photographs.
-	D-10	Ephemeral Stream (Field assessment)	N	845	1.0	0.1	1.0	0.1	-	0.02	0.02	The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters upstream and downstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 3 and 4 of Attachment F: Linear Water Feature Photographs.
-	D-11	Ephemeral Stream (Field assessment)	N	406	1.1	0.1	1	0.1	-	0.01	0.02	This feature is a tributary of D-10. The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 5 and 6 of Attachment F: Linear Water Feature Photographs.
-	D-12	Ephemeral Stream (Field assessment)	N	325	1.0	0.1	1.0	0.1	-	0.01	0.01	The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 7 and 8 of Attachment F: Linear Water Feature Photographs.
-	D-13	Ephemeral Stream (Field assessment)	N	336	12.0	0.1	8.0	0.3	-	0.1	0.10	The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 9 and 10 of Attachment F: Linear Water Feature Photographs.

NWI ID	Drainage ID	Feature Type	Wetland Indications Present	Approximate Length (feet)	Average Measurement (feet)				Jurisdictional Area (acres)			Notes
					OHWM Width	OHWM Depth	Top of Bank (TOB) Width	TOB Depth	USACE	RWQCB	CDFW	
-	D-14	Ephemeral Stream (Field assessment)	N	418	7.0	0.7	6.5	3.2	-	0.04	0.12	The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters upstream and downstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 11 and 12 of Attachment F: Linear Water Feature Photographs.
-	D-15	Ephemeral Stream (Field assessment)	N	592	28	1.5	27	2.1	-	0.19	0.21	This feature is a tributary of D-17. The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 13 and 14 of Attachment F: Linear Water Feature Photographs.
-	D-16	Ephemeral Stream (Field assessment)	N	120	1.0	0.3	1.0	1.5	-	0.01	0.01	This feature is a tributary of D-17. The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 15 and 16 of Attachment F: Linear Water Feature Photographs.
-	D-17	Ephemeral Stream (Field assessment)	N	481	1.5	0.3	1.5	3.4	-	0.02	0.07	The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 17 and 18 of Attachment F: Linear Water Feature Photographs.
-	D-18	Ephemeral Stream (Field assessment)	N	309	3.5	0.75	2.5	2.5	-	0.02	0.06	This feature is a tributary of D-17. The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 19 and 20 of Attachment F: Linear Water Feature Photographs
-	D-19	Ephemeral Stream (Field assessment)	N	71	7.3	0.9	7.0	1.5	-	0.01	0.02	This feature is a tributary of D-18. The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 21 and 22 of Attachment F: Linear Water Feature Photographs.
-	D-20	Ephemeral Stream (Field assessment)	N	212	17.2	2.1	17	2.2	-	0.09	0.10	This feature is a tributary of D-18. The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 23 and 24 of Attachment F: Linear Water Feature Photographs.
-	D-21	Ephemeral Stream (Field assessment)	N	263	1.7	4.0	1.7	2.4	-	0.02	0.02	The feature has a well-defined bed and bank and observable OHWM indicators. The feature had observable connectivity to waters downstream, but not upstream. No wetland indicators or riparian vegetation were observed. No water was present within the feature at the time of the survey. This feature was determined to meet the criteria to be classified as a water of the state and is identified in Photographs 25 and 26 of Attachment F: Linear Water Feature Photographs.

  - For the South Tower, surveys would be conducted during the blooming periods of Lost Hills crownscale (April to September), recurved larkspur (March to June), and showy golden madia (March to May).

- Surveys would be confined to Proposed Project work areas within annual grassland habitats, as well as disturbed habitats and agricultural areas within 500 feet of annual grassland habitats. In the event of the discovery of a previously unknown special-status plant, the area would be marked as sensitive and would be avoided to the maximum extent practicable. If avoidance of species listed under the FESA or California Endangered Species Act (CESA) is not possible, the USFWS and/or the CDFW would be consulted. Any other construction activities that may impact sensitive biological resources, including the movement of construction equipment and other activities outside of the fenced/paved areas, would be monitored by a qualified biologist. The monitor/inspector would have the authority to stop work activities upon the discovery of sensitive biological resources and allow construction to proceed after the identification and implementation of steps required to avoid or minimize impacts to sensitive resources.

7.0.1 Avian Species

- If feasible, construction and vegetation trimming/removal would be avoided during the migratory bird nesting or breeding season (i.e., February 15 to August 31). When it is not feasible to avoid construction during the nesting or breeding season, a survey would be performed in the area where the work is to occur. This survey would be performed to determine the presence or absence of nesting birds. If an active nest (i.e., containing eggs or young) is identified, a suitable construction buffer (which would differ based on species and location of nest) would be implemented to ensure that the nesting or breeding activities are not substantially adversely affected. If the nesting or breeding activities are being conducted by a federally or state-listed species, the USFWS and CDFW would be consulted as necessary. Monitoring of the nest would continue until the birds fledge or construction is no longer occurring on the site.

- If a raptor nest is observed during pre-construction surveys, a qualified biologist would determine if it is active. If the nest is determined to be active, the biological monitor would monitor the nest to ensure that nesting or breeding activities are not substantially adversely affected. If the biological monitor determines that activities associated with the Proposed Project are disturbing or disrupting nesting or breeding activities, the biological monitor would make recommendations to reduce noise or disturbance in the vicinity of the nest, such as temporarily suspending work in the area. If the nest is determined to be inactive, the nest would be removed under direct supervision of the qualified biologist.

7.0.2 Special-Status Mammals and Herpetofauna

- Prior to initial vegetation clearance and ground-disturbing activities, a qualified biologist would conduct pre-construction surveys of the Proposed Project work area for special-status wildlife and burrows and dens potentially occupied by special-status wildlife. Surveys would be confined to Proposed Project work areas within annual grassland habitats, as well as disturbed habitats and agricultural areas within 500 feet of annual grassland habitats. The qualified biologist would identify, flag, and map all burrows and

dens potentially occupied by burrowing owl, San Joaquin antelope squirrel, giant kangaroo rat, and San Joaquin kit fox, and then confirm occupation of all potential burrows for buffers and avoidance. Methods of determining burrow occupancy may include, but would not be limited to visual observations of scat or tracks outside burrow entrances, dusting burrow entrances with a tracking medium for 3 days, installing trail cameras for nocturnal observations, performing small mammal trapping, or a combination of these methods as appropriate and in consultation with the CDFW and USFWS. If occupied burrows cannot be avoided, the USFWS and CDFW would be consulted to ensure compliance with the FESA and CESA, respectively, and species-specific mortality reduction or avoidance plans would be developed for agency review and approval.

- If occupied burrows or dens are found during construction wildlife and burrow surveys, adequate buffers would be established around burrows. Adequate buffers would be determined by a qualified biologist based on field conditions and resource agency guidelines. If avoidance of species listed under the FESA or CESA is not possible, the USFWS and/or CDFW would be consulted and species-specific mortality reduction or avoidance plans would be developed for agency review and approval, as appropriate. These plans may include, but would not be limited to the following:

  – Detailed description of trapping methodology,
  – Detailed burrow excavation methods,
  – Release location(s),
  – Detailed release methods,
  – Artificial burrow design and installation methods,
  – Description of exclusion fencing type and implementation, and
  – Identification of a wildlife rehabilitation center or veterinary facility capable of and willing to treat injured special-status species.

  Any other construction activities that may impact burrows occupied by special-status species (including movement of construction equipment and other activities outside of the fenced/paved areas within wildlife habitat) would be monitored by a qualified biologist. The monitor/inspector would have the authority to stop work activities upon the discovery of sensitive biological resources and allow construction to proceed after the identification and implementation of steps required to avoid or minimize impacts to sensitive resources.

- Prior to the initiation of construction, a qualified biologist would conduct protocol-level surveys of the Proposed Project work area for giant kangaroo rat. Surveys would be confined to Proposed Project work areas within annual grassland habitats, as well as disturbed habitats and agricultural areas within 500 feet of annual grassland habitats. Surveys would conform to the methodology outlined in the San Joaquin Kangaroo Rat Trapping Protocol (USFWS 2013). If species presence is determined through these surveys, the USFWS and CDFW would be consulted to ensure compliance with the FESA and CESA, respectively, and species-specific mortality reduction or avoidance plans would be developed for agency review and approval.

- Prior to the initiation of construction, a qualified biologist would conduct protocol-level surveys of the Proposed Project work area for giant kangaroo rat. Surveys would be confined to Proposed Project work areas within annual grassland habitats, as well as disturbed habitats and agricultural areas within 500 feet of annual grassland habitats. Surveys would conform to the methodology outlined in the Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 2011). If species presence is determined through these surveys, the USFWS and CDFW would be consulted to ensure compliance with the FESA and CESA, respectively, and species-specific mortality reduction or avoidance plans would be developed for agency review and approval.

- Prior to the initiation of construction, a qualified biologist would conduct focused surveys of the Proposed Project work area for San Joaquin antelope squirrel in annual grassland habitats, as well as disturbed habitats and agricultural areas within 500 feet of annual grassland habitats. If species presence is determined through these surveys, the CDFW would be consulted to ensure compliance with the CESA, and species-specific mortality reduction or avoidance plans would be developed for agency review and approval.

- Prior to the initiation of construction, a qualified biologist would conduct protocol-level surveys of the Proposed Project work area for blunt-nosed leopard lizard in annual grassland habitats and disturbed habitats within 500 feet of annual grassland habitats. Surveys would conform to the methodology outlined in the Approved Survey Methodology for the Blunt-Nosed Leopard Lizard (CDFW 2019). If species presence is determined through these surveys, the USFWS and CDFW would be consulted to ensure compliance with the FESA and CESA, respectively, and a species-specific avoidance plan would be developed for agency review and approval. This plan would include an overview and results of blunt-nosed leopard lizard surveys, the proposed mitigation measure implementation strategy, and methods to avoid species take prior to and during construction activities.

7.0.3 Crotch's Bumblebee

- A pre-construction survey plan for Crotch's bumblebee would be developed and implemented for Proposed Project work areas associated with the Manning Alignment that occur within annual grassland habitats, as well as within disturbed habitats and agricultural areas located within 500 feet of annual grassland habitats. The plan would detail survey methodology and reporting procedures. Prior to initial vegetation clearance and ground-disturbing activities, pre-construction surveys would be conducted to identify Crotch's bumblebee habitat and host plants present within the Proposed Project work areas. Photograph-only surveys would also be conducted in accordance with USFWS protocol recommendations (USFWS 2019) to determine adult bumblebee presence. Active Crotch's bumblebee nest sites may be incidentally observed during photograph-only surveys and would be identified as active based on repeated observations of bumblebee ingress and egress from the nest site and after consultation with the CDFW. Active nests would be marked for avoidance prior to construction.

- If occupied Crotch's bumblebee nests are found during pre-construction bumblebee surveys, adequate buffers would be established around nests. Adequate buffers would be determined by a qualified biologist based on field conditions and resource agency guidelines. If avoidance of bumblebee nests is not possible, the CDFW would be consulted. If Crotch's bumblebee host plants are found during pre-construction bumblebee surveys, these would be avoided to the greatest extent feasible during construction activities. Any construction activities that may impact Crotch's bumblebee nests and/or host plants, including movement of construction equipment and activities outside of the fenced/paved areas within wildlife habitat, would be monitored by a qualified biologist. The monitor/inspector would have the authority to stop work activities upon the discovery of occupied nests and host plants and allow construction to proceed after the identification and implementation of steps required to avoid or minimize impacts to Crotch's bumblebee.

7.1 AVOIDANCE AND MINIMIZATION MEASURES

- Any construction activities that may impact sensitive biological resources, including the movement of construction equipment and other activities outside of the fenced/paved areas, would be monitored by a qualified biologist. The monitor/inspector would have the authority to stop work activities upon the discovery of sensitive biological resources and allow construction to proceed after the identification and implementation of steps required to avoid or minimize impacts to sensitive resources.

- All work areas within the Proposed Project area would be clearly delineated with fencing, staking, or flags prior to construction commencing. Construction activities would be restricted to delineated work areas, and all delineation would be maintained in working order until the completion of construction.

- All sensitive biological areas (including aquatic resources) within Proposed Project work areas would be clearly marked prior to construction to restrict construction activities and equipment from entering these areas. Signage would be placed along regular intervals of this delineation to prohibit entry by Proposed Project personnel and identify the delineated area as a sensitive resource. A buffer of at least 5 feet from all construction activities would be established around these areas. These buffers would be inspected regularly to ensure that they remain in place. All construction activities that are permitted within jurisdictional waters would be clearly delineated and monitored by a qualified biologist.

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ATTACHMENT A: VEGETATION COMMUNITIES, WETLANDS, DRAINAGES, AND LAND COVER TYPES

Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 1 of 15

Manning 500/230 Kilovolt Substation Project

D-7
D-6 (W-6)
D-5
D-3 (W-5)
D-4
D-2
D-8
S Brannon Ave
W Manning Av

- Mapped Drainage
- Survey Area

Vegetation and Landcover

- Agriculture
- *Amsinckia (menziesii, tessellata) - Phacelia* spp. Herbaceous Alliance
- *Avena* spp. - *Bromus* spp. Semi-Natural Alliance
- *Bromus rubens - Schismus (arabicus, barbatus)* Herbaceous Semi-Natural Alliance
- Developed
- Disturbed
- Not Surveyed

Source: Insignia, 2025, USFWS, 2024

LSPOWER GRID CALIFORNIA
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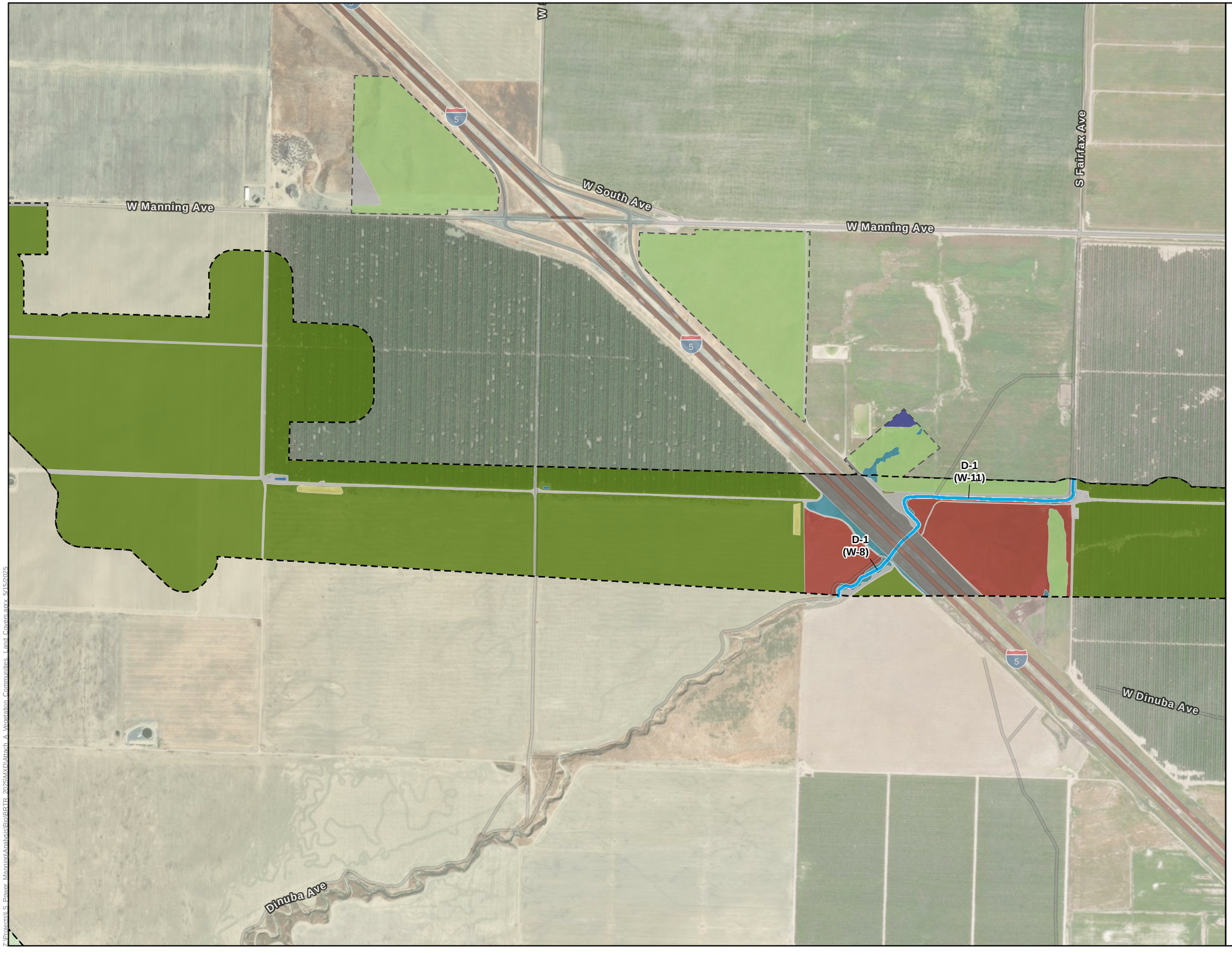


Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 2 of 15

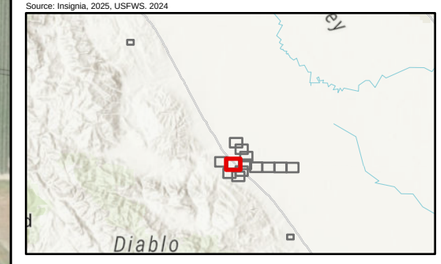
Manning 500/230 Kilovolt Substation Project

- Mapped Drainage
- Survey Area

Vegetation and Landcover

- Agriculture
- *Amsinckia (menziesii, tessellata) - Phacelia* spp. Herbaceous Alliance
- *Atriplex canescens* Shrubland Alliance
- *Atriplex lentiformis* Shrubland Alliance
- *Avena* spp. - *Bromus* spp. Semi-Natural Alliance
- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Bromus rubens - Schismus (arabicus, barbatus)* Herbaceous Semi-Natural Alliance
- Developed
- Disturbed
- Open Water
- Not Surveyed

Source: Insignia, 2025, USFWS. 2024



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Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 3 of 15

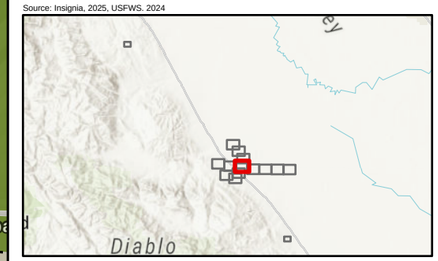
Manning 500/230 Kilovolt Substation Project

- Mapped Drainage
- Survey Area

Vegetation and Landcover

- Agriculture
- *Amsinckia (menziesii, tessellata) - Phacelia* spp. Herbaceous Alliance
- *Atriplex lentiformis* Shrubland Alliance
- *Bromus rubens - Schismus (arabicus, barbatus)* Herbaceous Semi-Natural Alliance
- Disturbed
- Not Surveyed

Source: Insignia, 2025, USFWS. 2024



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INSIGNIA ENVIRONMENTAL

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Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 4 of 15

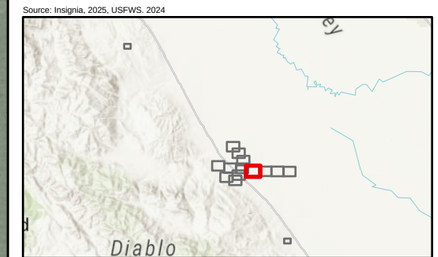
Manning 500/230 Kilovolt Substation Project

- Mapped Drainage
- Survey Area

Vegetation and Landcover

- Agriculture
- Developed
- Disturbed
- Open Water
- Not Surveyed

Source: Insignia, 2025, USFWS, 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 5 of 15

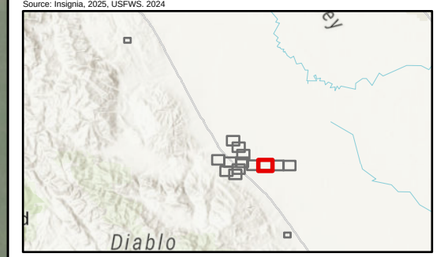
Manning 500/230 Kilovolt Substation Project

Survey Area

Vegetation and Landcover

- Agriculture
- *Atriplex lentiformis* Shrubland Alliance
- Developed
- Disturbed
- Open Water
- Not Surveyed

Source: Insignia, 2025, USFWS. 2024



LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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W Manning Ave
W Manning Ave
S Imperial Ave
S Imperial Ave
3rd St
W Dinuba Ave
S Washoe Ave
W Dinuba Ave
S San Diego Ave
W Dinuba Ave

Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 6 of 15

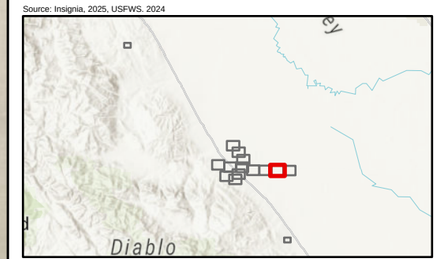
Manning 500/230 Kilovolt Substation Project

Survey Area

Vegetation and Landcover

- Agriculture
- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- Developed
- Disturbed
- Open Water
- Not Surveyed

Source: Insignia, 2025, USFWS. 2024



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INSIGNIA ENVIRONMENTAL

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Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 7 of 15

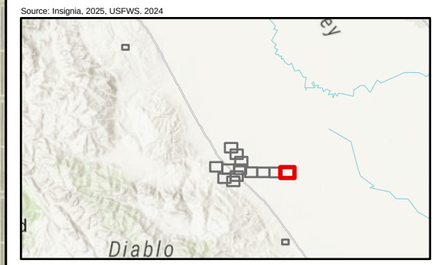
Manning 500/230 Kilovolt Substation Project

Survey Area

Vegetation and Landcover

- Agriculture
- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- Developed
- Disturbed
- Not Surveyed

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:11,000

0 500 1,000 Feet

W Manning Ave

W Manning Ave

S San Bernardino Ave

W Dinuba Ave

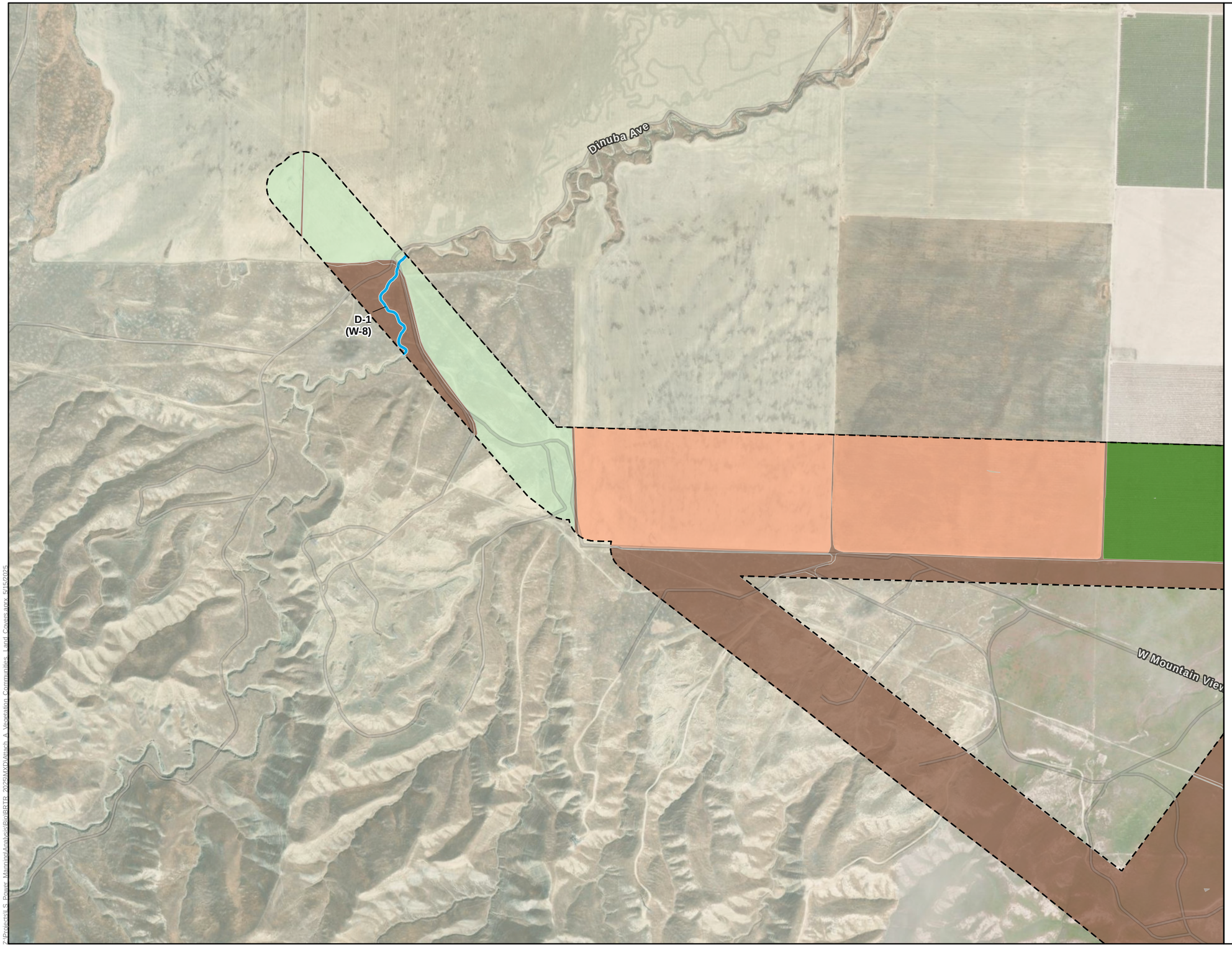
W Dinuba Ave

S Ohio Ave

W Dinuba

S San Bernardino Ave

Z:\Projects\LS Power Manning\Analysis\Bio\BRTR_2025\MXD\Attach A Vegetation Communities, Land Covers.aprx, 5/15/2025



Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 8 of 15

Manning 500/230 Kilovolt Substation Project

Mapped Drainage

Survey Area

Vegetation and Landcover

Agriculture

Amsinckia (menziesii, tessellata) - *Phacelia* spp. Herbaceous Alliance

Avena spp. - *Bromus* spp. Semi-Natural Alliance

Disturbed

Not Surveyed

Source: Insignia, 2025, USFWS. 2024

LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:11,000

0 500 1,000 Feet

Z:\Projects\LS Power Manning\Analysis\Bio\BRTR_2025\MXD\Attach A Vegetation Communities, Land Covers.aprx 5/15/2025

Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 9 of 15

Manning 500/230 Kilovolt Substation Project

Survey Area

Vegetation and Landcover

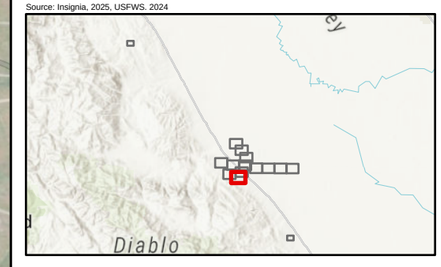
- Agriculture
- *Amsinckia (menziesii, tessellata)* - *Phacelia* spp. Herbaceous Alliance
- Disturbed
- Not Surveyed

W Mountain View Ave

S Hudson Ave

W Mountain View Ave

Source: Insignia, 2025, USFWS. 2024



LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:11,000

0 500 1,000 Feet

Z:\Projects\LS Power Manning\Analysis\ArcPRO\PRTR_2025\MXD\Attach A Vegetation Communities, Land Covers.aprx 5/15/2025

D-1
(W-8)

W Dinuba Ave

W Dinuba Ave

S Hudson Ave

W Mountain View Ave

S Hudson Ave

5

5

5

Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 10 of 15

Manning 500/230 Kilovolt Substation Project

Mapped Drainage

Survey Area

Vegetation and Landcover

Agriculture

Amsinckia (menziesii, tessellata) - Phacelia spp. Herbaceous Alliance

Atriplex lentiformis Shrubland Alliance

Bromus rubens - Schismus (arabicus, barbatus) Herbaceous Semi-Natural Alliance

Developed

Disturbed

Dry Lake / Mudflats / Playa

Not Surveyed

Source: Insignia, 2025, USFWS, 2024

Diablo

LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:11,000

0 500 1,000 Feet

Z:\Projects\LS Power Manning\Analysis\Bio\BRTR_2025\MXD\Attach A Vegetation Communities, Land Covers.mxd, 5/15/2025

Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 11 of 15

Manning 500/230 Kilovolt Substation Project

Mapped Drainage

Survey Area

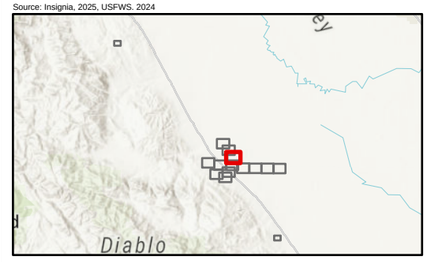
Vegetation and Landcover

Agriculture

Disturbed

Not Surveyed

Source: Insignia, 2025, USFWS, 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:11,000

0 500 1,000 Feet

Z:\Projects\LS Power Manning\Analysis\GIS\BRTR_2025\MXD\Attach A Vegetation Communities, Land Covers.aprx, 5/15/2025

S Fairfax Ave

S Hudson Ave

S Fairfax Ave

S Hudson Ave

Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 12 of 15

Manning 500/230 Kilovolt Substation Project

Survey Area

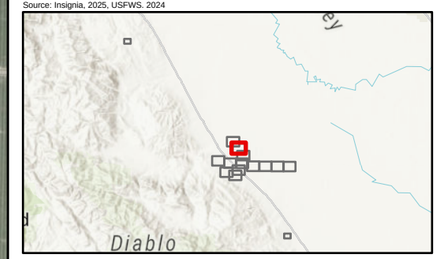
Vegetation and Landcover

Agriculture

Disturbed

Not Surveyed

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:11,000

0 500 1,000 Feet

Z:\Projects\LS Power_Manning\Analysis\Bio\BRTR_2025\MXD\Attach A Vegetation Communities, Land Covers.aprx, 5/15/2025

Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 13 of 15

Manning 500/230 Kilovolt Substation Project

Survey Area

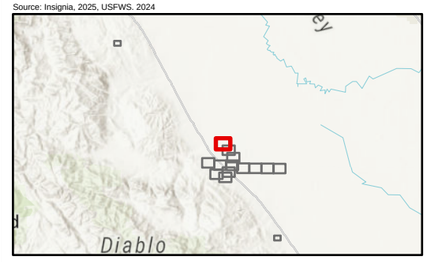
Vegetation and Landcover

Agriculture

Disturbed

Not Surveyed

Source: Insignia, 2025, USFWS. 2024



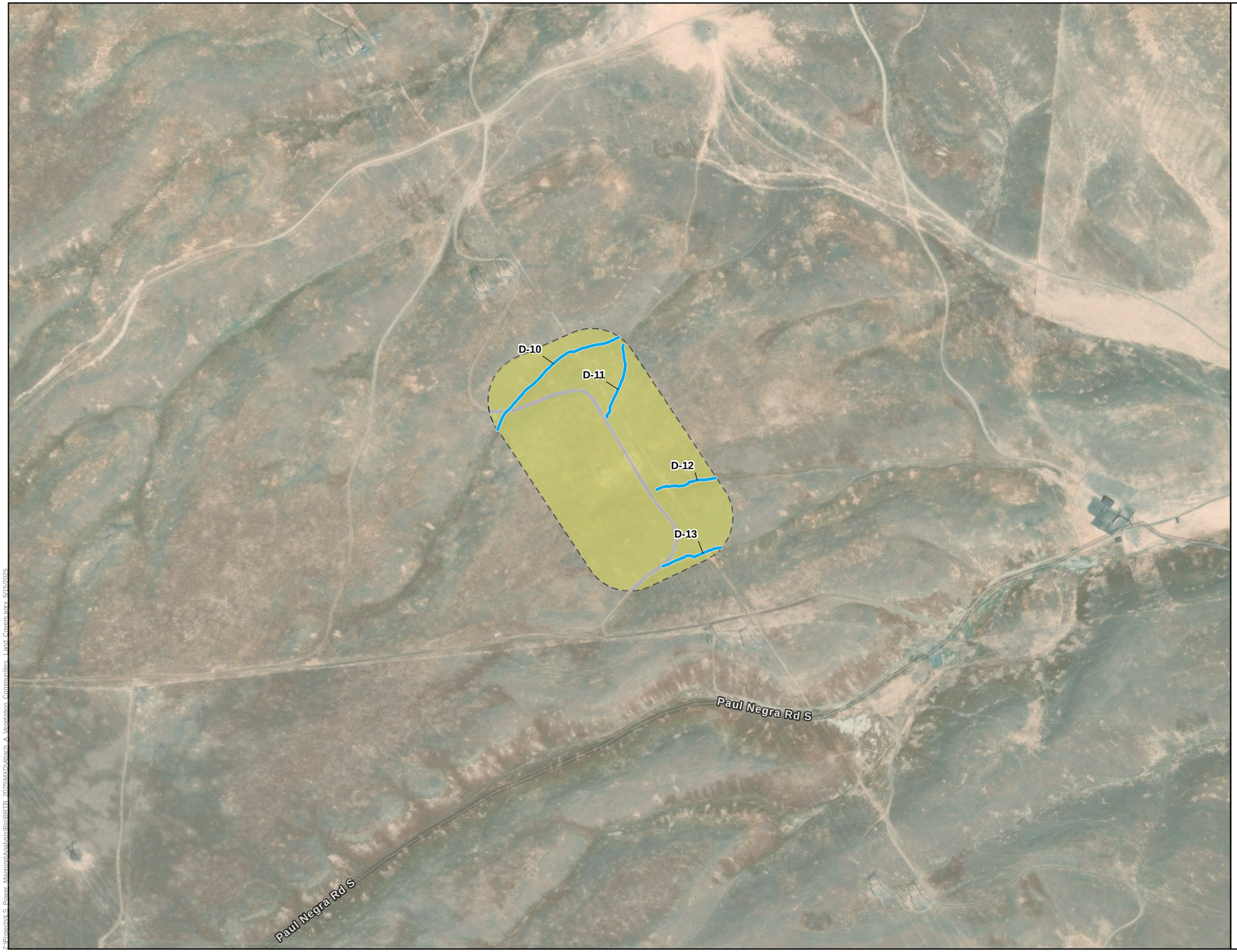
LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:11,000

0 500 1,000 Feet

Z:\Projects\LS Power_Manning\Analysis\Bio\BRTR_2025\MXD\Attach A_Vegetation Communities_Land Covers.aprx 5/15/2025



Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 14 of 15

Manning 500/230 Kilovolt Substation Project

Survey Area

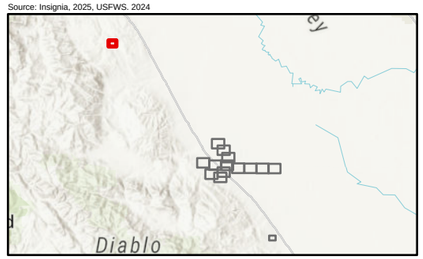
Vegetation and Landcover

Avena spp. - *Bromus* spp. Semi-Natural Alliance

Disturbed

Not Surveyed

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:6,000

0 500 1,000 Feet

Z:\Projects\LS Power Manning\Analysis\Bio\RPTR 2025\MXD\Attach A Vegetation Communities, Land Covers.mxd, 5/15/2025

Attachment A: Vegetation Communities, Drainages and Land Cover Types
Map 15 of 15

Manning 500/230 Kilovolt Substation Project

Survey Area

Vegetation and Landcover

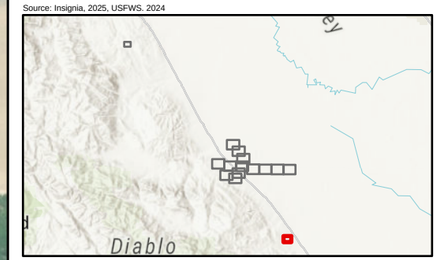
Atriplex polycarpa Shrubland Alliance

Bromus rubens - Schismus (arabicus, barbatus) Herbaceous Semi-Natural Alliance

Disturbed

Not Surveyed

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:6,000

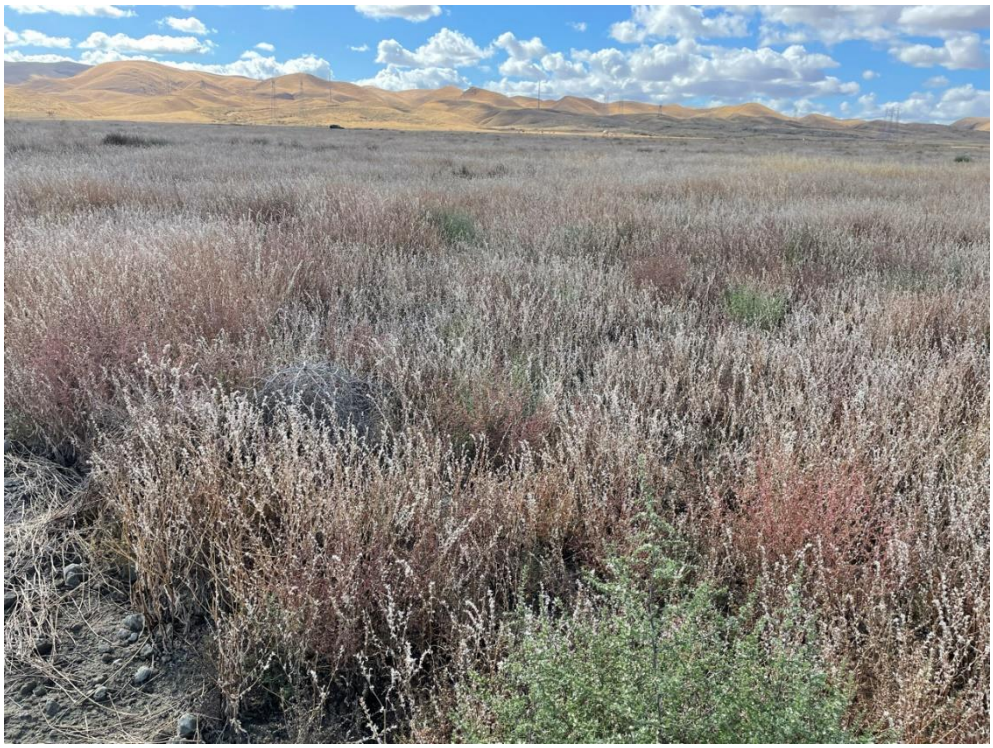
0 500 1,000 Feet

Z:\Projects\LS Power Manning\Analysis\GIS\ARTR_2025\MXD\Attach A Vegetation Communities, Land Covers.aprx 5/15/2025

ATTACHMENT B: HABITAT ASSESSMENT PHOTOGRAPHS

ATTACHMENT B: HABITAT ASSESSMENT PHOTOGRAPHS

Photograph 1: Active agriculture, facing north.



Photograph 2: *Amsinkia (menziesii, tessellata) - Phacelia spp.* Herbaceous Alliance, facing northwest.

Photograph 3: *Atriplex canescens* Shrubland Alliance, facing northeast.

Photograph 4: *Atriplex lentiformis* Shrubland Alliance, facing southwest.

Photograph 5: *Atriplex polycarpa* Shrubland Alliance, facing southeast.

Photograph 6: *Avena spp. – Bromus spp.* Herbaceous Semi-Natural Alliance, facing west.

Photograph 7: *Brassica nigra – Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance, facing north.

Photograph 8: *Bromus rubens - Schismus* (*arabicus*, *barbatus*) Herbaceous Semi-Natural Alliance, facing southwest.

Photograph 9: Developed, facing northeast.

Photograph 10: Disturbed, facing west.

Photograph 11: Dry lake/ mudflats/playa, facing south.

ATTACHMENT C: CNDDB OCCURRENCES OF SPECIAL-STATUS PLANT SPECIES

Attachment C: CNDDB Occurrences of Special-Status Plant Species

Manning 500/230 Kilovolt Substation Project

- Existing PG&E Tranquillity Switching Station
- Proposed LSPGC Substation
- Proposed Transmission Lines and Interconnections
- Existing PG&E Substation
- Existing PG&E Transmission Line
- 0.25-, 1-, and 5-Mile Buffer

Special Status Plant Species

- Chaparral ragwort
- Hall's tarplant
- Lost Hills crownscale
- Munz's tidy-tips
- Pale-yellow layia
- Panoche pepper-grass
- Recurved larkspur
- San Joaquin woollythreads
- Showy golden madia

Source: California Department of Fish and Wildlife, California Natural Diversity Database, 2025

LSPOWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

1:270,000

0 1 2 4 6 8 Miles

Z:\Projects\LS Power Manning\Analysis\Bio\PDF\Attachment C CNDDB FLORA MapBook 20250324.mxd 4/30/2025

ATTACHMENT D: CNDDB OCCURRENCES OF SPECIAL-STATUS WILDLIFE SPECIES

Attachment D: CNDDB Occurrences of Special Status Wildlife Species Amphibians - Map 1 of 5

Manning 500/230 Kilovolt Substation Project

- Existing PG&E Substation
- Existing PG&E Tranquillity Switching Station
- Existing PG&E Transmission Line
- Proposed LSPGC Substation
- Proposed Transmission Lines and Interconnections
- 0.25-, 1-, and 5-Mile Buffer

Special Status Amphibian Species

- Foothill yellow-legged frog - Central Coast DPS
- Western spadefoot toad

Source: California Department of Fish and Wildlife, California Natural Diversity Database, 2025

LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:270,000

0 1 2 4 6 8 Miles

Z:\Projects\LS Power Manning\Analysis\Bio\MXD\CNDDB MapBook 20250926.mxd 4/7/2025

Attachment D: CNDDB Occurrences of Special Status Wildlife Species
Birds - Map 2 of 5

Manning 500/230 Kilovolt Substation Project

- Existing PG&E Substation
- Existing PG&E Tranquillity Switching Station
- Existing PG&E Transmission Line
- Proposed LSPGC Substation
- Proposed Transmission Lines and Interconnections
- 0.25-, 1-, and 5-Mile Buffer

Special Status Bird Species

- Burrowing owl
- California horned lark
- Prairie falcon
- Short-eared owl
- Swainson's hawk
- Tricolored blackbird

Source: California Department of Fish and Wildlife, California Natural Diversity Database, 2025

LSPOWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

1:270,000

0 1 2 4 6 8 Miles

Z:\Projects\LS Power Manning\Analysis\Bio\MXD\CNDDB MapBook 20250930.mxd 4/7/2025

Attachment D: CNDDB Occurrences of Special Status Wildlife Species Invertebrates - Map 3 of 5

Manning 500/230 Kilovolt Substation Project

- Existing PG&E Substation
- Existing PG&E Tranquillity Switching Station
- Existing PG&E Transmission Line
- Proposed LSPGC Substation
- Proposed Transmission Lines and Interconnections
- 0.25-, 1-, and 5-Mile Buffer

Special Status Invertebrates Species

- Crotch's bumble bee
- Longhorn fairy shrimp

Source: California Department of Fish and Wildlife, California Natural Diversity Database, 2025

LS POWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

1:270,000

0 1 2 4 6 8 Miles

Z:\Projects\LS_Power_Manning\Analysis\Bio\MXD\CNDDB_MapBook_20250326.mxd 4/7/2025

Attachment D: CNDDB Occurrences of Special Status Wildlife Species
Mammals - Map 4 of 5

Manning 500/230 Kilovolt Substation Project

- Existing PG&E Substation
- Existing PG&E Tranquillity Switching Station
- Existing PG&E Transmission Line
- Proposed LSPGC Substation
- Proposed Transmission Lines and Interconnections
- 0.25-, 1-, and 5-Mile Buffer

Special Status Mammal Species

- American badger
- Giant kangaroo rat
- Nelson's San Joaquin antelope squirrel
- Pallid bat
- San Joaquin kit fox
- Tulare grasshopper mouse
- Western mastiff bat

Source: California Department of Fish and Wildlife, California Natural Diversity Database, 2025

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:270,000

0 1 2 4 6 8 Miles

Z:\Projects\LS Power Manning\Analysis\Bio\MXD\CNDDB_MapBook_20250326.mxd 4/7/2025

Attachment D: CNDDB Occurrences of Special Status Wildlife Species
Reptiles - Map 5 of 5

Manning 500/230 Kilovolt Substation Project

- Existing PG&E Substation
- Existing PG&E Tranquillity Switching Station
- Existing PG&E Transmission Line
- Proposed LSPGC Substation
- Proposed Transmission Lines and Interconnections
- 0.25-, 1-, and 5-Mile Buffer

Special Status Reptile Species

- Blunt-nosed leopard lizard
- California glossy snake
- Coast horned lizard
- Northern California legless lizard
- San Joaquin coachwhip
- Southwestern pond turtle

Source: California Department of Fish and Wildlife, California Natural Diversity Database, 2025

LS POWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

1:270,000

0 1 2 4 6 8 Miles

Z:\Projects\LS Power Manning\Analysis\Bio\MXD\CNDDB MapBook 20250326.mxd 4/7/2025

ATTACHMENT E: ESSENTIAL CONNECTIVITY AREAS

Attachment E: Essential Connectivity Areas
Map 1 of 3

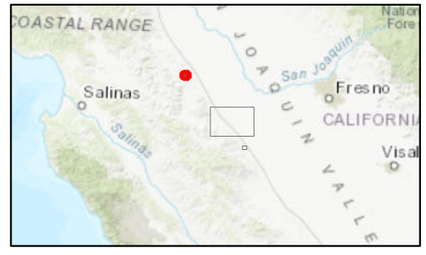
Manning 500/230 Kilovolt Substation Project

North Tower

More Permeable

Less Permeable

Survey Area



LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:6,400

0 0.1 0.2 Miles

Z:\Projects\LS Power Manning\Analysis\Bio\BRTR 2025\MXD\Essential Connectivity Areas.mxd

Attachment E: Essential Connectivity Areas
Map 2 of 3

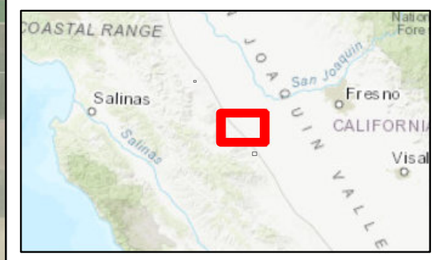
Manning 500/230 Kilovolt Substation Project

More Permeable

Less Permeable

Survey Area

California Aqueduct



LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:98,200

0 0.25 0.5 1 1.5 2 2.5 Miles

Z:\Projects\LS Power Manning\Analysis\Bio\BRTR 2025\MXD\Essential Connectivity Areas.mxd

Attachment E: Essential Connectivity Areas
Map 3 of 3

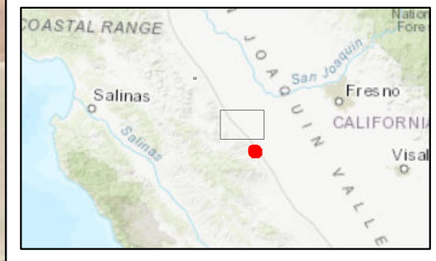
Manning 500/230 Kilovolt Substation Project

More Permeable

Less Permeable

Survey Area

South Tower



LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:10,200

0 0.15 0.3 Miles

Z:\Projects\LS Power Manning\Analysis\Bio\BRTR 2025\MXD\Essential Connectivity Areas.mxd

ATTACHMENT F: LINEAR WATER FEATURE PHOTOGRAPHS

ATTACHMENT F: LINEAR WATER FEATURE PHOTOGRAPHS

Photograph 1: D-1 (W-8 and W-11, eastern section), facing upstream and west.

Photograph 2: D-1 (W-8 and W-11, eastern section), facing downstream and north.

Photograph 3: D-10, facing upstream and southwest.

Photograph 4: D-10, facing downstream and northeast.

Photograph 5: D-11, facing upstream and south.

Photograph 6: D-11, facing downstream and north.

Photograph 7: D-12, facing upstream and southwest.

Photograph 8: D-12, facing downstream and southwest.

Photograph 9: D-13, facing upstream and southwest.

Photograph 10: D-13, facing downstream and northeast.

Photograph 11: D-14, facing upstream and southeast.

Photograph 12: D-14, facing downstream and southwest.

Photograph 13: D-15, facing upstream and southeast.

Photograph 14: D-15, facing downstream and north.

Photograph 15: D-16, facing upstream and northwest.

Photograph 16: D-16, facing downstream and south.

Photograph 17: D-17, facing upstream and southwest.

Photograph 18: D-17, facing downstream and northeast.

Photograph 19: D-18, facing upstream and southwest.

Photograph 20: D-18, facing downstream and east.

Photograph 21: D-19, facing upstream and southwest.

Photograph 22: D-19, facing downstream and northeast.

Photograph 23: D-20, facing upstream and south.

Photograph 24: D-20, facing downstream and north.

Photograph 25: D-21, facing upstream and northwest.

Photograph 26: D-21, facing downstream and southeast.

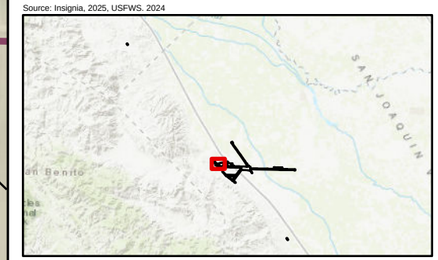
ATTACHMENT G: LINEAR WATER FEATURES ON THE PROPOSED ALIGNMENT

Attachment G:
Linear Water Features on the Proposed Alignment
Map 1 of 7
Manning 500/230 Kilovolt Substation Project

Mapped Drainage
National Wetland Inventory Feature
Survey Area

D-7
W-6
D-6
(W-6)
D-5
W-5
D-3
(W-5)
D-4
D-2
W-9
D-8
W-12
W-4
S Brannon Ave

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

1:10,000
0 500 1,000 Feet

Z:\Projects\L.S. Power Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025

Attachment G:
Linear Water Features on the Proposed Alignment
Map 2 of 7
Manning 500/230 Kilovolt Substation Project

Mapped Drainage
National Wetland Inventory Feature
Survey Area

W Manning Ave
W South Ave
W Manning Ave
S Fairfax Ave
W Dinuba Ave
5
5
5
W-12
D-1
(W-11)
W-11
W-8
D-1
(W-8)
W-10
W-11

Source: Insignia, 2025, USFWS. 2024

LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

1:10,000
0 500 1,000 Feet

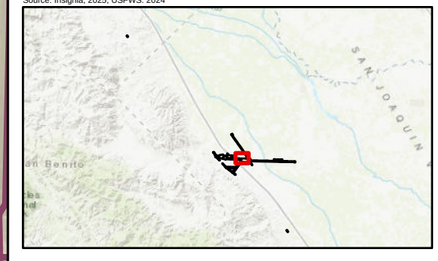
Z:\Projects\L-S Power Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025

Attachment G:
Linear Water Features on the Proposed Alignment
Map 3 of 7
Manning 500/230 Kilovolt Substation Project

Mapped Drainage
National Wetland Inventory Feature
Survey Area

S Fairfax Ave
S Hudson Ave
W Manning Ave
D-9
W-11
D-1
(W-11)
W-11
W Dinuba Ave
W-11
W Dinuba Ave
S Hudson Ave
W-11
S Jerrold Ave

Source: Insignia, 2025, USFWS. 2024



LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

1:10,000
0 500 1,000 Feet

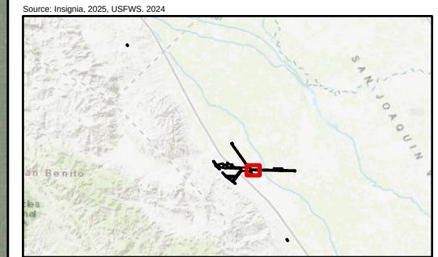
Z:\Projects\LS_Power_Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025

Attachment G:
Linear Water Features on the Proposed Alignment
Map 4 of 7
Manning 500/230 Kilovolt Substation Project

Mapped Drainage
National Wetland Inventory Feature
Survey Area

W-11
W-11
W-11
W-11
W-11
S Newcomb Ave
S Newcomb Ave
S Newcomb Ave
W Dinuba Ave
W Dinuba Ave
S Jerrold Ave

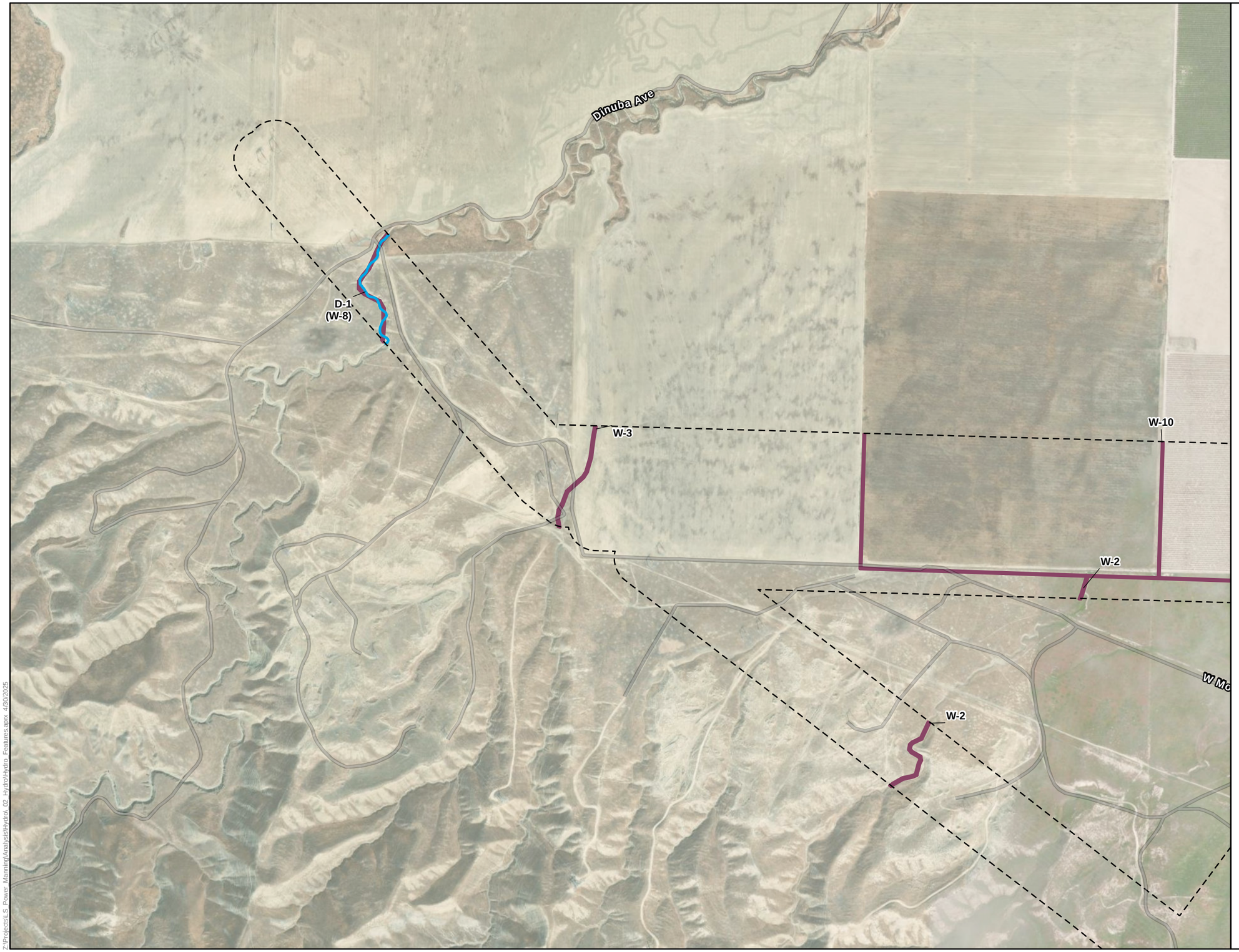
Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

1:10,000
0 500 1,000 Feet

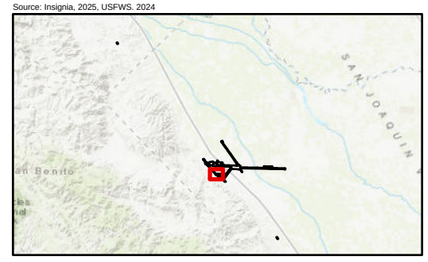
Z:\Projects\LS Power Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025



Attachment G:
Linear Water Features on the Proposed Alignment
Map 5 of 7
Manning 500/230 Kilovolt Substation Project

- Mapped Drainage
- National Wetland Inventory Feature
- Survey Area

Source: Insignia, 2025, USFWS, 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

N

1:10,000

0 500 1,000 Feet

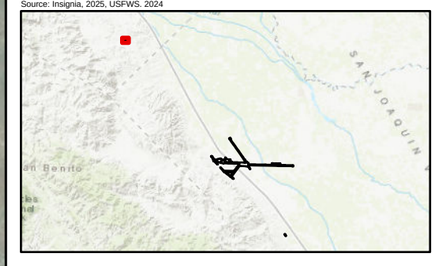
Z:\Projects\LS Power Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025

Attachment G:
Linear Water Features on the Proposed Alignment
Map 6 of 7
Manning 500/230 Kilovolt Substation Project

- Mapped Drainage
- National Wetland Inventory Feature
- Survey Area

D-10
D-11
D-12
D-13
Paul Negra Rd S

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

1:5,000
0 250 500 Feet

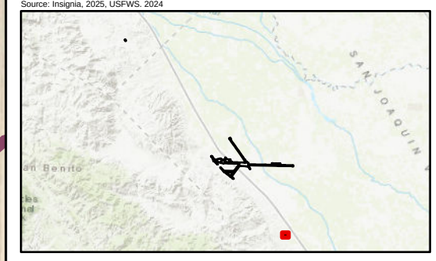
Z:\Projects\LS Power Manning\Analysis\Hydro\ 02 Hydro\Hydro Features.aprx 4/30/2025

Attachment G:
Linear Water Features on the Proposed Alignment
Map 7 of 7
Manning 500/230 Kilovolt Substation Project

- Mapped Drainage
- National Wetland Inventory Feature
- Survey Area

W-13
D-14
D-15
D-15
D-16
D-17
D-18
D-19
D-20
D-21

Source: Insignia, 2025, USFWS. 2024

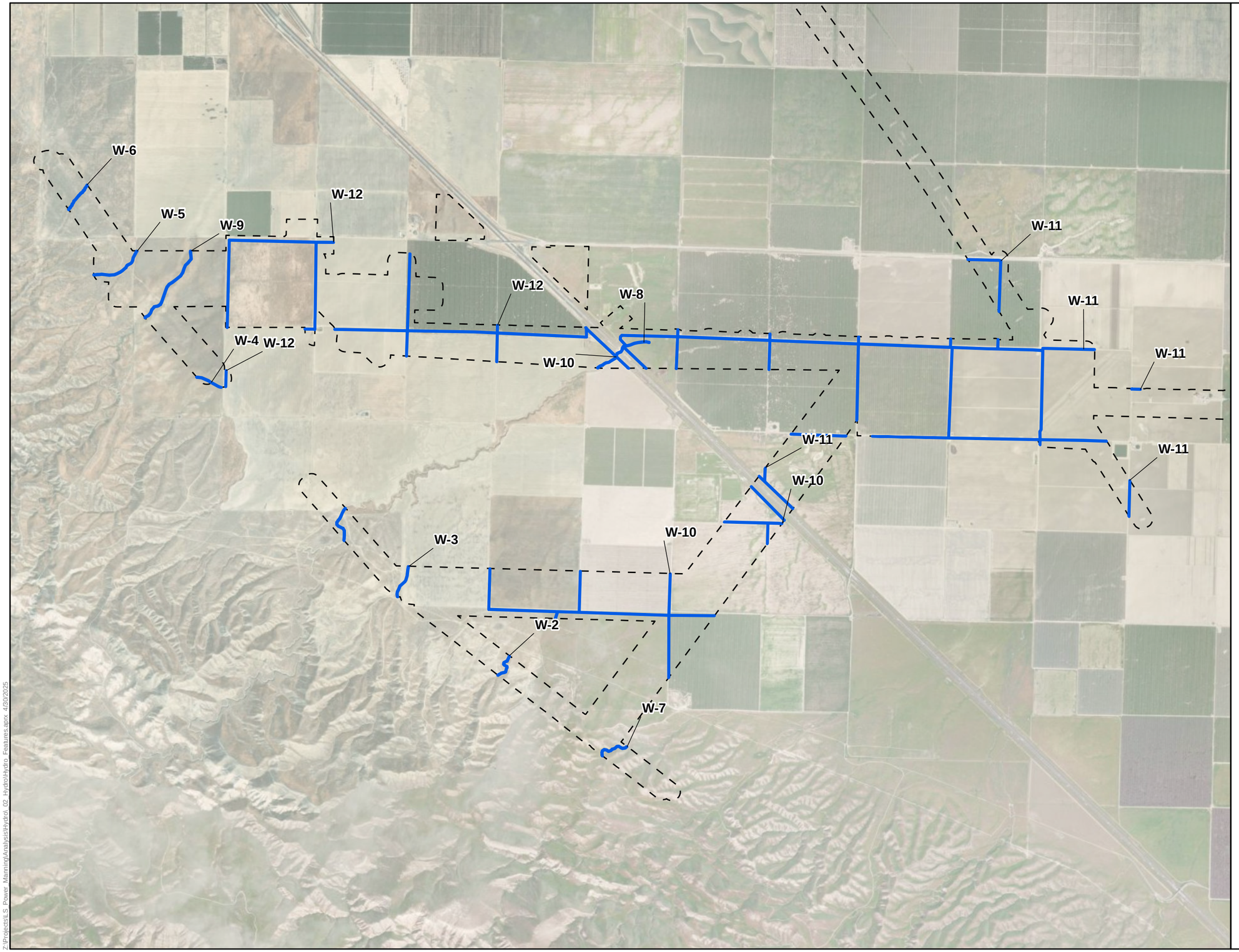


LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

1:5,000
0 250 500 Feet

Z:\Projects\LS Power_Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025

ATTACHMENT H: NATIONAL WETLANDS INVENTORY MAP



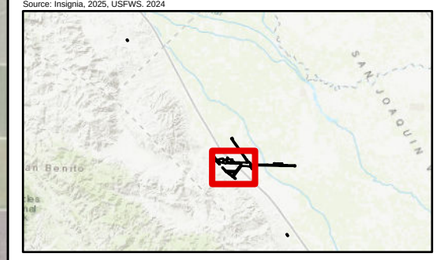
Attachment H:
National Wetlands Inventory Map

Map 1 of 4
Manning 500/230 Kilovolt
Substation Project

Survey Area

National Wetland Inventory Feature

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:33,000

0 0.25 0.5 1 Miles

Z:\Projects\L.S. Power_Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025

Attachment H:
National Wetlands Inventory Map

Map 2 of 4
Manning 500/230 Kilovolt
Substation Project

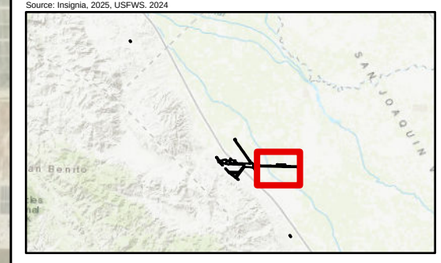
Survey Area

National Wetland Inventory Feature

W-11

W-1

Source: Insignia, 2025, USFWS. 2024



LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:33,000

0 0.25 0.5 1 Miles

Z:\Projects\LS Power_Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025

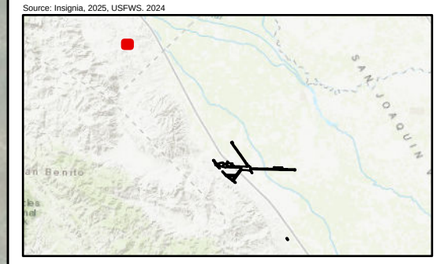
Attachment H:
National Wetlands Inventory Map

Map 3 of 4
Manning 500/230 Kilovolt
Substation Project

Survey Area

National Wetland Inventory Feature

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

1:5,000

0 250 500 Feet

Z:\Projects\L.S. Power Manning\Analysis\Hydro_02_Hydro\Hydro_Features.aprx 4/30/2025

Attachment H:
National Wetlands Inventory Map

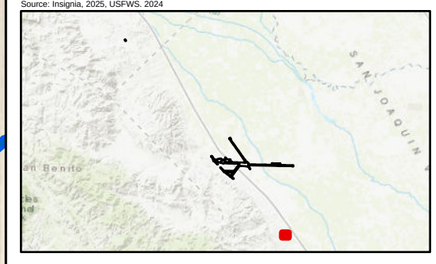
Map 4 of 4
Manning 500/230 Kilovolt
Substation Project

Survey Area

National Wetland Inventory Feature

W-13

Source: Insignia, 2025, USFWS. 2024



LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

N

1:5,000

0 250 500 Feet

Z:\Projects\LS Power Manning\Analysis\Hydro_02 Hydro\Hydro_Features.aprx 4/30/2025