INSIGNIA ENVIRONMENTAL

LS POWER GRID CALIFORNIA, LLC

COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT

TERRESTRIAL 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 pre-project survey for the Collinsville 500/230 Kilovolt (kV) Substation Project (Proposed Project). The Proposed Project would involve the construction of a new 500/230 kV substation (Collinsville Substation), the construction of two new 500 kV single-circuit transmission line segments that will loop Pacific Gas and Electric Company's (PG&E's) existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed LSPGC Collinsville Substation, and the construction of one new 230 kV double-circuit transmission line that would connect the proposed LSPGC Collinsville Substation to PG&E's existing Pittsburg Substation. The Proposed Project's general location is depicted in Figure 1: Project Overview Map, and the Proposed Project components located within the survey area associated with this Terrestrial Biological Resources Technical Report Addendum (Addendum) are depicted in Figure 2: Project Components Map. A Biological Resources Technical Report (Original Report) (Insignia 2024) was prepared for the Proposed Project in July 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 vicinity of the Proposed Project.

Since the completion of the Original Report, the project design for the Proposed Project has undergone changes, including the addition of three new transposition structures, the removal of two existing transposition lattice steel poles (LSPs), and the replacement of two existing lattice steel towers (LSTs) with two new three-pole dead-end tubular steel poles (TSPs) at four distinct locations along PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line. These four new structure sites (hereafter referred to as Tower A, Tower B, Tower C, Tower D, or "Towers" collectively) are located outside of the survey area[1] evaluated in the Original Report. To accommodate supplemental habitat assessment and preliminary waters surveys for the Towers, the Proposed Project survey area has since been expanded by approximately 526 acres. This Addendum was prepared to supplement the Original Report and details the findings of habitat assessments and preliminary waters surveys conducted within the approximately 526-acre survey area that was added (Tower survey area).

2 – PROJECT DESCRIPTION

2.0 PROJECT LOCATION

As depicted in Figure 1: Project Overview Map, the Towers would be located at four separate sites spread along approximately 33 miles of PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line. The approximately 526-acre Tower survey area is divided among the four discrete transposition structure locations. The survey areas associated with each transposition structure location are separate and do not overlap.

[1] The survey area primarily consists of all terrestrial areas of the Proposed Project area north of the Sacramento River, as well as an approximately 10-acre buffer. Terrestrial areas south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation, compose a small portion of the survey area.

Tower A, the northernmost transposition structure location, is located approximately 3 miles southeast of the City of Vacaville in Solano County. The Tower survey area associated with Tower A is approximately 214 acres.

Tower B is located approximately 7 miles southeast of Tower A and approximately 3 miles southeast of the community of Denverton in Solano County. The Tower survey area associated with Tower B is approximately 91 acres.

Tower C—the site of the removal of two existing LSPs and the replacement of two existing LSTs with two three-pole dead-end TSPs—is located approximately 5 miles southeast of Tower B and approximately 2 miles east of Birds Landing in Solano County. The Tower survey area associated with Tower C is approximately 146 acres.

Tower D, the southernmost transposition structure installation, is located approximately 21 miles southeast of Tower C within the census designated place of Byron in Contra Costa County. The Tower survey area associated with Tower D is approximately 75 acres.

2.1 PROJECT COMPONENTS

With the exception of the addition of the Towers, the main components of the Proposed Project remain largely unchanged from the Original Report. The main components are depicted on Figure 2: Project Components Map and include the following:

- Constructing a new 500/230 kV substation (the proposed LSPGC Collinsville Substation).
- Constructing two new approximately 1.2-mile-long, single-circuit 500 kV transmission line segments extending to interconnect (or "loop") PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed LSPGC Collinsville Substation.
- Constructing a new approximately 6-mile-long, double-circuit 230 kV transmission line to connect the proposed LSPGC Collinsville Substation to PG&E's existing Pittsburg Substation.
- Extending and connecting PG&E's existing 12 kV Peabody 2107 Circuit distribution line to the proposed LSPGC Collinsville Substation.
- Constructing two new telecommunications paths to the proposed LSPGC Collinsville Substation—a new microwave tower would be constructed and owned by PG&E at the substation—and a new fiber optic path consisting of two fiber optic cables for redundancy would be installed between existing fiber in the City of Pittsburg and the proposed substation.
- Construction of three new PG&E 500 kV transposition structures, the removal of two existing LSPs, and the replacement of two existing LSTs with two new three-pole dead-end TSPs along PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line.

Figure 1: Project Overview Map — **Collinsville 500/230 Kilovolt Substation Project**

- Proposed LSPGC Collinsville Substation
- Existing PG&E Pittsburg Substation
- Proposed PG&E 500 kV Transposition Structure
- Proposed Project Transmission Lines
- Proposed PG&E 12 kV Distribution Line
- Proposed LSPGC Telecommunications Line
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Navigational Channel

1:250,000

0 2 4 Miles

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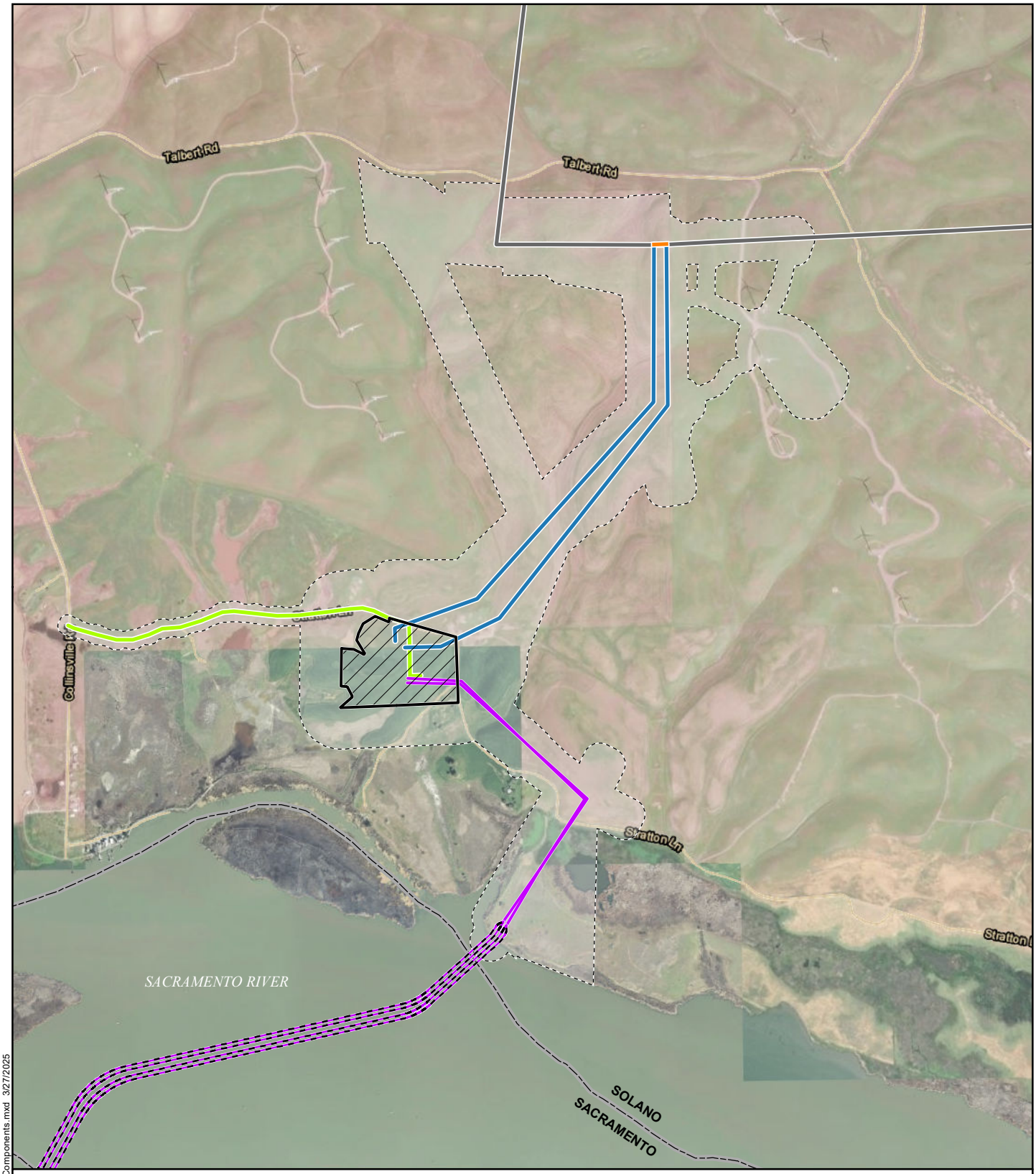

Figure 2: Project Components Map 1 of 6 **Collinsville 500/230 Kilovolt Substation Project**

- Existing PG&E 500 kV Overhead Transmission Line
- Proposed LSPGC 230 kV Overhead Segment
- Proposed LSPGC 230 kV Submarine Segment
- Proposed PG&E 12 kV Distribution Line
- Proposed PG&E 500 kV Interconnection
- Existing PG&E 500 kV Overhead Transmission Line to be Removed
- County Boundary
- Survey Area
- Proposed Collinsville Substation

1:20,000
0 500 1,000 Feet

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Figure 2: Project Components Map 2 of 6 **Collinsville 500/230 Kilovolt Substation Project**

- Proposed LSPGC 230 kV Submarine Segment
- Proposed LSPGC 230 kV Underground Segment
- Proposed LSPGC Telecommunications Line
- Survey Area
- Existing PG&E Pittsburg Substation
- Proposed Riser
- Proposed Utility Vault

1:8,000

0 500 1,000 Feet

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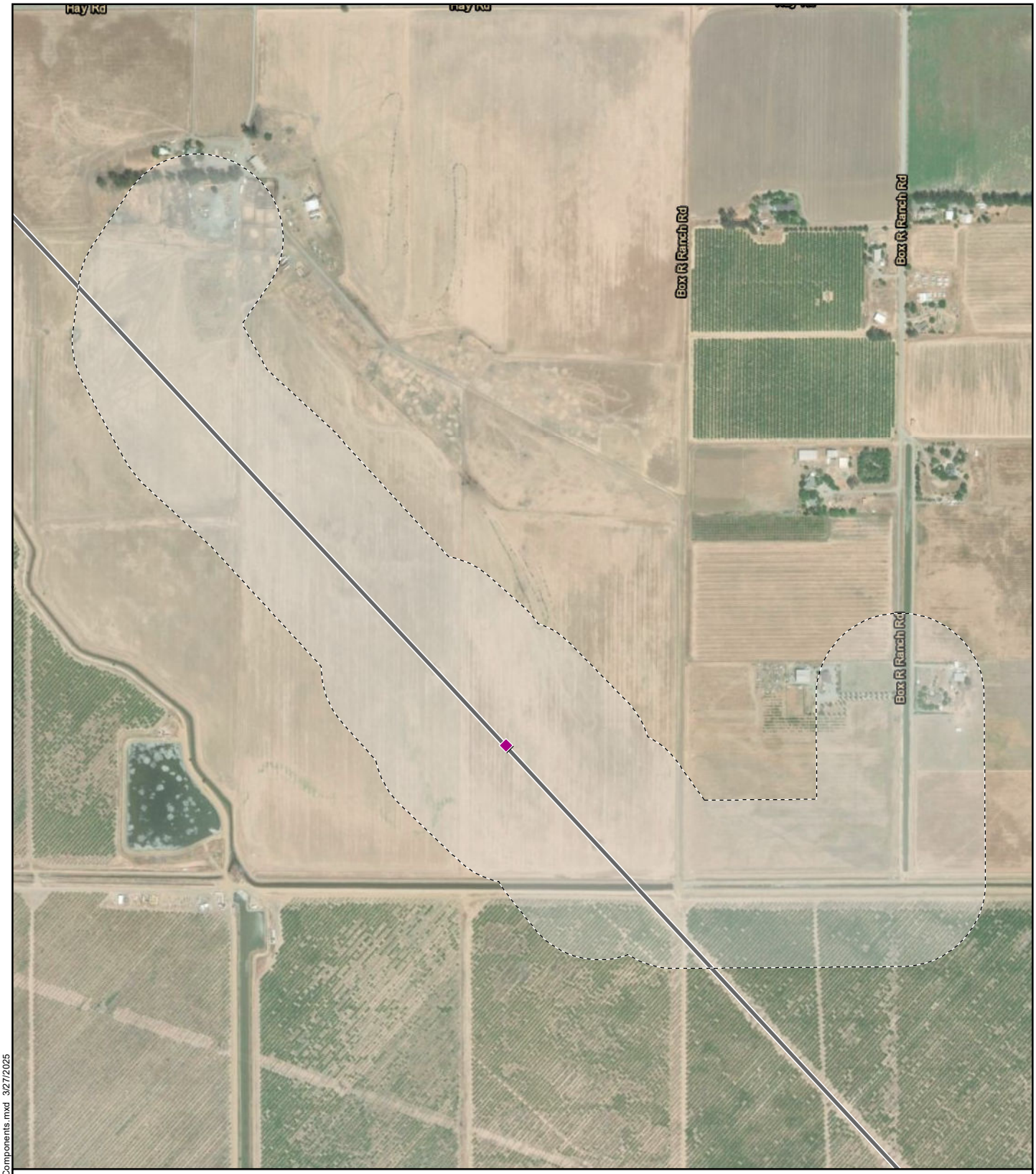

Figure 2: Project Components Map 3 of 6 **Collinsville 500/230 Kilovolt Substation Project**

- Proposed PG&E 500 kV Transposition Structure
- Existing PG&E 500 kV Overhead Transmission Line
- Survey Area

1:10,000

0 500 1,000 Feet

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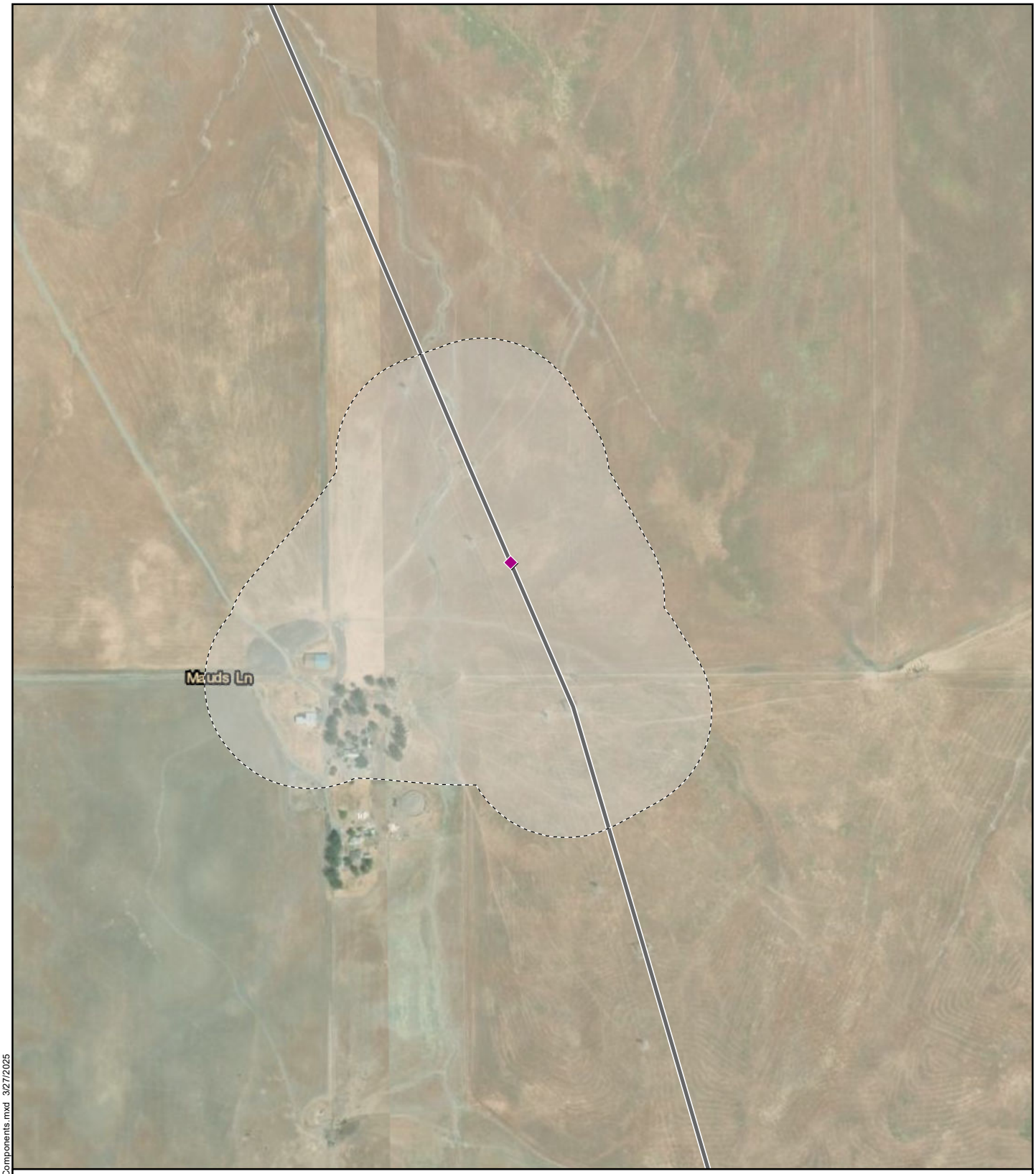

Figure 2: Project Components Map 4 of 6 **Collinsville 500/230 Kilovolt Substation Project**

Proposed PG&E 500 kV Transposition Structure

Existing PG&E 500 kV Overhead Transmission Line

Survey Area

1:8,000

0 500 1,000 Feet

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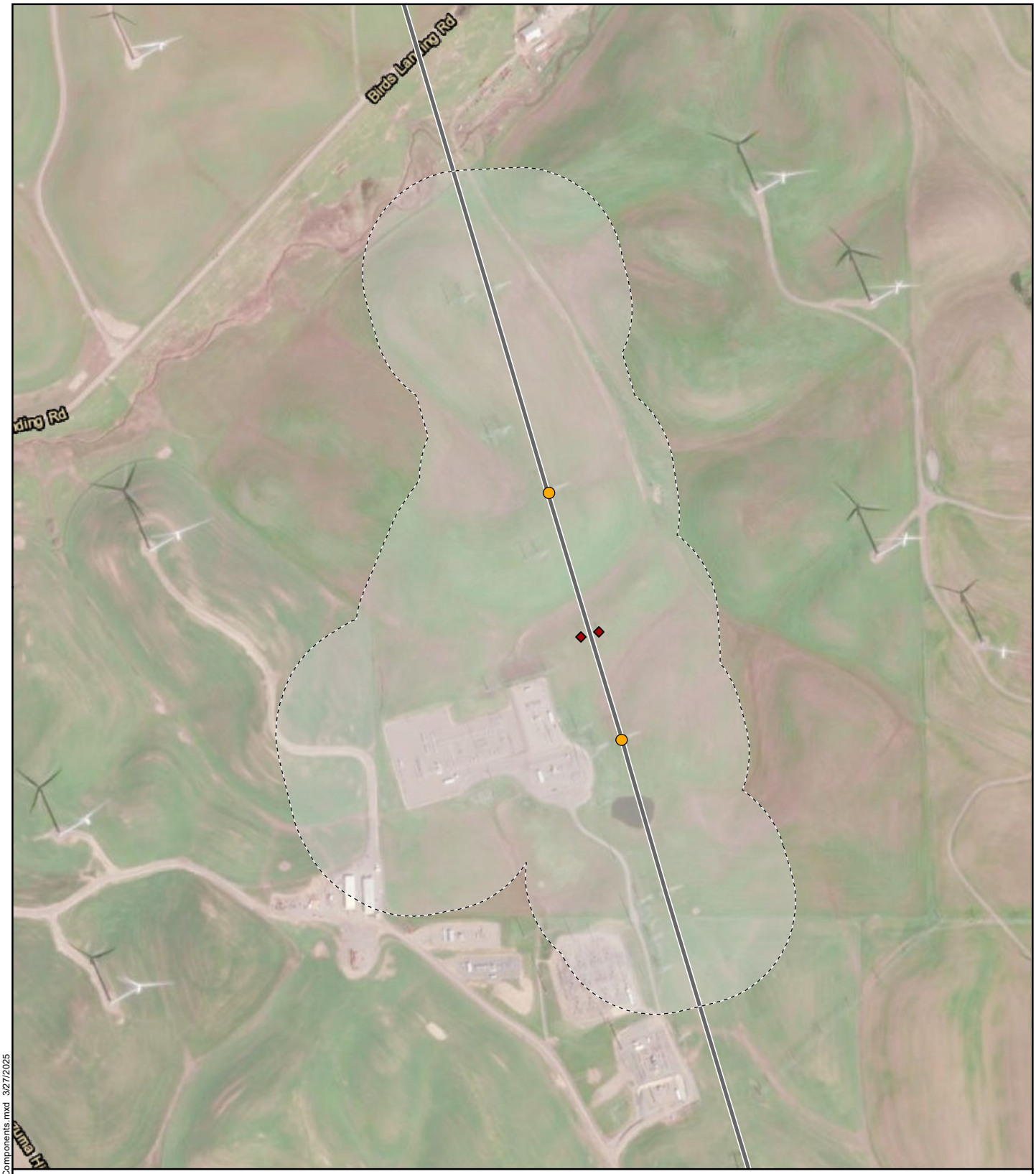

Figure 2: Project Components Map 5 of 6 **Collinsville 500/230 Kilovolt Substation Project**

- Proposed PG&E LSP Removal
- Proposed PG&E Three-Pole Dead-End TSP
- Existing PG&E 500 kV Overhead Transmission Line
- Survey Area

1:8,000

0 500 1,000 Feet

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Figure 2: Project Components Map 6 of 6 **Collinsville 500/230 Kilovolt Substation Project**

- Proposed PG&E 500 kV Transposition Structure
- Existing PG&E 500 kV Overhead Transmission Line
- Survey Area

1:8,000

0 500 1,000 Feet

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3 – REGULATORY FRAMEWORK

The regulatory framework applicable to the Tower survey area is consistent with the framework established in the Original Report. The following federal, state, and local regulations apply to the Tower survey area:

- Federal
  - Federal Endangered Species Act (FESA)
  - Migratory Bird Treaty Act (MBTA)
  - Bald and Golden Eagle Protection Act (BGEPA)
  - Clean Water Act (CWA) Sections 404, 402, and 401
  - Plant Protection Act of 2000
- California
  - 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 Code of Regulations (CCR)
- Local
  - Solano County General Plan
  - Solano County Water Agency (SCWA) Solano Multispecies Habitat Conservation Plan
  - East Contra Costa Habitat and Natural Community Conservation Plan
  - PG&E Bay Area Operations and Maintenance Habitat Conservation Plan

4 – PRELIMINARY AGENCY CONSULTATION

No pre-survey contact with applicable wildlife agencies was conducted regarding this Addendum. No agency approvals were required for biologists conducting surveys. Agency protocols and best practices applied to the survey effort are detailed in Section 5.2 Biological Resource Survey Method of the Original Report.

5 – METHODS

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

Surveys within the Tower survey area were conducted on February 20 and 21, 2025. Insignia biologists searched for areas of potential habitat by walking meandering transects that covered 100 percent of the Tower survey area that was accessible. Approximately 82 acres that were inaccessible due to lack of landowner permission were surveyed through binoculars to the

greatest extent feasible from accessible rights-of-way. The Tower survey area and areas where surveyor access was limited are shown in Attachment A: Biological Resources Map.

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 45 to 70 degrees Fahrenheit with wind speeds between 5 and 20 miles per hour.

5.0 MODIFICATIONS FROM ORIGINAL REPORT

A fully floristic special-status plant survey was conducted in the survey area for the Original Report; however, this survey was not conducted within the Tower survey area for this Addendum. Therefore, the criteria for a special-status species' potential to occur in this Addendum differ from the Original Report and are as follows:

- Present: The species was incidentally observed during the habitat assessment surveys.
- High Potential: Suitable habitat for the species is present within the Tower survey area, and recent (i.e., within 30 years) occurrences have been reported within 1 mile of the Tower survey area; or marginal habitat is present, and recent occurrences have been recorded within 0.25 mile of the Tower survey area.
- Moderate Potential: Suitable habitat for the species is present, and the Tower survey area is located within the species' known range, but no recent (i.e., within 30 years) occurrences have been recorded between 1 and 5 miles from the Tower survey area; or marginal habitat is present, the Tower survey area is located within the species' known range, and multiple recent occurrences have been recorded between 1 and 5 miles from the Tower survey area.
- Low Potential: Poor or marginal habitat for the species exists, and no more than one recent occurrence has been recorded between 1 and 5 miles from the Tower survey area; barriers to migration/dispersal may be present; or suitable habitat for the species is present within the Tower survey area, but either no recent occurrences have been recorded between 1 and 5 miles from the Tower survey area or the Tower survey area is located outside of the species' known range.
- No Potential: No habitat exists for the species; no occurrences have been recorded between 1 and 5 miles from the Tower survey area, or the Tower survey area is outside of the species' known geographic or elevation range; and/or the species has been confirmed to be extirpated from the area.

6 – RESULTS

6.0 GEOGRAPHY, CLIMATE, AND HYDROLOGY

Precipitation, average air temperatures, and elevation data at each transposition tower location within the Tower survey area are detailed in Table 1: Geography, Climate, and Hydrology within the Tower Survey Area.

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

Metric	Tower			
	A*	B*	C*	D**
Average Rainfall (inches)	24.0	24.0	24.0	13.7
Period of Highest Rainfall	Dec-Mar	Dec-Mar	Dec-Mar	Dec-Feb
Average Annual Temperature Range (degrees Fahrenheit)	26-108	26-108	26-108	26-106
Elevation Range (feet)***	42-79	72-140	170-281	5-14

(*National Oceanic and Atmospheric Administration [NOAA] 2025a)
(**NOAA 2025b)
(***Google Earth Pro 2025)

6.1 RECORDS SEARCH

Results of the initial desktop analysis indicated that the areas surrounding the Tower survey area are primarily grassland habitat and agricultural areas, followed by some developed areas for farming or residential purposes. Grassland habitats, in general, may provide suitable habitat for special-status plants.

From this records search, Insignia compiled a list of 44 special-status plant species and 46 special-status wildlife species that have the potential to occur within the Tower survey area associated with each of the Towers, as well as 18 potential jurisdictional water features from a United States (U.S.) Geological Survey (USGS) National Wetlands Inventory (NWI) database review. Special-status species and water features found during the records search are broken down by transposition towers and are detailed in Table 2: Special-Status Plant and Wildlife Species Identified During Records Search and Table 3: Aquatic Resources Identified During Records Search of Water Features .

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

Tower	Special-Status Occurrences	
	Plants	Wildlife
A	33	20
B	36	28
C	33	31
D	28	30
All Towers*	**44**	**46**

Note: The totals represent the cumulative special-status species count for the Towers. The total will not sum as the transposition tower records search either overlapped and captured the same occurrence data or independently recorded the same species within their respective search areas.

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

Tower	Water Features
A	8
B	2
C	2
D	6
Total	**18**

6.2 VEGETATION COMMUNITIES

Ten vegetation community alliances and land cover types were identified in the Tower survey area, as presented in Table 4: Vegetation Community Alliances and Land Cover Types and depicted in Attachment A: Biological Resources Map. The vegetation community and land cover locations are also documented in Attachment A: Biological Resources Map, and photographs are provided in Attachment B: Habitat Assessment Photographs. The natural communities observed in the Tower survey area are ranked S3, S4, and semi-natural alliance (SNA) (semi-natural stands dominated by non-native species). Two of the 10 natural communities observed are considered sensitive. The following subsections describe each vegetation community identified within the survey area.

Approximately 162 acres of the Tower survey area were not accessible to the field survey team on foot. However, these areas were assessed for habitat from adjacent accessible areas through a combination of binocular-assisted evaluation and desktop analysis. Although vegetation communities and land cover types were identified for portions of the inaccessible terrain, a preliminary jurisdictional delineation for waters was not feasible in areas with limited foot access.

6.2.0 *Allenrolfea occidentalis* Shrubland Alliance (S3)

This community is associated with dry lakebed margins, hummocks, playas perched above current drainages, and seeps. Iodine bush (*Allenrolfea occidentalis*) typically has a greater than 2-percent absolute cover in the shrub canopy and is dominant or co-dominant in the shrub and herbaceous layers with fourwing saltbush (*Atriplex canescens*), saltgrass (*Distichlis spicata*), and alkali heath (*Frankenia salina*). This community was observed within the Tower survey area associated with Tower D, along either side of Kellog Creek Road adjacent to roadside drainages.

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

This community is found in foothills, waste places, rangelands, and opening in woodlands. The dominant species include oats (*Avena* spp.) and bromes (*Bromus* spp.) in the herbaceous layer with at least 50-percent relative cover. Co-dominant species in the herbaceous layer may include Australian saltbush (*Atriplex semibaccata*) and barley (*Hordeum* spp.). This alliance is widespread across the Tower survey area associated with Tower B, Tower C, and Tower D. Areas where this community occurs are being used for active cattle grazing or agriculture.

Table 4: Vegetation Community Alliances and Land Cover Types

Vegetation Community or Land Cover Type	Area Identified (acres)			
	A	B	C	D
Agriculture	22.4	--*	--	31.4
Allenrolfea occidentalis Shrubland Alliance**	--	--	--	0.6
Avena spp. – *Bromus* spp. Herbaceous SNA	--	84.6	132.5	34.0
Brassica nigra – *Centaurea* (*solstitialis*, *melitensis*) Herbaceous SNA	3.3	--	--	1.6
Developed	2.0	1.1	12.2	1.0
Disturbed	15.3	0.9	1.6	1.4
Lolium perenne Herbaceous SNA	165.9	--	--	--
Open water	1.1	--	--	--
Ornamental Vegetation	4.2	3.9	--	2.7
Schoenoplectus (*acutus, californicus*) Herbaceous Alliance**	--	--	--	2.0
Total* **	**214.3**	**90.5**	**146.2**	**74.7**

*This vegetation community or land cover type was not observed within the Tower survey area.
** This is a California Department of Fish and Wildlife- (CDFW-) designated sensitive natural community (State Rarity Rank S1-S3).
*** Due to rounding, the total may not sum.

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

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 within the Tower survey area associated with Tower A where active cattle grazing occurs and at Tower D along either side of agricultural canals.

6.2.3 *Lolium perenne* Herbaceous Semi-Natural Alliance

This community contains Italian rye grass (*Festuca perennis*) that is dominant or co-dominant with other non-natives in the herbaceous layer, including rip-gut brome (*Bromus diandrus*), sea barley (*Hordeum marinum*), and wild oat (*Avena fatua*). Typically, the herbaceous layer is continuous and often forms monocultures, which contributes to a poorly developed shrub layer. This alliance is widespread across the Tower survey area associated with Tower A, where the land is used for active cattle grazing and agriculture.

6.2.4 *Schoenoplectus* (*acutus, californicus*) Herbaceous Alliance (S3S4)

This community is found in a variety of wetland habitats, including brackish marshes, freshwater ponds, sloughs, swamps, and roadside ditches. The herbaceous layer is intermittent to continuous, forming thick stands that often result in a poorly developed shrub layer. Hardstem

bulrush (*Schoenoplectus acutus*) or giant bulrush (*Schoenoplectus californicus*) typically contain greater than 50-percent relative cover in the herbaceous layer. This community was observed within the Tower survey area associated with Tower D, in the middle of several agricultural canals that run between fallow and active agriculture fields.

6.3 SPECIAL-STATUS PLANT SPECIES

Background research conducted for the Tower survey area generated a list of 41 special-status plant species that have the potential to occur in the Tower survey area. This list was generated by comparing the species' ranges and habitat requirements with the location of the Tower survey area and habitat types within it. These species are presented in Table 5: Special-Status Plant Species with the Potential to Occur, which provides the listing status, life history, and bloom period for each species. California Natural Diversity Database (CNDDB) occurrences of special-status plants are presented in Attachment C: CNDDB Occurrences of Special-Status Plant Species.

As documented in Table 5: Special-Status Plant Species with the Potential to Occur, seven species have a high potential to occur and 28 species have a moderate potential to occur.

6.4 SPECIAL-STATUS WILDLIFE SPECIES

Based on the literature and database review, 46 special-status wildlife species were identified that have the potential to occur within the Tower survey area. The species name, listing status, life history, known locations, and a brief assessment of the potential to occur within the Tower survey area are provided for each species in Table 6: Special-Status Wildlife Species with the Potential to Occur. CNDDB occurrences of special-status wildlife are presented in Attachment D: CNDDB Occurrences of Special-Status Wildlife Species.

As documented in Table 6: Special-Status Wildlife Species with the Potential to Occur, two species (golden eagle [*Aquila chrysaetos*] and northern harrier [*Circus cyaneus*]) were incidentally observed during the habitat assessment surveys, eight species have a high potential to occur, and 19 species have a moderate potential to occur.

6.5 GENERAL WILDLIFE SPECIES

Nineteen wildlife species were incidentally identified during the surveys, which includes two mammals and 17 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 Tower survey area, because species that are nocturnal, secretive, or seasonally absent may not have been observed. Observed occurrences of wildlife species are shown in Table 7: Wildlife Species Observed within the Tower Survey Area.

Table 5: Special-Status Plant Species with the Potential to Occur

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
alkali-sink goldfields (*Lasthenia chrysantha*)	1B.2	This species occurs in vernal pools at elevations between 0 and 656 feet. (CNPS 2025b)	Feb-Apr	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
alkali milk-vetch (*Astragalus tener var. tener*)	1B.2	This species occurs in alkali playas, valley and foothill grasslands, and vernal pools at elevations between 5 and 195 feet. (CNPS 2025b)	Mar-Jun	annual herb	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. **Moderate 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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented within 0.25 mile of the survey area. **High Potential**
Antioch Dunes evening-primrose (*Oenothera deltoides* ssp. *howellii*)	FE; SE; 1B.1	This species occurs in inland dunes at elevations between 0 to 100 feet. (CNPS 2025b)	Mar-Sep	perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**
Baker's navarretia (*Navarretia leucocephala ssp. bakeri*)	1B.1	This species occurs in a variety of habitats including cismontane woodland, lower montane coniferous forest, meadows and seeps. It may also be seen in valley or foothill grasslands and vernal pools at elevations between 16 and 5,709 feet. (CNPS 2025b)	Apr-Jul	annual herb	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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area. **High Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area. **High Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**

[2] Explanation of federal and state listing codes:

Federal listing code:
-FE: Federally listed as endangered

State listing code:
-SE: State-listed as endangered

California Native Plant Society (CNPS) California Rare Plant Ranks (CRPRs):
-1A: Presumed extinct in California and rare/extinct elsewhere
-1B: Rare or endangered in California and elsewhere
-2B: Rare, threatened, or endangered in California, but more common elsewhere

CRPR Threat Codes:
-0.1: Seriously threatened in California (over 80 percent of occurrences threatened, high degree and immediacy of threat)
-0.2: Moderate Potentially threatened in California (20 to 80 percent of occurrences threatened, Moderate Potential degree and immediacy of threat)

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
bearded popcornflower (*Plagiobothrys hystriculus*)	1B.2	This species occurs in valley & foothill grassland and vernal pool at elevations between 0 to 900 feet. (CNPS 2025b)	Apr-May	annual herb	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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented within 0.25 mile of the survey area. **High Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented within 0.25 mile of the survey area. **High Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Big tarplant (*Blepharizonia plumosa*)	1B.1	This species occurs within valley and foothill grasslands at elevations between 98 and 1,657 feet. (CNPS 2025b)	Jul-Oct	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate 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. **Moderate Potential**
Boggs Lake hedge-hyssop (*Gratiola heterosepala*)	2B.2	This species occurs within marshes, swamps, and vernal pools at elevations between 33 and 7,792 feet. (CNPS 2025b)	Apr-Aug	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within the 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Bolander's water-hemlock (*Cicuta maculata var. bolanderi*)	2B.2	This species occurs in marsh & swamp and salt marsh at elevations between 0 to 655 feet. (CNPS 2025b)	Jul-Sep	perennial herb	Suitable marsh habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable marsh habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **N Potential**	Suitable marsh habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable marsh habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**
Brittlescale (*Atriplex depressa*)	2B.2	This species occurs in a variety of habitats including alkali playa, chenopod scrub, meadows and seep. It may also be observed in valley or foothill grasslands and vernal pools at elevations between 5 to 1,050 feet. (CNPS 2025b)	Apr-Oct	annual herb	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. **Moderate 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. **Moderate 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. **Moderate 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. **Moderate Potential**

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
California alkali grass (*Puccinellia simplex*)	2B.2	This species occurs in a variety of habitats including chenopod scrub, meadows and seeps. It may also be observed in valley or foothill grasslands and vernal pools at elevations between 7 and 3,051 feet. (CNPS 2025b)	Mar-May	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate 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. **Moderate Potential**
Caper-fruited tropidocarpum (*Tropidocarpum capparideum*)	1B.1	This species occurs in valley and foothill grasslands at elevations between 3 and1,493 feet. (CNPS 2025b)	Mar-Apr	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area. **High Potential**
Carquinez goldenbush (*Isocoma arguta*)	1B.2	This species occurs in valley & foothill grassland at elevations between 5 to 65 feet. (CNPS 2025b)	Aug-Dec	perennial shrub	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. **Moderate Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**
chapparal ragwort (*Senecio aphanactis*)	2B.2	This species occurs in chaparral, cismontane woodland, and coastal scrub at elevations between 50 to 2,625 feet. (CNPS 2025b)	January to April	annual herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles from the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles from the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles from the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**
Colusa grass (*Neostapfia colusana*)	SE; 1B.2	This species occurs in vernal pools at elevations between 15 and 655 feet. (CNPS 2025b)	May-Aug	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented 5 miles of the survey area. **No Potential**

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
Contra Costa goldfields (*Lasthenia conjugens*)	FE; 1B.2	This species occurs in a variety of habitats such as alkali playa, cismontane woodland, and valley or foothill grasslands. It may also be found in vernal pools at elevations between 0 to 1,540 feet. (CNPS 2025b)	Mar-Jun	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**
Contra Costa wallflower (*Erysimum capitatum* var. *angustatum*)	FE; SE; 1B.1	This species occurs in inland dunes at elevations between 10 and 65 feet. (CNPS 2025b)	Mar-Jul	perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey. **No Potential**
Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*)	1B.1	This species occurs within marshes and seeps, playas, and vernal pools at elevations between 5 and 4,005 feet. (CNPS 2025b)	Feb-Jun	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Crampton's tuctoria or Solano grass (*Tuctoria mucronata*)	1B.1	This species occurs in valley or foothill grasslands and vernal pools at elevations between 15 and 35 feet. (CNPS 2025b)	Apr-Aug	annual herb	Suitable grasslands are present within the survey area; however, the survey area is not within the known elevation range for this species. Therefore, marginally suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **Low Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **Not Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**
Delta button-celery (*Eryngium racemosum*)	SE; 1B.1	This species occurs in riparian scrub at elevations between 10 and 100 feet. (CNPS 2025b)	Jun-Oct	annual/ perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area; however, this species' known range does not overlap with the survey area. **No Potential**

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
Delta mudwort (*Limosella australis*)	2B.1	This species occurs in a variety of habitats such as brackish marsh, freshwater marsh, marsh or swamp. It may also be observed within riparian scrub at elevations between 0 to 10 feet. (CNPS 2025b)	May to August	perennial stoloniferous herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**
Delta tule pea (*Lathyrus jepsoniil* var. *jepsonii*)	1B.2	This species occurs in marshes or swamps at elevations between 0 to 15 feet. (CNPS 2025b)	May to July	perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**
diamond-petaled California poppy (*Eschscholzia rhombipetala*)	1B.1	This species occurs in valley or foothill grassland at elevations between 0 to 3,200 feet. (CNPS 2025b)	March to April	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No 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. **Moderate Potential**
dwarf downingia (*Downingia pusilla*)	FE; 1B.1	This species occurs in valley or foothill grassland and vernal pool at elevations between 5 to 1,460 feet. (CNPS 2025b)	Mar-May	annual herb	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. **Moderate 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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
fragrant fritillary (*Fritillaria liliacea*)	1B.1	This species occurs in a variety of habitats, such as cismontane woodland and coastal prairie or scrub. It may also be observed in valley & foothill grassland at elevations between 10 to 1,345 feet often found in ultramafic soils. (CNPS 2025b)	Feb-Apr	perennial bulbiferous herb	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. **Moderate 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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
heartscale (*Atriplex cordulata var. cordulata*)	1B.1	This species occurs in chenopod scrub, meadow or seep, and valley or foothill grassland at elevations between 0 to 1,835 feet. (CNPS 2025b)	Apr-Oct	annual herb	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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area. **High 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Heckard's pepper-grass (*Lepidium latipes var. heckardii*)	FT; SE; 1B.1	This species occurs in valley and foothill grasslands at elevations between 5 and 655 feet. (CNPS 2025b)	Mar-May	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
hispid salty bird's-beak (*Chloropyron molle ssp. hispidum*)	FT; SE; 1B.1	This species occurs in meadows and seeps, playas, and valley or foothill grasslands at elevations between 5 and 510 feet. (CNPS 2025b)	Jun-Sep	annual herb (hemiparasitic)	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Keck's checkerbloom (*Sidalcea keckii*)	FE, 1B.1	This species occurs in cismontane woodlands and valley or foothill grasslands at elevations between 245 to 2,135 feet, often found in ultramafic soils. (CNPS 2025b)	Apr-Jun	annual herb	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has been documented within 0.25 mile of the survey area. **High Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area. **High Potential**	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
large flowered fiddleneck (*Amsinkia grandiflora*)	FE;1B.1	This species occurs in foothill woodlands and valley grasslands at elevations between 0 and 1,000 feet. (CNPS 2025b)	Apr-May	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
Legenere (*Legenere limosa*)	1B.1	This species occurs in vernal pools at elevations between 5 and 2,885 feet. (CNPS 2025b)	Apr-Jun	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Long-styled sand-spurrey (*Spergularia macrotheca* var. *longistyla*)	1B.2	This species occurs in marshes, swamps, meadows, and seeps at elevations between 0 and 835 feet. (CNPS 2025b)	Feb-May	perennial herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**
Mason's lilaeopsis (*Lilaeopsis masonii*)	1B.1	This species occurs in freshwater marsh, marsh or swamp, and riparian scrub at elevations between 0 to 35 feet. (CNPS 2025b)	Apr-Nov	perennial rhizomatous herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**
pappose tarplant *(Centromadia parryi ssp. parryi)*	1B.1	This species occurs in a variety of habitats such as chaparral, coastal prairie, meadow and seep. It may also be observed within marsh, swamp, and valley or foothill grasslands at elevations between 0 to 1,380 feet. (CNPS 2025b)	May-Nov	annual herb	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. **Moderate 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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**
Recurved larkspur (*Delphinium recurvatum*)	1B.2	This species occurs in chenopod scrub, cismontane woodland, and valley or foothill grasslands at elevations between 10 and 2,590 feet. (CNPS 2025b)	Mar-Jun	perennial herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate 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. **Moderate Potential**

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
saline clover (*Trifolium hydrophilum*)	1B.1	This species occurs in marshes and swamps, valley or foothill grasslands, and vernal pools at elevations between 0 and 985 feet. (CNPS 2025b)	Apr-Jun	annual herb	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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**
San Joaquin spearscale (*Extriplex joaquinana*)	1B.2	This species occurs in alkali playa, chenopod scrub, meadows and seeps. It may also be observed in valley or foothill grasslands at elevations between 5 to 2,740 feet. (CNPS 2025b)	Apr-Oct	annual herb	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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has been documented within 0.25 mile of the survey area. **High Potential**
San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*)	FE; 1B.1	This species occurs in vernal pools at elevations between 35 and 2475 feet. (CNPS 2025b)	Apr-Sep	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
soft salty bird's-beak (*Chloropyron molle* ssp. *molle*)	FE; 1B.2	This species occurs in marshes and swamps at elevations between 0 and 10 feet. (CNPS 2025b)	Jun-Nov	annual herb (hemiparasitic)	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area and this species' known range does not overlap with the survey area **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species known range does not overlap with the survey area. **No Potential**
spiny-sepaled button-celery (*Eryngium spinosepalum*)	1B.2	This species occurs in valley or foothill grasslands and vernal pools at elevations between 260 and 3,200 feet. (CNPS 2025b)	Apr-Jun	annual/ perennial herb	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **Low Potential**

Common Name (*Scientific Name*)	Listing Status[2]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area			
					Tower A	Tower B	Tower C	Tower D
Suisun Marsh aster (*Symphyotrichum lentum*)	FE; 1B.1	This species occurs in marshes and swamps at elevations between 0 to 10 feet. (CNPS 2025b)	(Apr)May-Nov	perennial rhizomatous herb	Suitable grasslands for this species is present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **Low Potential**	Suitable grasslands for this species is present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **Low Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**
Suisun thistle (*Circium hydrophilum* var. *hydrophilum*)	1B.1; FE	This species occurs in marshes and swamps at elevations between 0 to 5 feet. (CNPS 2025b)	Jun-Sept	perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and the species' known range does not overlap with the survey area. **No Potential**
two-fork clover (*Trifolium amoenum*)	1B.2; FE	This species occurs in coastal bluff scrub and valley or foothill grasslands at elevations between 15 and 1360 feet. (CNPS 2025b)	Apr-Jun	annual herb	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. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area. **Moderate Potential**	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
vernal pool smallscale (*Atriplex persistens*)	FE; SE; 1B.1	This species occurs in vernal pools at elevations between 35 and 275 feet. (CNPS 2025b)	Jun-Oct	annual herb	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. **Moderate 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. **Moderate Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Wooly rose-mallow (*Hibiscus lasiocarpos* var. *occidentalis*)	1B.2	This species occurs in marshes and swamps at elevations between 0 and 395 feet. (CNPS 2025b)	Jun-Sep	perennial/ rhizomatous herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area. **No Potential**	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area. **No Potential**

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

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
Amphibians						
California red-legged frog (*Rana draytonii*)	FT; SSC	This highly aquatic species typically inhabits quiet pools of streams, marshes and ponds, preferring habitat with extensive shoreline vegetation. Its diet is highly variable and may include various invertebrates, amphibians, and small mammals. In Northern California, breeding usually takes place between March and July. (USFWS 2025)	Marginal stream habitat that lacks the preferred shoreline vegetation for the species is present within the survey area. This species has not been recently (within 30 years) documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Low Potential**	Although the species' known range overlaps with the survey area, suitable stream habitat is not present within the survey area. Additionally, this species has not been recently documented within 5 miles of the survey area. **No Potential**	Suitable stream habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **No Potential**	Suitable stream habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **High Potential**
California tiger salamander - central California DPS (*Ambystoma californiense pop. 1*)	FT; ST; WL	This species occupies grassland, savanna, or open woodland habitats and spends much of the year in underground refuges, especially ground squirrel (*Ammospermopholis beechyi*) 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 during November to February. Its diet is highly variable and may include invertebrates, amphibians, or small mammals. (USFWS 2025)	Suitable grassland with ground squirrel burrows and seasonally ponded wetland habitat are present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **High Potential**	Suitable grassland and seasonally ponded wetland habitat are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**	Suitable grasslands are present within the survey area; however, small mammal burrows suitable for occupancy and seasonal wetlands were not observed. This species has been recently documented between 0.25 and 1 mile of the survey area. **High Potential**
western spadefoot (*Spea hammondii*)	SSC; FPT	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. (USFWS 2025)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Moderate Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area **Moderate Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Moderate Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Moderate Potential**

[3] Explanation of federal and state listing codes:

Federal listing codes:
-FE: Federally listed as endangered
-FT: Federally listed as threatened
-FPT: Proposed to be federally listed as threatened
-BCC: United States (U.S.) Fish and Wildlife Service (USFWS) Bird of Conservation Concern
-BGEPA: Bald and Golden Eagle Protection Act

State listing codes:
-SE: State-listed as endangered
-ST: State-listed as threatened
-SCE: State candidate for listing as endangered
-SSC: Species of Special Concern
-FP: Fully protected species
-WL: Watch List species
-WBWG-H: Western Bat Working Group high designation

[4] Unless otherwise specified, all documented occurrences of special-status species were observed in the last 30 years

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
Birds						
burrowing owl (*Athene cunicularia* ssp. *hypugaea*)	SCE; SSC	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. This species preys on large insects and small mammals. (USFWS 2025)	Suitable grassland and agricultural habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **High Potential (Nesting)** **High Potential (Foraging)**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **Moderate Potential (Nesting)** **High Potential (Foraging)**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential (Nesting)** **High Potential (Foraging)**	Suitable grassland and agricultural habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential (Nesting)** **High Potential (Foraging)**
California black rail (*Laterallus jamaicensis coturniculus*)	ST; FP	This species is found in tidal emergent wetlands dominated by pickleweed (*Salicornia* spp.) or in brackish marshes supporting bulrushes in association with pickleweed. Breeding occurs from March to June, and nests are concealed in dense vegetation (often pickleweed) near the upper limits of tidal flooding. (CDFW 2025a)	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Although this species has been recently documented between 1 and 5 miles of the survey area, suitable tidal marsh habitat is not present within the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable tidal marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable tidal marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**
California condor (*Gymnogyps californianus*)	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 2025)	Suitable open grassland habitat is present within the survey area; however, steep, rocky terrain is not. This species has not been recently documented within 5 miles of the survey area, and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable open grassland habitat is present within the survey area; however, steep, rocky terrain is not. This species has not been recently documented within 5 miles of the survey area, and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable open grassland habitat is present within the survey area; however, steep, rocky terrain is not. This species has not been recently documented within 5 miles of the survey area, and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable open grassland habitat is present within the survey area; however, steep, rocky terrain is not. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **Moderate Potential (Foraging)**
California least tern (*Sternula antillarum browni*)	FE; SE; FP	This species is found throughout California and requires undisturbed stretches of beach and coastline. Adults forage in bays and estuaries for a variety of fish species. The California least tern nests in colonies on relatively open beaches where vegetation is limited by natural scouring from tidal action. However, to avoid humans, tern colonies have been known to move to inland mud flats and dredge fill sites. The breeding season typically begins in early to mid-May, and nests are constructed directly on the ground. (USFWS 2025)	Suitable mudflat, beach, or coastline is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable mudflat, beach, or coastline is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range overlaps with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable mudflat, beach, or coastline is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable mudflat, beach, or coastline is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**
California Ridgeway's rail (*Rallus obsoletus)*	FE; SE; FP	This species occurs almost exclusively in tidal and brackish marshes with unrestricted daily tidal flow, adequate invertebrate prey food supply, well-developed tidal channel networks, and suitable nesting and escape cover to provide habitat during extreme high tides. (CDFW 2025a)	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
golden eagle (*Aquila chrysaetos*)	FP; WL; BGEPA	This species is an uncommon resident and migrant in California, favoring rolling foothills, mountains, and open terrains for hunting lagomorphs and rodents. It nests on cliffs and large trees, requiring rugged habitats with cover. This bird exhibits year-round diurnal activity and may migrate seasonally. (CDFW 2025a)	Suitable open terrain habitat for hunting is present within the survey area; however, marginal nesting habitat within trees are present. This species has not been recently documented within 5 miles of the survey area; however, this species' range does overlap with the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable open terrain habitat for hunting is present within the survey area; however, marginal nesting habitat within trees are present. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable open terrain habitat for hunting is present within the survey area; however, marginal nesting habitat within trees are present. This species has been recently documented between 0.25 and 1 mile of the survey area. **Low Potential (Nesting)** **High Potential (Foraging)**	A pair of golden eagles was observed on during field surveys within the Tower survey area associated with Tower D. The pair was seen perching in a PG&E transmission tower, adjacent to a small stick nest whose approximate location is shown in Attachment A: Biological Resources Map. No nest building, or incubation was observed during the survey. During a subsequent site visit by PG&E staff on February 27, 2025, the pair of eagles was not observed at this location and no evidence of nest-tending by any species was observed. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential (Nesting)** **Present (Foraging)**
grasshopper sparrow (*Ammodramus savannarum*)	SSC	This species is a summer resident in California's dry, dense grasslands, particularly in foothills and lowlands. It requires thick cover of grasses and forbs for nesting and foraging. This secretive species primarily feeds on insects and may breed up to 1,500 meters elevation. (CDFW 2025a)	Marginally suitable dense grassland habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Marginally suitable dense grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Marginally suitable dense grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Marginally suitable dense grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**
mountain plover (*Charadrius montanus*)	SSC	This species prefers open grasslands and plowed fields with low vegetation for feeding and roosting. It is a winter resident in California's Central Valley and foothill valleys, relying on short grasslands. The species is declining, with specific habitat needs for foraging and nesting. (USFWS 2025)	Suitable grassland and plowed fields are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable grassland and plowed field habitat are present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **No Potential (Nesting)** **High Potential (Foraging)**	Suitable grassland and plowed fields are present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable grassland and plowed fields are present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
northern harrier (*Circus hudsonius*)	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, 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 2025a)	Suitable open grassland and agricultural habitat is present within the survey area. This species was observed during field surveys and has been recently documented between 1 and 5 miles of the survey area **Moderate Potential (Nesting)** **Present (Foraging)**	Suitable open grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **Moderate Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable open grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable open grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Low Potential (Nesting)** **Low Potential (Foraging)**
prairie falcon (*Falco mexicanus*)	WL	This species is an uncommon permanent resident found in California's grasslands, savannahs, rangelands, and desert scrub. It requires open areas for foraging and sheltered cliff ledges for nesting. This species primarily feeds on small mammals and exhibits diurnal activity patterns. (USFWS 2025)	Suitable grassland habitat is present within the survey area; however, no suitable nesting habitat is present. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable grassland habitat is present within the survey area; however, no suitable nesting habitat is present. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable grassland habitat is present within the survey area; however, no suitable nesting habitat is present. This species has not been recently documented within 5 miles of the survey area. **No Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable grassland habitat is present within the survey area; however, no suitable nesting habitat is present. This species has been recently documented between 0.25 and 1 mile of the survey area. **No Potential (Nesting)** **High Potential (Foraging)**
saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*)	SSC; BCC	This species occurs in freshwater and saltwater marshes. It requires thick, continuous cover down to the water surface for foraging, and tall grasses, tule patches, and willows for nesting. (CDFW 2025a)	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **No Potential (Nesting)** **No Potential (Foraging)**	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Marginal tule habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**
short-eared owl (*Asio flammeus*)	SSC; BCC	This species occurs in agricultural fields, grazed and ungrazed grasslands, and freshwater and saltwater marshes. This species requires open country that supports concentrations of microtine rodents and herbaceous cover sufficient to conceal its nest from predators. Its nests are built on the ground. This species' diet consists of small mammals and is particularly affected by the 3- to 4-year cycle of the California vole (*Microtus californicus*). Its breeding season occurs from April through July. (USFWS 2025)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area. **Low Potential (Nesting)** **Low Potential (Foraging)**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
song sparrow ("Modesto" population) (*Melospiza melodia* pop. 1)	SSC	This species inhabits freshwater marshes, riparian thickets, sparsely vegetated irrigation canals, and valley oak restoration sites. It seeks cover and nests in willow and nettle thickets, growths of tules and cattails, and riparian oak forests with a sufficient understory of blackberry. (CDFW 2025a)	Suitable riparian and irrigation canal habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable riparian and irrigation canal habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable riparian and irrigation canal habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**
Suisun song sparrow (*Melospiza melodia maxillaris*)	SSC	This species occurs throughout California, primarily in saltwater and brackish marshes. The species requires dense vegetation as protection from predators and high tide, for perching, and for nesting habitat. Breeding season is from early March through July. (CDFW 2025a)	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **Low Potential (Nesting)** **Low Potential (Foraging)**	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **Low Potential (Nesting)** **Low Potential (Foraging)**	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**
Swainson's hawk (*Buteo swainsoni*)	ST	This species occurs in open grasslands, prairies, and farmlands that have nearby trees for nesting. It nests in bushes and in several tree species, including oaks (*Quercus* spp.), willow, and eucalyptus, and usually nests in trees in riparian areas near open fields. This species primarily hunts small rodents, rabbits, birds, and reptiles during the breeding season. It largely lives off insects, such as grasshoppers and beetles, during the non-breeding season. It reproduces from March through April, incubates for 34 to 35 days, and fledges 6 weeks later. (CDFW 2025a)	Suitable grassland and farmland habitat are present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **High Potential (Nesting)** **High Potential (Foraging)**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable grassland habitat is present within the survey area; however, there is marginally suitable tree habitat. This species has been recently documented between 0.25 and 1 mile of the survey area. **Low Potential (Nesting)** **High 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 fresh water, often in emergent wetlands with tall, dense cattails or tules, but also in thickets of willow; blackberry; wild rose; or tall, dense forbs. Seeds and cultivated grains, such as rice and oats, compose most of its fall and winter diet. Tricolored blackbird 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. (USFWS 2025)	Suitable wetland habitat is not present within the survey area; however, grassy fields are. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable wetland habitat is not present within the survey area; however, grassy fields are. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable wetland habitat is not present within the survey area; however, grassy fields are. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**	Suitable wetland habitat and grassy fields are present within the survey area, This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential (Nesting)** **Moderate Potential (Foraging)**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
western snowy plover (*Charadrius nivosus nivosus*)	FT; SSC	This species thrives on sandy marine and estuarine shores, nesting from April to August in shallow depressions on sandy or gravelly substrates. Key habitats include coastal beaches, salt ponds, and alkali lakes, where it feeds on insects and relies on camouflage for cover. (USFWS 2025)	Suitable shore and sandy habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable shore and sandy habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable shore and sandy habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable shore and sandy habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**
white-tailed kite (*Elanus leucurus*)	FP	This species nests in riparian or oak woodland adjacent to undisturbed, open fields and grasslands, meadows, farmlands, and emergent wetlands, where it hunts rodents. Breeding generally occurs from February through October. White-tailed kite lays three to five eggs, which it incubates for 30 to 32 days, after which fledging occurs at 5 to 6 weeks of age. (CDFW 2025a)	Suitable riparian or oak woodland habitat adjacent to open fields and grasslands is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable riparian or oak woodland habitat adjacent to open fields are not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **No Potential (Nesting)** **No Potential (Foraging)**	Suitable riparian or oak woodland habitat adjacent to open fields are not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **No Potential (Nesting)** **No Potential (Foraging)**	Suitable riparian or oak woodland habitat adjacent to open fields and grasslands is not present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**
yellow rail (*Coturnicops noveboracensis*)	SSC	This species breeds in densely vegetated, shallow freshwater marshes and wet meadows. Breeding occurs from May through September. Wintering birds frequent mature salt marshes well above the water line. (Green 1992)	Suitable marsh and wet meadow habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable marsh and wet meadow habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**	Suitable marsh and wet meadow habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **No Potential (Nesting)** **No Potential (Foraging)**	Suitable marsh and wet meadow habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential (Nesting)** **No Potential (Foraging)**
Fish						
Delta smelt (*Hypomesus transpacificus*)	FT; SE	Delta smelt are an euryhaline species (i.e., a species adapted to living in fresh and brackish water) that occupies estuarine areas with salinities below 2 parts per thousand. This species is found only from the San Pablo Bay upstream through the Sacramento-San Joaquin River Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties. Delta smelt spawn in shallow, fresh, or slightly brackish water upstream from the brackish water habitat associated with the mixing zone. (USFWS 2025)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Marginal aquatic habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
eulachon (*Thaleichthys pacificus*)	FT; SSC	Eulachon require clean, cold freshwater rivers for spawning and coastal marine environments for growth; they migrate upstream to spawn in late winter to early spring, exhibiting a semelparous life cycle. (McCaughran and Heggenes 2010)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential**
green sturgeon - southern DPS (*Acipenser medirostris pop. 1*)	FT; SSC	This species is found in a variety of estuarine and freshwater habitats within the San Francisco Bay, San Pablo Bay, and Sacramento-San Joaquin River Delta. Spawning occurs in the Sacramento, Feather, and Yuba rivers in cool (11 to 15 degrees Celsius) sections of mainstem rivers in deep pools (i.e., 8 to 9 meters) with substrate containing small- to medium-sized sand, gravel, cobble, or boulders. (USFWS 2025)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Although this species has been recently documented between 1 and 5 miles of the survey area, suitable aquatic habitat is not present within the survey area. **No Potential**	Although this species has been recently documented between 1 and 5 miles of the survey area, suitable aquatic habitat is not present within the survey area. **No Potential**	Although this species has been recently documented between 1 and 5 miles of the survey area, suitable aquatic habitat is not present within the survey area. **No Potential**
longfin smelt – San Francisco Bay-Delta DPS (*Spirinchus thaleichthys* pop. 2)	FE; ST	The known range of this species extends from the San Francisco Bay Estuary and Sacramento-San Joaquin Delta (Bay-Delta) in California northward to the Cook Inlet in Alaska. In the Bay-Delta, longfin smelt spawn primarily in freshwater in the lower reaches of the Sacramento and San Joaquin rivers. Juvenile and adult longfin smelt have been found throughout the year in salinities ranging from pure freshwater to pure seawater. Once past the juvenile stage, they are typically collected in waters with salinities ranging from 14 to 28 parts per thousand. The life cycle of most longfin smelt generally requires estuarine conditions. Longfin smelt occur in the Bay-Delta typically from January to April. (Moyle and Baltz 1985)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Marginal aquatic habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential**
Sacramento splittail (*Pogonichthys macrolepidotus*)	SSC	The Sacramento splittail requires shallow, slow-moving waters with abundant vegetation for spawning and rearing, primarily inhabiting the Sacramento-San Joaquin Delta. They migrate for spawning in floodplain habitats. (USFWS 2025)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Marginal aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
steelhead - Central Valley DPS (*Oncorhynchus mykiss irideus pop. 11*)	FT; SSC	This DPS of steelhead represents a population that spawns in freshwater habitats located in California's Central Valley. This species is anadromous, meaning they are born in freshwater, migrate to the ocean to grow and mature, and return to their natal streams to spawn. Suitable freshwater breeding habitats include rivers, streams, and tributaries with clean, cold water and gravel substrate. After hatching, the young steelhead spend several years in fresh water before migrating to the ocean, where they feed on a variety of prey, including small fish, invertebrates, and plankton. (CDFW 2025a)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**
Invertebrates						
Conservancy fairy shrimp (*Branchinecta conservatio*)	FE	This species occurs within vernal pool habitats in California's Central Valley. It mostly lives in relatively large, turbid freshwater vernal pools called playa pools. This species can be found at elevations ranging from 16 to 5,577 feet in grassland, rural, and wetland habitats. This species opportunistically filter-feeds on various planktonic food sources including algae and protozoa. (USFWS 2025)	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Delta green ground beetle (*Elaphrus viridis*)	FT	This species is currently only known to live in the Jepson Prairie region of Solano County. The Delta green ground beetle requires moist, grassy habitats near wetlands, with a life history involving predation on other insects and a lifecycle that includes egg, larval, pupal, and adult stages. (USFWS 2025)	Suitable prairie habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable prairie habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable prairie habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable prairie habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Lange's metalmark butterfly (*Apodemia mormo langei*)	FE	This species is associated with the Antioch Dunes, a riverbank dune system along the San Joaquin River. Currently, this species can only be found in the Antioch Dunes National Wildlife Refuge, the last remnants of the Antioch Dunes. All life stages are closely associated with naked-stemmed buckwheat (*Eriogonum nudum* var. *psychicola*), which is the primary nectar source for adults, is used to lay eggs, and is a larval food plant. The leaves of the larval host plant provide both food and shelter throughout the larval instar phases. (Nature Serve)	Suitable riverbank dune habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable riverbank dune habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable riverbank dune habitat is not present within the survey area. This species has been recently documented within 0.25 mile of the survey area. **No Potential**	Suitable riverbank dune habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
longhorn fairy shrimp (*Branchinecta longiantenna*)	FE	Longhorn fairy shrimp require temporary freshwater pools for breeding, with a life cycle that includes a dormant egg stage, hatching in response to seasonal rainfall. They thrive in vernal pools. (USFWS 2025)	Suitable seasonally ponded wetland habitat is present within the survey area; however, this species' known range does not overlap with the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Suitable seasonally ponded wetland habitat is present within the survey area; however, this species' known range does not overlap with the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Suitable seasonally ponded wetland habitat is not present within the survey area; however, this species' known range does not overlap with the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Suitable seasonally ponded wetland habitat is not present within the survey area; however, this species' known range overlaps with the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **No Potential**
monarch butterfly (*Danaus plexippus*)	FPT	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 2025)	Suitable habitat with milkweed is not present within the survey area; however, other species flowering plants are present. Therefore, marginally suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area. **Low Potential**	Suitable habitat with milkweed is not present within the survey area; however, other species flowering plants are present. Therefore, marginally suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area. **Low Potential**	Suitable habitat with milkweed is not present within the survey area; however, other species flowering plants are present. Therefore, marginally suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area. **Low Potential**	Suitable habitat with milkweed is not present within the survey area; however, other species flowering plants are present. Therefore, marginally suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area. **Low 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 2025)	Suitable riparian habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Suitable riparian habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Suitable riparian habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Marginally suitable riparian habitat is present within the survey area; however, no elderberry shrubs are present within these habitats. This species has not been recently documented within 5 miles of the survey area. **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 2025)	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **High Potential**	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area. **High Potential**	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**
vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	This species occurs within vernal pool habitats with a patchy distribution within California's Central Valley. Female vernal pool tadpole shrimp produce up to six clutches of eggs containing 32 to 61 eggs per clutch during each wet season. They 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 other fairy shrimp (*Branchinecta* spp.), invertebrates, and waste from other vernal pool species. (USFWS 2025)	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **Moderate Potential**	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
western bumble bee (*Bombus occidentalis*)	SCE	This species can be found throughout the western United States and Canada and are not limited to any particular host plant. (Xerces Society)	Suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area; however, this occurrence is over 30 years old. **Moderate Potential**	Suitable habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**	Suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area. **Low Potential**	Suitable habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**
Mammals						
American badger (*Taxidea taxus*)	SSC	This species is an uncommon, permanent resident in California, thriving in drier, open habitats with friable soils. It primarily feeds on fossorial rodents and digs burrows for cover and reproduction. This species plays a crucial role in controlling small mammal populations. (WDFW)	Suitable dry, open habitat with fossorial rodent burrows is present within the survey area; however, these burrows are not suitably large enough for this species. This species has not been recently documented within 5 miles of the survey area. **Low Potential**	Marginal grassland habitats lacking suitably sized rodent burrows are present within the survey area. This species has not been recently documented within 5 miles of the survey area. **Low Potential**	Marginal grassland habitats lacking suitably sized rodent burrows are present within the survey area. This species has not been recently documented within 5 miles of the survey area. **Low Potential**	Marginal grassland habitats lacking suitably sized rodent burrows are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Low Potential**
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. (USFWSUSFWS 2025)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**
salt-marsh harvest mouse (*Reithrodontomys raviventris*)	FE; SE; FP	This species inhabits salt marshes in California and is adapted to live in marsh vegetation, including pickleweed and cordgrass, which provide cover, food sources, and breeding habitats. Breeding typically occurs between March and October. Its diet consists of marsh vegetation, including seeds, stems, and leaves. (USFWS 2025)	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **No Potential**	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area **No Potential**	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**
Western red bat (*Lasirurs blossevillii*)	SSC, WBWG-H	This species occurs in a variety of habits, including forests, woodlands, and riparian areas. It roosts and forages among trees and vegetation and exhibits a preference for mixed coniferous and deciduous forests. Breeding occurs in the spring and early summer. This species typically seeks out tree foliage, such as leaves or branches, to create roosting sites. The diet consists mainly of insects, such as moths, beetles, and flies. (CDFW 2025a)	Marginally suitable roosting habitat is present within the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has not been recently documented between 1 and 5 miles from the survey area. **Low Potential (Roosting)** **Low Potential (Foraging)**	Marginally suitable roosting habitat is present within the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has not been recently documented between 1 and 5 miles from the survey area. **Low Potential (Roosting)** **Low Potential (Foraging)**	Marginally suitable roosting habitat is present within the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has not been recently documented between 1 and 5 miles from the survey area. **Low Potential (Roosting)** **Low Potential (Foraging)**	Marginally suitable roosting habitat is present within the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has not been recently documented between 1 and 5 miles from the survey area. **Low Potential (Roosting)** **Low Potential (Foraging)**

Common Name (*Scientific Name*)	Listing Status[3]	Habitat and Life History	Potential to Occur within the Survey Area[4]			
			Tower A	Tower B	Tower C	Tower D
Reptiles						
Alameda whipsnake (*Masticophis lateralis euryxanthus*)	FT; ST	This species inhabits grasslands, chaparral, and oak woodlands within Alameda and Contra Costa counties. It is primarily diurnal, being active during the day and seeking shelter in vegetation or underground burrows at night. Breeding typically occurs in the spring and summer months. The diet consists of small vertebrates, including lizards, rodents, and birds. (USFWS 2025)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**
coast horned lizard (*Phrynosoma blainvillii*)	SSC	Blainville's horned lizard (Phrynosoma blainvillii) thrives in open, sandy habitats with scattered shrubs, including valley-foothill hardwood, conifer, and grasslands across California. It forages primarily on the ground, consumes ants, and relies on camouflage for protection. This species is diurnal and hibernates in loose soil during winter. (Nature Serve)	Suitable sandy habitats with scattered shrubs are not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Suitable sandy habitats with scattered shrubs are not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Suitable sandy habitats with scattered shrubs are not present within the survey area. This species has not been recently documented within 5 miles of the survey area. **No Potential**	Marginally suitable sandy habitats with scattered shrubs are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**
giant gartersnake (*Thamnophis gigas*)	FT; ST	This semi-aquatic species inhabits marshes, wetlands, and slow-moving bodies of water. It is often closely associated with water sources, which serve as its hunting grounds. Breeding typically occurs in the spring and early summer. After mating, females give birth to live young. The diet primarily consists of small fish, amphibians, and aquatic invertebrates. (USFWS 2025)	Suitable marsh and wetland habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area. **No Potential**	Suitable marsh and wetland habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area. **No Potential**	Suitable marsh and wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Marginal slow moving linear drainage habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area. **No Potential**
Northern California legless lizard (*Anniella pulchra*)	SSC	This species is found in grasslands, chaparral, and open woodlands and requires loose, friable soils for burrowing. Breeding typically occurs in the spring or early summer. Females lay small clutches of eggs in underground burrows or hidden areas. The diet primarily consists of small invertebrates, such as insects, spiders, and other arthropods. (CDFW 2025a)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area. **No Potential**	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **Moderate Potential**
northwestern pond turtle (*Actinemys marmorata*)	FPT; SSC	This freshwater turtle species primarily inhabits ponds, lakes, and slow-moving streams with suitable basking sites. It spends 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. The diet is omnivorous and consists of various aquatic plants, insects, small fish, and amphibians. (USFWS 2025)	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**	Marginal slow-moving aquatic habitat is present within the survey area; however, these areas lack suitable basking sites. This species has been recently documented between 1 and 5 miles of the survey area. **No Potential**

Table 7: Wildlife Species Observed within the Tower Survey Area

Common Name	Scientific Name
American crow	*Corvus brachyrhynchos*
Black phoebe	*Sayornis nigricans*
Black-tailed jackrabbit	*Lepus californicus*
European starling	*Sturnus vulgaris*
Golden eagle	*Aquila chrysaetos*
Horned lark	*Eremophila alpestris*
House finch	*Haemorhous mexicanus*
Loggerhead shrike	*Lanius ludovicianus*
Mourning dove	*Zenaida macroura*
Northern harrier	*Circus hudsonius*
Northern mockingbird	*Mimus polyglottos*
Raccoon	*Procyon lotor*
Red-tailed hawk	*Buteo jamaicensis*
Red-winged blackbird	*Agelaius phoeniceus*
Ring-necked pheasant	*Phasianus colchicus*
Song sparrow	*Melospiza melodia*
Tree swallow	*Tachycineta bicolor*
Western meadowlark	*Sturnella neglecta*
White-crowned sparrow	*Zonotrichia leucophrys*

6.6 CRITICAL HABITAT

Critical habitat for delta smelt (*Hypomesus transpacificus*) is present at the Tower survey area associated with Tower D. However, this area lacks several of the primary constituent elements (PCEs) for delta smelt, including physical habitat and river flow. Physical habitat requires proper substrate with water depth variation and channel morphology for spawning adults and potential foraging habitat for rearing juveniles along marsh edges. The agricultural canals within the Tower survey area associated with Tower D have been extensively manipulated and lack the variation in depth and morphology required by the species. Further, the canals within the Tower survey area associated with Tower D lack large-scale riverine flows that provide open water habitats preferred by the species.

However, the canals within the Tower survey area associated with Tower D may contain the requisite salinity necessary to satisfy the PCEs for critical habitat for this species, and the emergent vegetation along the shorelines of the canals may provide some physical habitat. However, the marginal suitability of the habitat within the Tower survey area associated with Tower D makes it unlikely that Delta smelt are present within these canals.

6.7 NATIVE WILDLIFE CORRIDORS AND NURSERY SITES

Wildlife migration corridors are areas that connect suitable wildlife habitats in a region that would otherwise be fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features (e.g., canyon drainages, ridgelines, or areas with vegetation cover) provide corridors for wildlife travel. Wildlife corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high-population or high-density areas; and facilitate genetic diversity. California Environmental Quality Act Guidelines require that project proponents disclose and mitigate for significant impacts on wildlife corridors. Impacts to wildlife corridors, such as human disturbance and development, can cause harm to migrating species, cause species to exceed population thresholds in fragmented patches, or prevent healthy gene flow between populations. The California Essential Habitat Connectivity Project (CEHC) maintains a statewide Essential Habitat Connectivity Map, which broadly depicts large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for ecological connectivity between them (Essential Connectivity Areas) (Spencer et al. 2010). One Essential Connectivity Area lies within the Tower survey area associated with Tower C, as depicted in Attachment E: Essential Connectivity Areas (CDFW 2025c), and no Natural Landscape Blocks overlap with the Tower survey area (CDFW 2025d).

The Proposed Project lies within the Pacific Flyway, which is 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 breeding grounds to the north with 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 Sacramento Valley as a stopover point or wintering area. One of those major locations is Suisun Marsh, which is less than 10 miles from the Tower survey area. At the Tower survey area's latitude, the Pacific Flyway extends inland from the Pacific Ocean for approximately 700 miles. As a result, the

Tower survey area's components would be placed in less than 0.3 percent of the width of the Pacific Flyway. The Tower survey area does not occur in any nursery sites.

6.8 AQUATIC RESOURCES

Insignia biologists identified 13 linear drainages within the Tower survey area that are potentially under the jurisdiction of the Regional Water Quality Control Board (RWQCB) and CDFW. Three of these drainages may are potentially under the jurisdiction of the U.S. Army Corps of Engineers (USACE). Further, 19 potentially jurisdictional wetland features were observed within the Tower survey area. Attachment A: Biological Resources Map depicts the locations of the potentially jurisdictional water features within the Tower survey area. Attachment F: Linear Water Feature Photographs presents upstream and downstream photographs of the mapped ephemeral linear water feature. Attachment G: Wetland Feature Photographs presents representative photographs of each wetland feature. Attachment H: Potentially Jurisdictional Water Features Table lists the unique feature identification number, feature type, length, ordinary high water mark width and depth, top-of-bank width and depth, Cowardin classification (for wetlands), and the approximate extent of potential USACE, RWQCB, and/or CDFW jurisdictions.

7 – RECOMMENDATIONS

Proposed Project-specific avoidance and minimization measures would need to be developed to reduce the potential for impacts to all special-status species with moderate or high potential to occur within the Proposed Project area, as well as species that are present within the Tower survey area.

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

- Pre-construction nesting bird and raptor surveys would be conducted within 48 hours prior to work occurring between February 1 and September 30 each year. Surveys would be conducted within 500 feet of all Proposed Project work areas.

- A pre-construction California red-legged frog survey would be conducted between January 1 and February 28 within the Tower survey area associated with Tower D in accordance with the U.S. Fish and Wildlife Service's (USFWS's) Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog guidelines (USFWS 2005).

- A pre-construction California tiger salamander survey would occur at all Towers within the Tower survey area in accordance with the USFWS's Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding on the California Tiger Salamander guidelines (USFWS 2003).

- A pre-construction golden eagle survey would occur within the Tower survey area associated with Tower D in accordance with the MBTA's Interim Golden Eagle Breeding

Survey Recommendations in Nevada: FWS R8 Migratory Birds June 13, 2023 guidelines (MBTA 2023).

- A pre-construction Swainson's hawk survey would occur at all Towers within the Tower survey area in accordance with the Swainson's Hawk Technical Advisory Committee's (SHTAC's) Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley guidelines (SHTAC 2000).

- A pre-construction survey for San Joaquin kit fox would occur in the Tower survey area associated with Tower D in accordance with the USFWS's Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 2011).

- Pre-construction burrowing owl surveys would be conducted in all Towers within the Tower survey area that may provide suitable nesting habitat in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012). The take avoidance surveys, consisting of up to four visits, would be initiated within 30 days of and completed at least 14 days before construction is initiated at a given location. In areas with burrows or refuge that could potentially support burrowing owls, a clearance visit would be conducted within 24 hours of construction.

- A formal wetland delineation would be required once further engineering is complete and prior to work commencing within the Tower survey area. Once complete, a preliminary jurisdictional determination would be presented to the USACE that includes all data sheets, including NWI maps that show all proposed facilities (as shown in Attachment I: National Wetlands Inventory Map).

For all federally listed species with a moderate or high potential to occur, if the Proposed Project has the potential to adversely affect the species or its habitat, consultation under Section 7 of the FESA would be necessary.

If any state-listed species are observed in the Tower survey area and the Proposed Project has the potential to adversely affect them, an incidental take permit (ITP) issued by the CDFW may be required to mitigate for potential take of those species.

Although the 16 of the 17 bird species identified in Table 7: Wildlife Species Observed within the Tower Survey Area do not carry listing statuses under the FESA or California Endangered Species Act, they are protected under the MBTA, California Fish and Game Code, and CCR. One wildlife species observed, the golden eagle, is protected under the BGEPA.

Several regulatory approvals, authorizations, or permits are required for the Proposed Project, as provided in Table 8: Anticipated Biological Resource Permits and Authorizations. These approvals may include conditions that afford additional protection to species and/or their habitat.

Table 8: Anticipated Biological Resource Permits and Authorizations

Agency	Permit/Approval/Consultation	Jurisdiction/Purpose of Permit
Federal Agencies		
USACE	CWA Section 404 Nationwide Permit	Permanent and temporary fill of waters of the U.S.
USFWS	FESA Section 7 Consultation	Construction activities such as vegetation clearing or removal that may affect federally listed species or their habitats
State Agencies		
CDFW	California Fish and Game Code Section 1600 Streambed Alteration Agreement	Activities that will substantially disturb the bed or bank of a jurisdictional waterbody
RWQCB	CWA Section 401 Water Quality Certification	Activities authorized by federal agencies that may affect state water quality

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ATTACHMENT A: BIOLOGICAL RESOURCES MAP

Attachment A: Bio Resources Map Tower A

Collinsville 500/230 Kilovolt Substation Project

Vegetation Community

- Agriculture
- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- Developed
- Disturbed
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Open Water
- Ornamental Vegetation
- Stick Nest
- Drainage
- Wetland
- Limited Access Area
- Survey

Note: Vegetation within Limited Access Areas were mapped using aerial imagery and visual observation

1:10,000

0 400 800 Feet

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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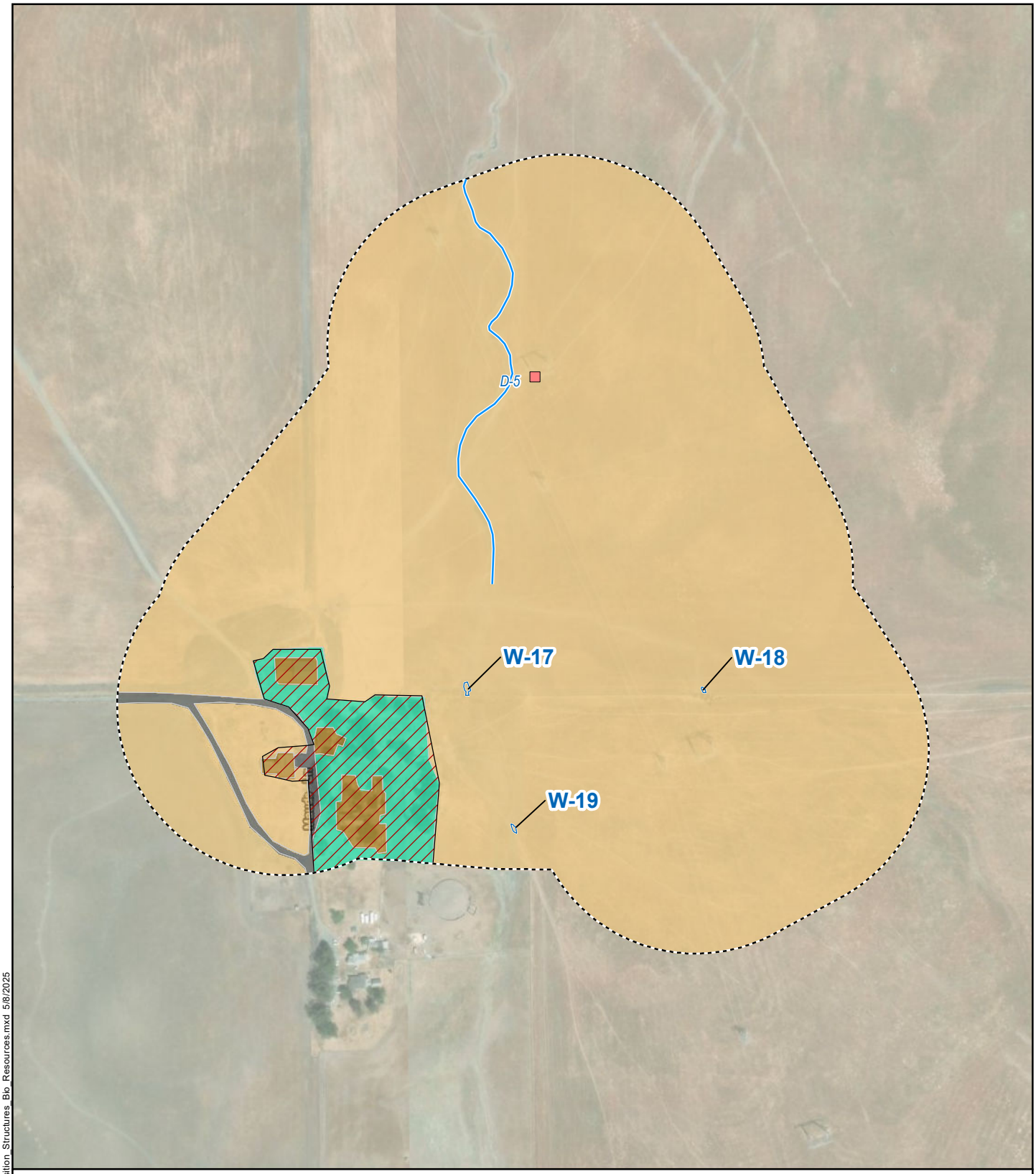

Attachment A: Bio Resources Map Tower B

Collinsville 500/230 Kilovolt Substation Project

Vegetation Community

- *Avena spp.* - *Bromus* spp. Herbaceous Semi-Natural Alliance
- Developed
- Disturbed
- Ornamental Vegetation

- Stick Nest
- Drainage
- Wetland
- Limited Access Area
- Survey Area

1:5,000

0 400 800 Feet

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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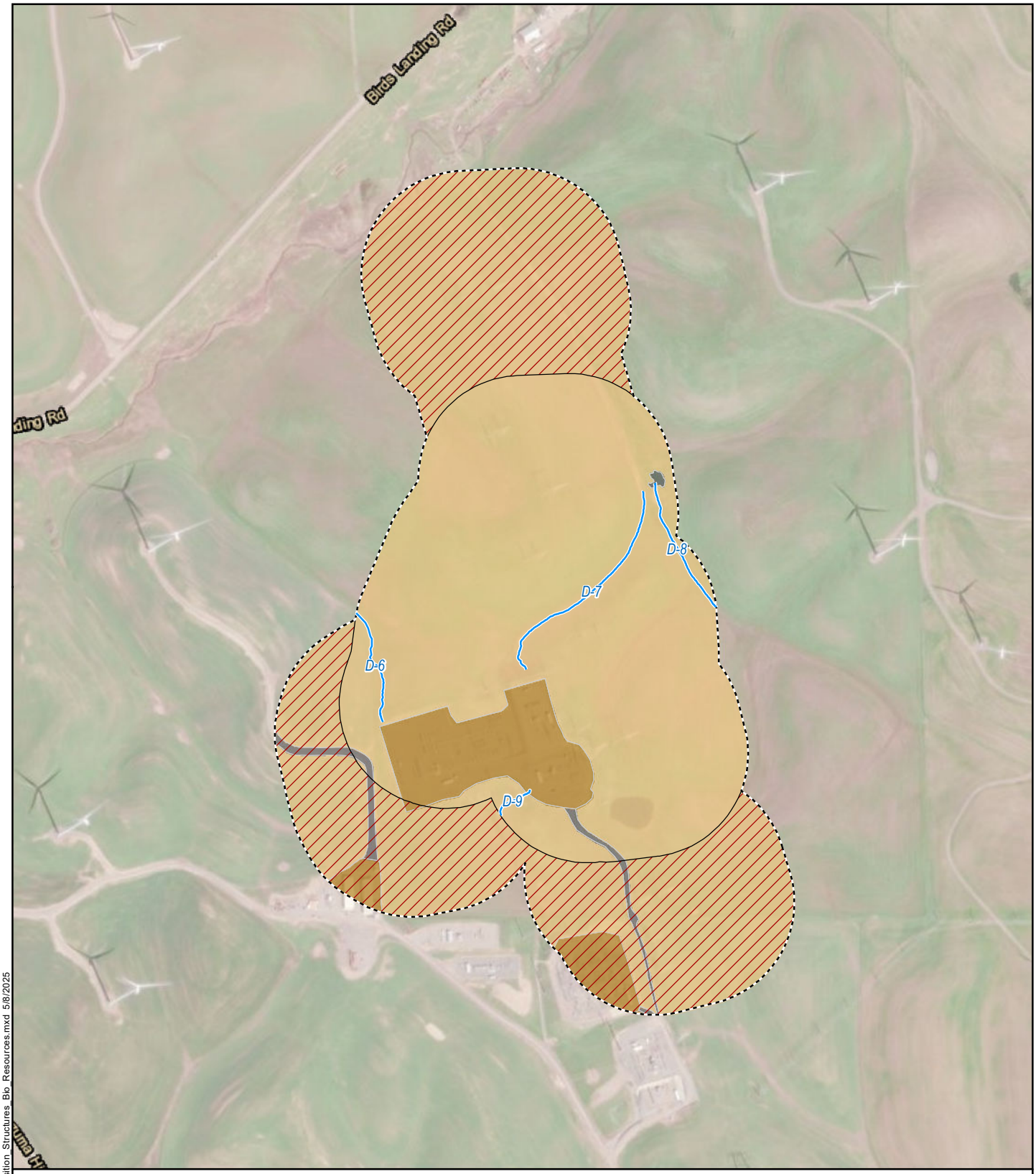

Attachment A: Bio Resources Map Tower C

Collinsville 500/230 Kilovolt Substation Project

Vegetation Community

- *Avena spp. - Bromus* spp. Herbaceous Semi-Natural Alliance
- Developed
- Disturbed

- Drainage
- Limited Access Area
- Survey Area

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0 400 800 Feet

LS POWER GRID CALIFORNIA

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Attachment A: Bio Resources Map Tower D

Collinsville 500/230 Kilovolt Substation Project

Vegetation Community

- Agriculture
- *Allenrolfea occidentalis* Shrubland Alliance
- *Avena spp. - Bromus* spp. Herbaceous Semi-Natural Alliance
- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- Developed
- Disturbed
- Ornamental Vegetation
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- Stick Nest
- Drainage
- Limited Access Area
- Survey Area

N

1:4,000

0 400 800 Feet

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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ATTACHMENT B: HABITAT ASSESSMENT PHOTOGRAPHS

ATTACHMENT B: HABITAT ASSESSMENT PHOTOGRAPHS

Photograph 1: Agriculture land cover type, facing southwest.

Photograph 2: *Allenrolfea occidentalis* Shrubland Alliance, facing south.

Photograph 3: *Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance (SNA), facing south.

Photograph 4: *Brassica nigra* - *Centaurea* (*solstitialis*, *melitensis*) Herbaceous SNA, facing east.

Photograph 5: Disturbed land cover type, facing north

Photograph 6: *Lolium perenne* Herbaceous SNA, facing southwest.

Photograph 7: *Schoenoplectus* (*acutus, californicus*) Herbaceous Alliance, facing north.

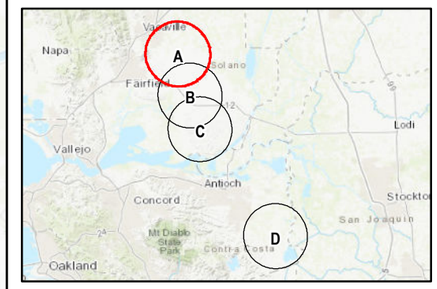
ATTACHMENT C: CNDDB OCCURRENCES OF SPECIAL-STATUS PLANT SPECIES

Attachment C:
CNDDB Occurrences of Special-Status Plant Species
Transposition Tower A

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Alkali Milk-Vetch
- Alkali-Sink Goldfields
- Baker's Navarretia
- Bearded Popcornflower
- Boggs Lake Hedge-Hyssop
- Bolander's Water-Hemlock
- Brittlescale
- California Alkali Grass
- Carquinez Goldenbush
- Colusa Grass
- Contra Costa Goldfields
- Coulter's Goldfields
- Crampton's Tuctoria (Solano Grass)
- Dwarf Downingia
- Fragrant Fritillary
- Heartscale
- Heckard's Pepper-Grass
- Hispid Salty Bird's-Beak
- Legenere
- Pappose Tarplant
- Saline Clover
- San Joaquin Spearscale
- San Joaquin Valley Orcutt Grass
- Suisun Marsh Aster
- Two-Fork Clover
- Vernal Pool Smallscale

5-Mile
1-Mile
0.25-Mile



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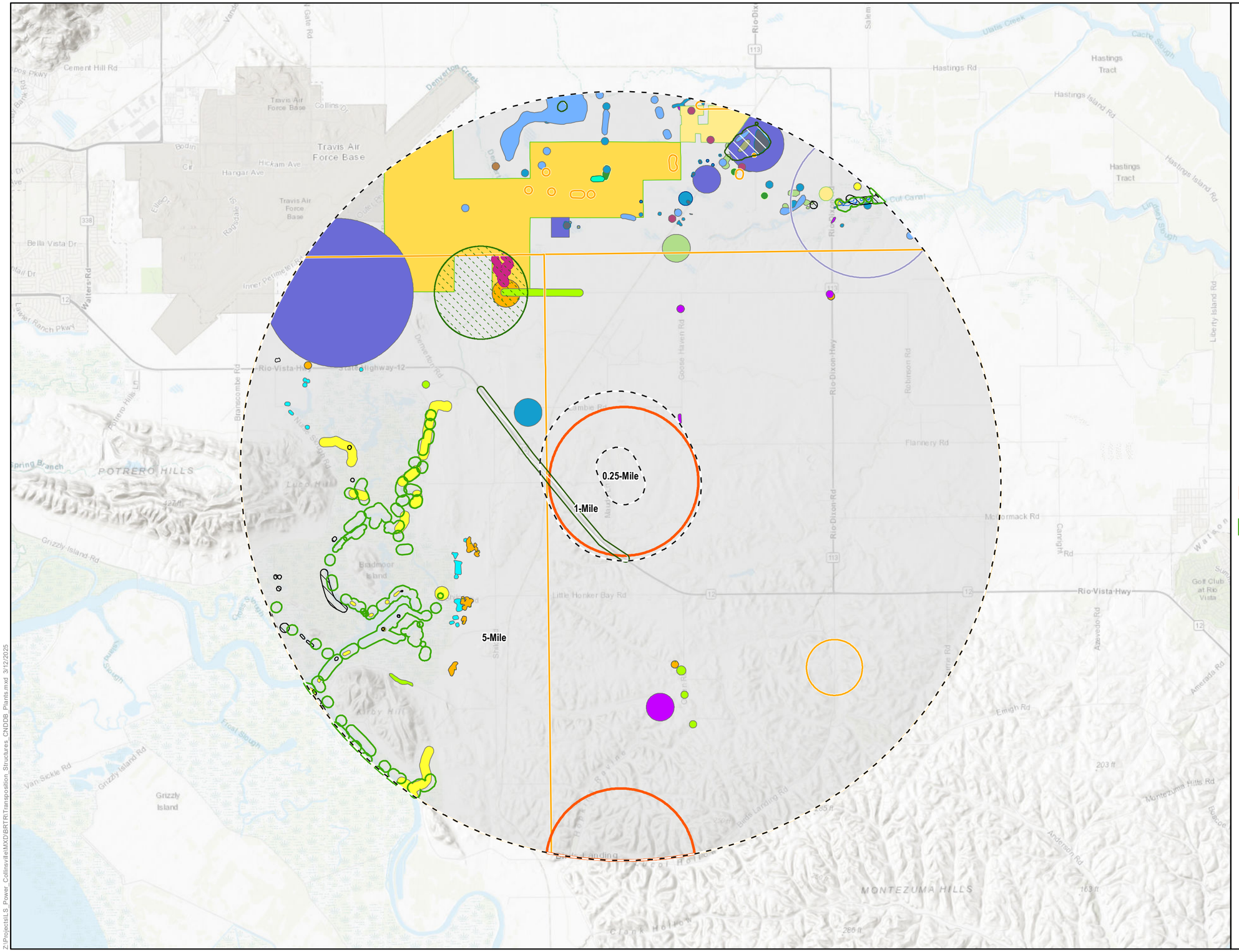

Attachment C:
CNDDB Occurrences of Special-Status Plant Species Transposition Tower B

Collinsville 500/230 Kilovolt Substation Project

- ⬚ Proposed Project Buffer
- 🟦 Alkali Milk-Vetch
- 🟨 Alkali-Sink Goldfields
- ☐ Baker's Navarretia
- 🟪 Boggs Lake Hedge-Hyssop
- ☐ Bearded Popcornflower
- ☐ Bolander's Water-Hemlock
- 🟪 Brittlescale
- ▨ California Alkali Grass
- 🟧 Carquinez Goldenbush
- ⬛ Colusa Grass
- ▦ Contra Costa Goldfields
- 🟨 Coulter's Goldfields
- 🟫 Crampton's Tuctoria (Solano Grass)
- ▩ Delta Mudwort
- ▧ Delta Tule Pea
- 🟦 Dwarf Downingia
- 🟩 Fragrant Fritillary
- 🟪 Heartscale
- 🟩 Heckard's Pepper-Grass
- 🟥 Hispid Salty Bird's-Beak
- ☐ Keck's Checkerbloom
- 🟩 Legenere
- ☐ Mason's Lilaeopsis
- 🟩 Pappose Tarplant
- 🟫 San Joaquin Valley Orcutt grass
- 🟦 Soft Salty Bird's-Beak
- 🟨 Suisun Marsh Aster
- 🟦 Vernal Pool Smallscale

1:80,000
0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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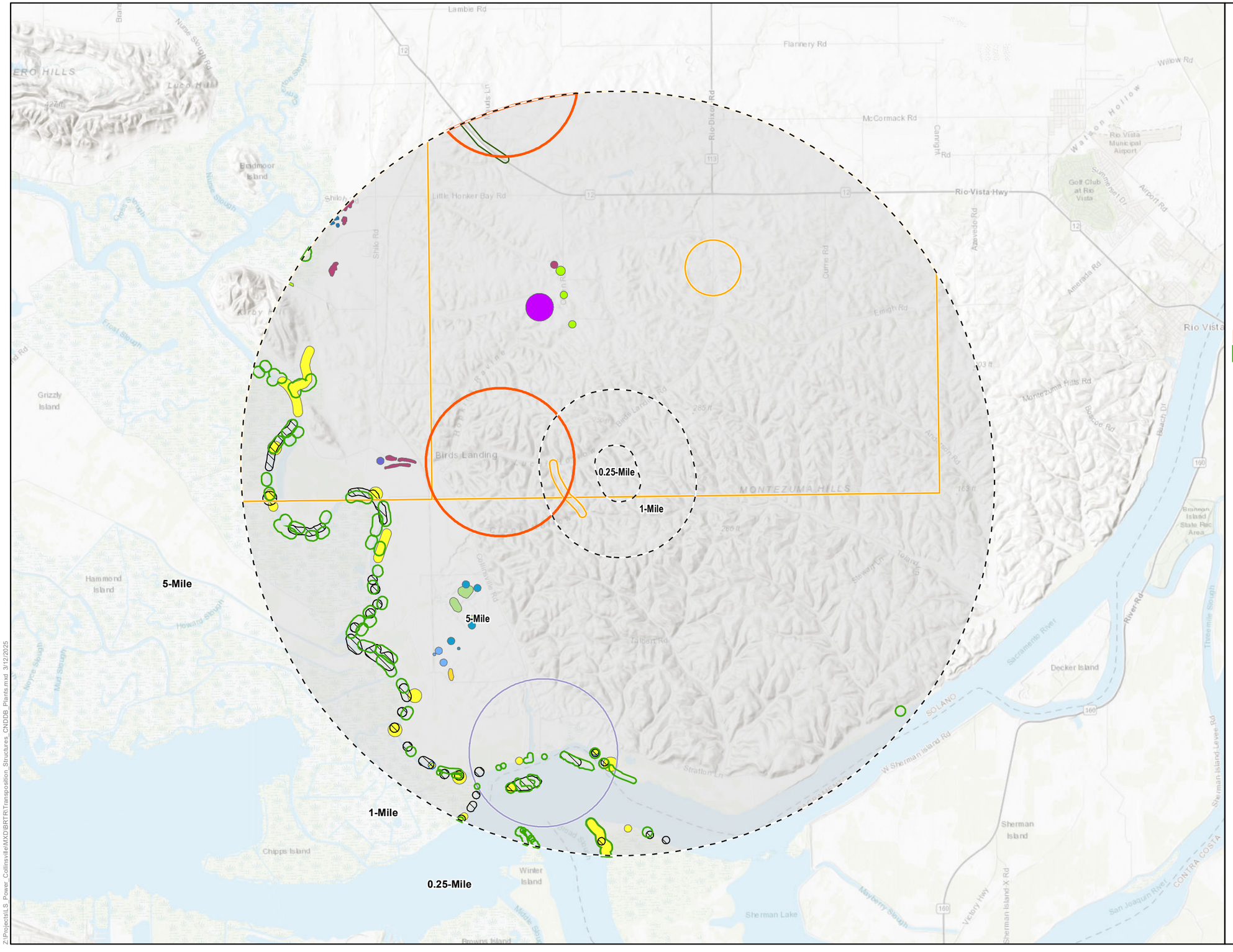
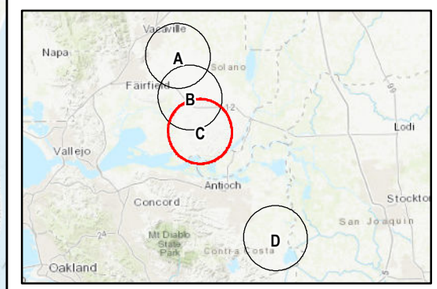


Attachment C:
CNDDB Occurrences of Special-Status Plant Species
Transposition Tower C

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Alkali Milk-Vetch
- Baker's Navarretia
- Bearded Popcornflower
- Bolander's Water-Hemlock
- Carquinez Goldenbush
- Brittlescale
- Delta Mudwort
- Delta Tule Pea
- Dwarf Downingia
- Fragrant Fritillary
- Heartscale
- Keck's Checkerbloom
- Mason's Lilaeopsis
- Pappose Tarplant
- San Joaquin Spearscale
- Soft Salty Bird's-Beak
- Suisun Marsh Aster



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0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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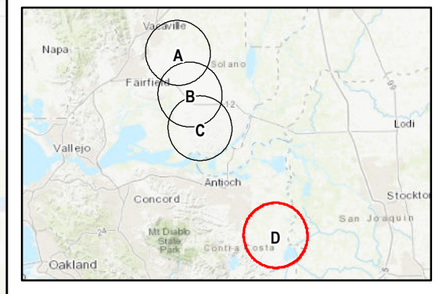
Attachment C:
CNDDB Occurrences of Special-Status Plant Species
Transposition Tower D

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Alkali Milk-Vetch
- Big Tarplant
- Brittlescale
- California Alkali Grass
- Caper-Fruited Tropidocarpum
- Chaparral Ragwort
- Delta Button-Celery
- Delta Mudwort
- Diamond-Petaled California Poppy
- Long-Styled Sand-Spurrey
- Mason's Lilaeopsis
- Recurved Larkspur
- San Joaquin Spearscale
- Spiny-Sepaled Button-Celery
- Woolly Rose-Mallow

0.25-Mile
1-Mile
5-Mile



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LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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ATTACHMENT D: CNDDB OCCURRENCES OF SPECIAL-STATUS WILDLIFE SPECIES

Attachment D:
CNDDB Occurrences of
Special-Status Wildlife Species
Amphibians - Transposition Tower A

Collinsville 500/230 Kilovolt
Substation Project

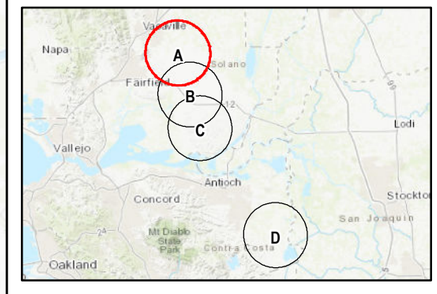
Proposed Project Buffer

California Tiger Salamander - Central California DPS

0.25-Mile

1-Mile

5-Mile



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LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Birds - Transposition Tower A

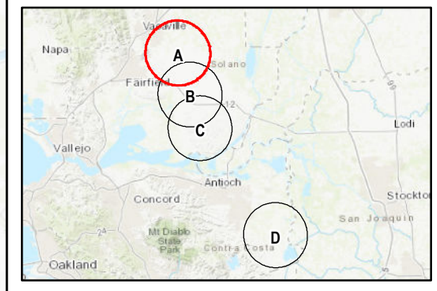
Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Burrowing Owl
- Grasshopper Sparrow
- Mountain Plover
- Northern Harrier
- Swainson's Hawk
- Tricolored Blackbird
- White-Tailed Kite

0.25-Mile

1-Mile

5-Mile



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LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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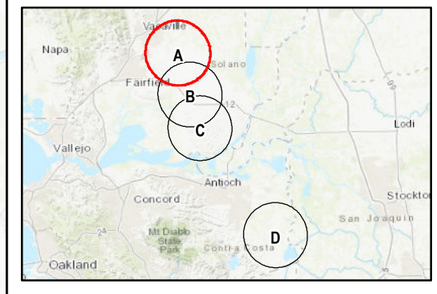
Attachment D:
CNDDB Occurrences of
Special-Status Wildlife Species
Crustaceans/Insects - Transposition Tower A

Collinsville 500/230 Kilovolt
Substation Project

- Proposed Project Buffer
- Conservancy Fairy Shrimp
- Delta Green Ground Beetle
- Vernal Pool Fairy Shrimp
- Vernal Pool Tadpole Shrimp
- Western Bumble Bee

0.25-Mile
1-Mile
5-Mile



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LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Reptiles - Transposition Tower A

Collinsville 500/230 Kilovolt Substation Project

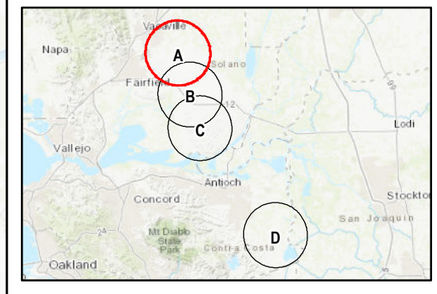
Proposed Project Buffer

Northwestern Pond Turtle

0.25-Mile

1-Mile

5-Mile



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0 1 2 Miles

LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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Attachment D:
CNDDB Occurrences of
Special-Status Wildlife Species
Amphibians - Transposition Tower B

Collinsville 500/230 Kilovolt
Substation Project

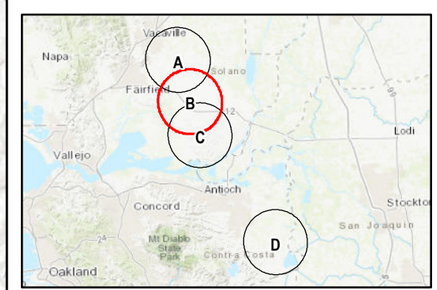
Proposed Project Buffer

California Tiger Salamander - Central California DPS

0.25-Mile

1-Mile

5-Mile



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0 1 2 Miles

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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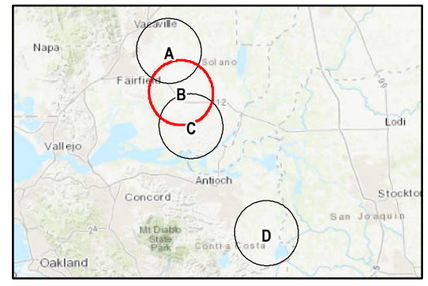
Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Birds - Transposition Tower B

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Burrowing Owl
- California Black Rail
- Golden Eagle
- Mountain Plover
- Northern Harrier
- Saltmarsh Common Yellowthroat
- Short-Eared Owl
- Suisun Song Sparrow
- Swainson's Hawk
- Tricolored Blackbird
- White-Tailed Kite

0.25-Mile
1-Mile
5-Mile



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0 1 2 Miles

LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

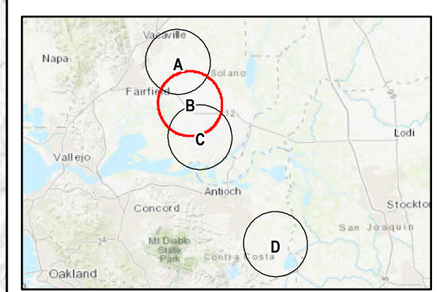
Z:\Projects\LS_Power_Collinsville\MXD\BRTR\Transposition_Structures_CNDDB_Animals.mxd 3/19/2025

Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Crustaceans/Insects - Transposition Tower B

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Conservancy Fairy Shrimp
- Delta Green Ground Beetle
- Vernal Pool Fairy Shrimp
- Vernal Pool Tadpole Shrimp
- Western Bumble Bee

0.25-Mile
1-Mile
5-Mile



1:80,000
0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

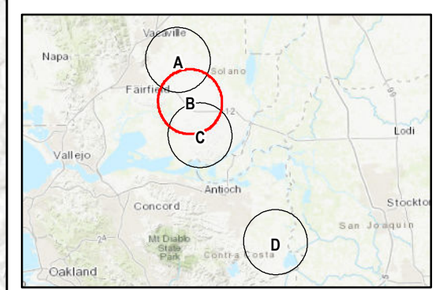
Z:\Projects\LS_Power_Collinsville\MXD\BRT\RT\Transposition_Structures_CNDDB_Animals.mxd 3/19/2025

Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Fish - Transposition Tower B

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Green Sturgeon - Southern DPS
- Longfin Smelt
- Sacramento Splittail

0.25-Mile
1-Mile
5-Mile



1:80,000
0 1 2 Miles

LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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Attachment D:
CNDDB Occurrences of
Special-Status Wildlife Species
Mammals - Transposition Tower B

Collinsville 500/230 Kilovolt
Substation Project

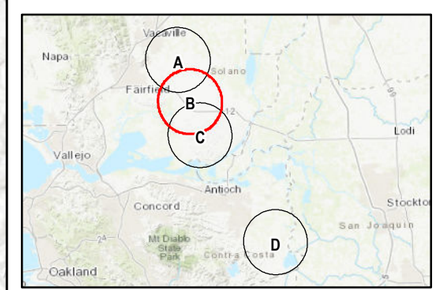
Proposed Project Buffer

Salt-Marsh Harvest Mouse

0.25-Mile

1-Mile

5-Mile



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0 1 2 Miles

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

Z:\Projects\LS_Power_Collinsville\MXD\BRTR\Transposition_Structures_CNDDB_Animals.mxd 3/19/2025

Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Reptiles - Transposition Tower B

Collinsville 500/230 Kilovolt Substation Project

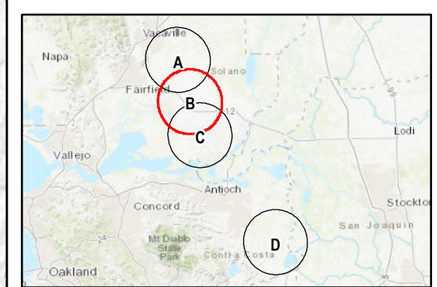
Proposed Project Buffer

Northwestern Pond Turtle

0.25-Mile

1-Mile

5-Mile



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0 1 2 Miles

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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Attachment D:
CNDDB Occurrences of
Special-Status Wildlife Species
Amphibians - Transposition Tower C

Collinsville 500/230 Kilovolt
Substation Project

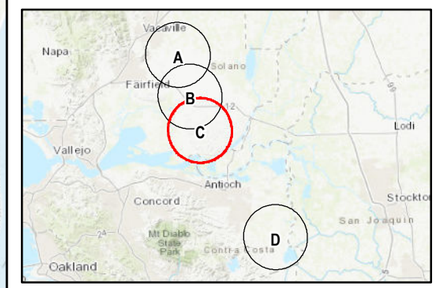
Proposed Project Buffer

California Tiger Salamander - Central California DPS

0.25-Mile

1-Mile

5-Mile



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0 1 2 Miles

LS POWER GRID CALIFORNIA

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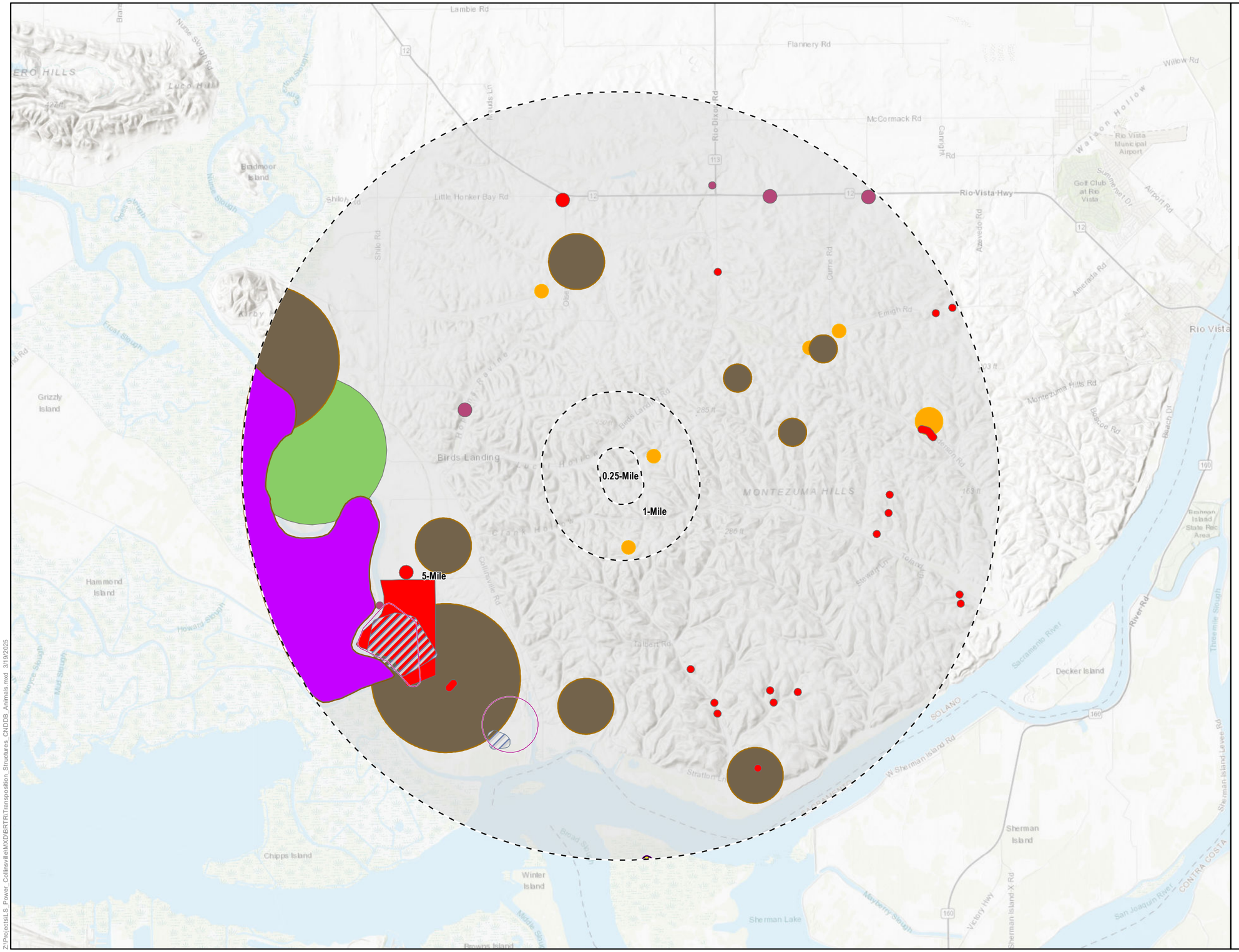

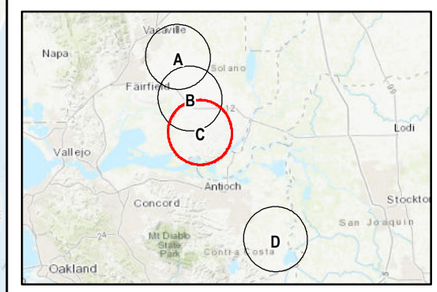

Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Birds - Transposition Tower C

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Burrowing Owl
- California Black Rail
- California Least Tern
- Golden Eagle
- Northern Harrier
- Saltmarsh Common Yellowthroat
- Short-Eared Owl
- Swainson's Hawk
- Suisun Song Sparrow
- Tricolored Blackbird
- Western Snowy Plover
- White-Tailed Kite
- Yellow Rail

1:80,000
0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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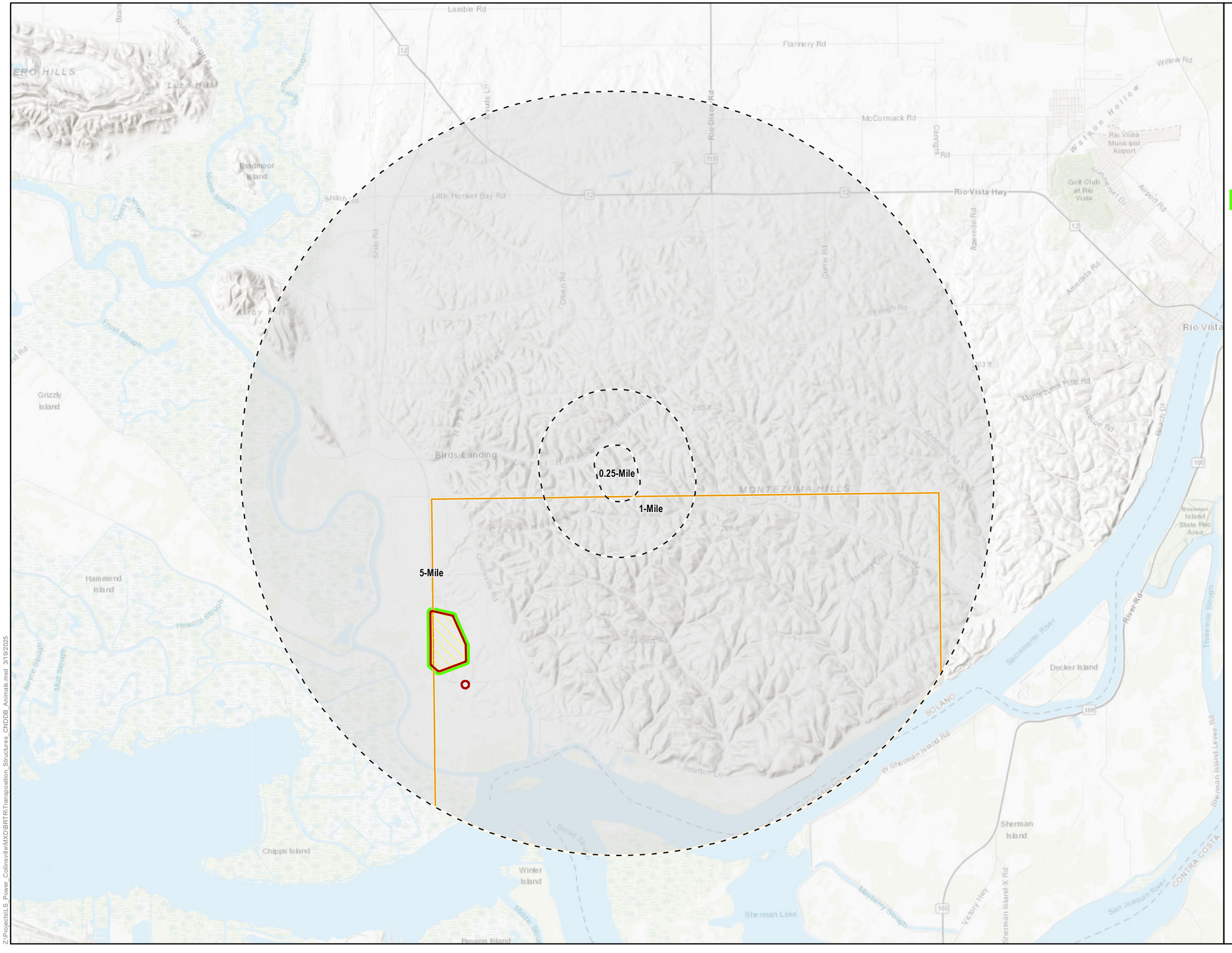

Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species Crustaceans/Insects - Transposition Tower C

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Conservancy Fairy Shrimp
- Lange's Metalmark Butterfly
- Vernal Pool Fairy Shrimp
- Vernal Pool Tadpole Shrimp

1:80,000

0 1 2 Miles

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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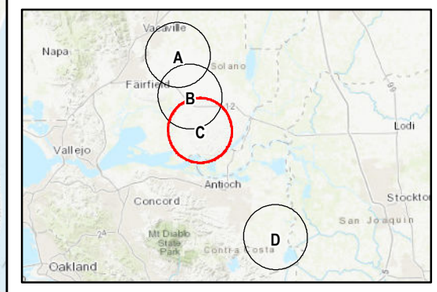
Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Fish - Transposition Tower C

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Delta Smelt
- Green Sturgeon - Southern DPS
- Longfin Smelt
- Steelhead - Central Valley DPS

0.25-Mile
1-Mile
5-Mile



1:80,000
0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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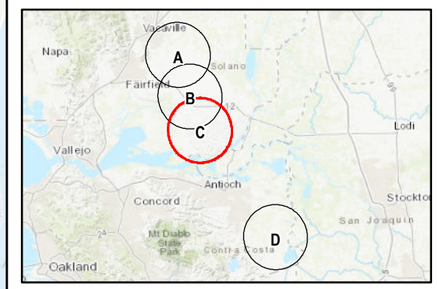
Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Mammals - Transposition Tower C

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Salt-Marsh Harvest Mouse

0.25-Mile
1-Mile
5-Mile



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0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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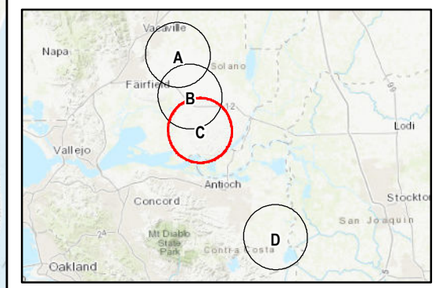
Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Reptiles - Transposition Tower C

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Giant Gartersnake
- Northwestern Pond Turtle

0.25-Mile
1-Mile
5-Mile



1:80,000
0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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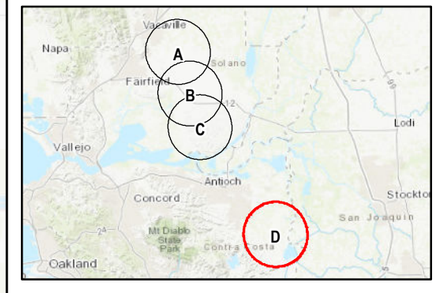
Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Amphibians - Transposition Tower D

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- California Red-Legged Frog
- California Tiger Salamander - Central California DPS

0.25-Mile
1-Mile
5-Mile



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0 1 2 Miles

LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species Birds - Transposition Tower D

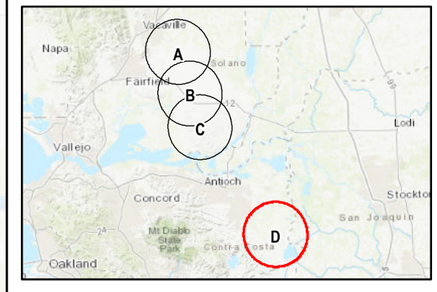
Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Burrowing Owl
- California Black Rail
- Golden Eagle
- Prairie Falcon
- Song Sparrow ("Modesto" population)
- Swainson's Hawk
- Tricolored Blackbird

0.25-Mile

1-Mile

5-Mile



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0 1 2 Miles

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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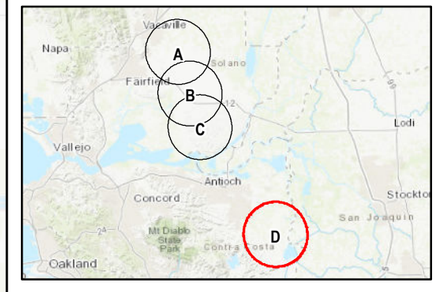
Attachment D:
CNDDB Occurrences of
Special-Status Wildlife Species
Crustaceans/Insects - Transposition Tower D

Collinsville 500/230 Kilovolt
Substation Project

- Proposed Project Buffer
- Longhorn Fairy Shrimp
- Vernal Pool Fairy Shrimp
- Western Bumble Bee

0.25-Mile
1-Mile
5-Mile



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0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

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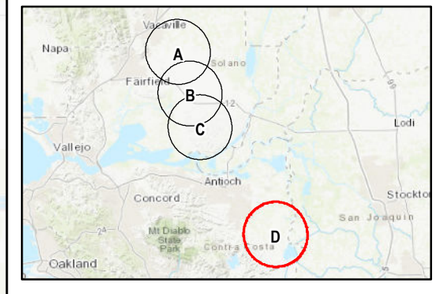
Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Fish - Transposition Tower D

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Delta Smelt
- Eulachon
- Green Sturgeon - Southern DPS
- Longfin Smelt
- Steelhead - Central Valley DPS

0.25-Mile
1-Mile
5-Mile



1:80,000
0 1 2 Miles

LSPOWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

Z:\Projects\LS_Power_Collinsville\MXD\BRTR\Transposition_Structures_CNDDB_Animals.mxd 3/19/2025

Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species Mammals - Transposition Tower D

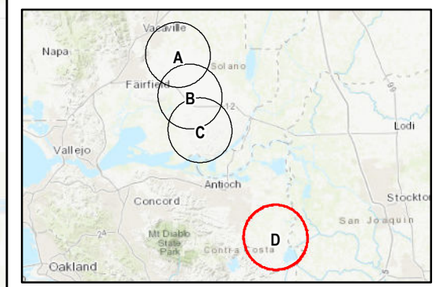
Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- American Badger
- San Joaquin Kit Fox
- San Joaquin Pocket Mouse

0.25-Mile

1-Mile

5-Mile



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0 1 2 Miles

LS POWER GRID CALIFORNIA

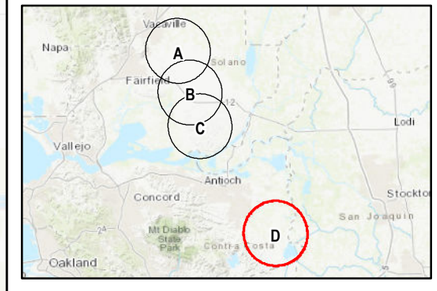
INSIGNIA ENVIRONMENTAL

Z:\Projects\LS_Power_Collinsville\MXD\BRTR\Transposition_Structures_CNDDB_Animals.mxd 3/19/2025

Attachment D:
CNDDB Occurrences of Special-Status Wildlife Species
Reptiles - Transposition Tower D

Collinsville 500/230 Kilovolt Substation Project

- Proposed Project Buffer
- Alameda Whipsnake
- Coast Horned Lizard
- Northwestern Pond Turtle
- Northern California Legless Lizard



1:80,000
0 1 2 Miles

LS POWER GRID CALIFORNIA
INSIGNIA ENVIRONMENTAL

Z:\Projects\LS_Power_Collinsville\MXD\BRTR\Transposition_Structures_CNDDB_Animals.mxd 3/19/2025

ATTACHMENT E: ESSENTIAL CONNECTIVITY AREAS

Attachment E: Essential Connectivity Areas Tower A **Collinsville 500/230 Kilovolt Substation Project**

More Permeable

Less Permeable

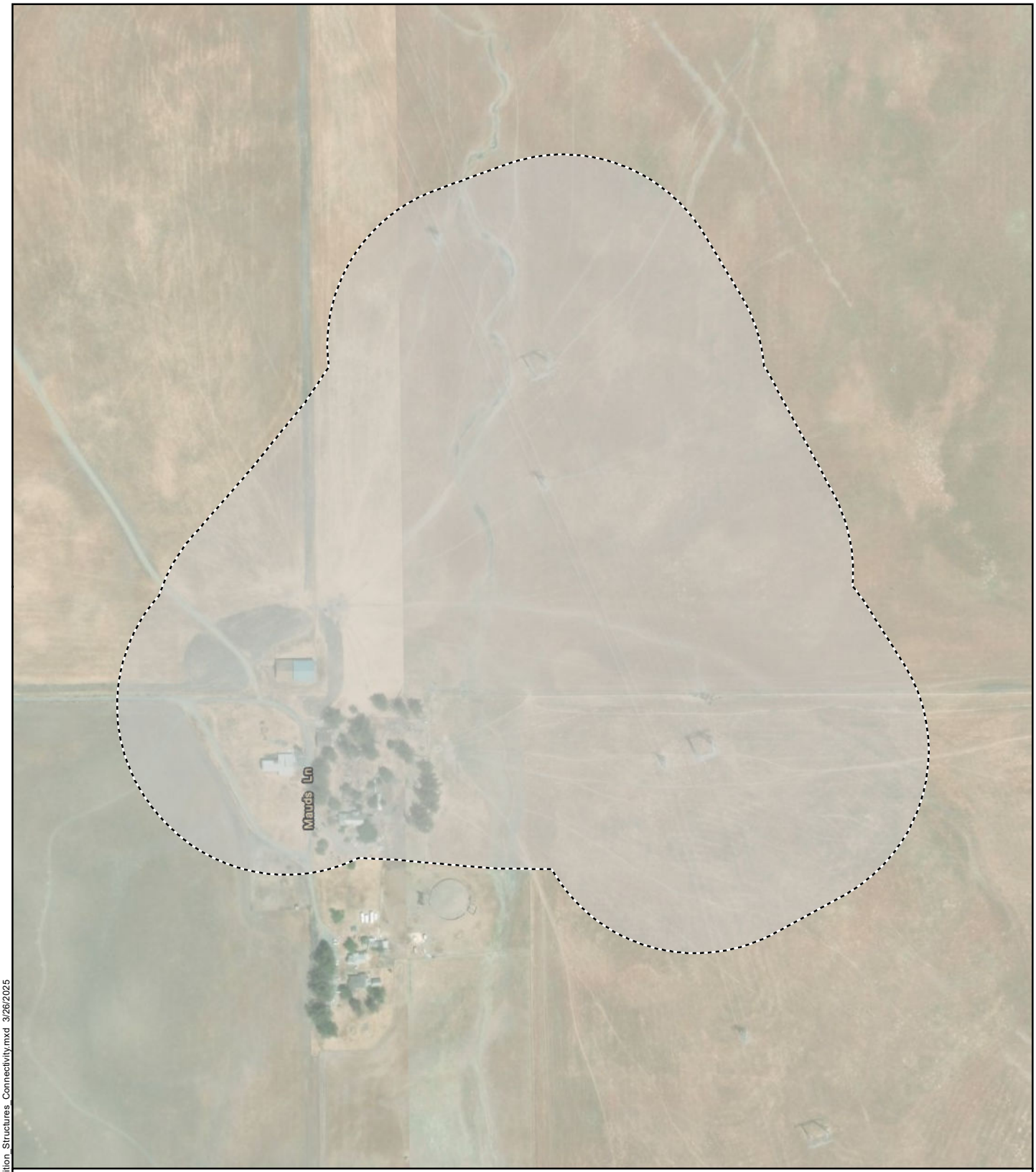
Survey Area

1:10,000

0 400 800 Feet

LS POWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

Z:\Projects\LS_Power_Collinsville\MXD\BRT\RiTransposition_Structures_Connectivity.mxd 3/26/2025



Attachment E: Essential Connectivity Areas Tower B **Collinsville 500/230 Kilovolt Substation Project**

More Permeable

Less Permeable

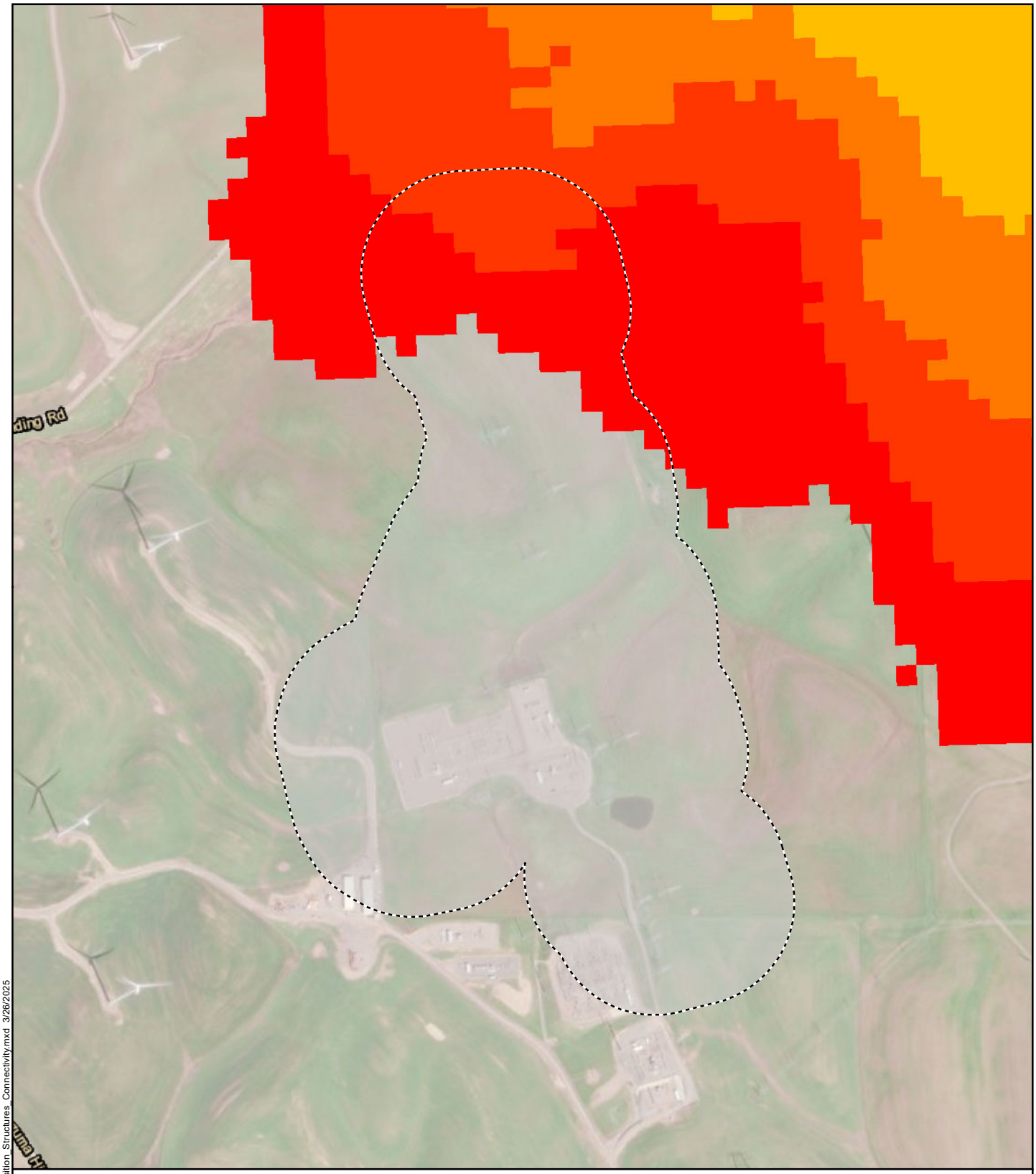
Survey Area

1:5,000

0 400 800 Feet

LS POWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

Z:\Projects\LS_Power_Collinsville\MXD\BRTR\Transposition_Structures_Connectivity.mxd 3/26/2025



Attachment E: Essential Connectivity Areas Tower C **Collinsville 500/230 Kilovolt Substation Project**

More Permeable

Less Permeable

Survey Area

1:8,000

0 400 800 Feet

LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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Attachment E: Essential Connectivity Areas Tower D **Collinsville 500/230 Kilovolt Substation Project**

More Permeable

Less Permeable

Survey Area

1:4,000

0 400 800 Feet

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ATTACHMENT F: LINEAR WATER FEATURE PHOTOGRAPHS

ATTACHMENT F: LINEAR WATER FEATURE PHOTOGRAPHS

TOWER A

Photograph 1: D-1, facing upstream and west.

Photograph 2: D-1, facing downstream and east.

Photograph 3: D-2, facing upstream and east.

Photograph 4: D-2, facing downstream and west.

Photograph 5: D-3, facing upstream and east.

Photograph 6: D-3, facing downstream and west.

Photograph 7: D-4, facing upstream and south.

Photograph 8: D-4, facing downstream and north.

TOWER B

Photograph 9: D-5, facing upstream and south.

Photograph 10: D-5, facing downstream and northeast.

TOWER C

Photograph 11: D-6, facing upstream and southeast.

Photograph 12: D-6, facing downstream and northeast.

Photograph 13: D-7, facing upstream and southwest.

Photograph 14: D-7, facing downstream and northwest.

Photograph 15: D-8, facing upstream and south.

Photograph 16: D-8, facing downstream and north.

Photograph 17: D-9, facing upstream and north.

Photograph 18: D-9, facing downstream and south.

TOWER D

Photograph 19: D-10, facing upstream and west.

Photograph 20: D-10, facing downstream and east.

Photograph 21: D-11, facing upstream and east.

Photograph 22: D-11, facing downstream and west.

Photograph 23: D-12, facing upstream and south.

Photograph 24: D-12, facing downstream and north.

Photograph 25: D-13, facing upstream and southwest.

Photograph 26: D-13, facing downstream and southeast.

ATTACHMENT G: WETLAND FEATURE PHOTOGRAPHS

ATTACHMENT G: WETLAND FEATURE PHOTOGRAPHS

Photograph 1: W-1, facing north.[1]

Photograph 2: W-2, facing north.

[1] Foot access for surveys was restricted due to landowner access. Photos were taken from the nearest accessible area.

Photograph 3: W-3, facing southeast.

Photograph 4: W-4, facing south.

Photograph 5: W-5, facing north.

Photograph 6: W-6, facing east.[2]

[2] Photographs of W-7 are not available; however, this feature closely resembles W-4, W-5, and W-6 in size, shape, observed hydrology, and vegetation community.

Photograph 7: W-8, facing north.

Photograph 8: W-9, facing north.

Photograph 9: W-10, facing west.

Photograph 10: W-11, facing north.

Photograph 11: W-12, facing west.

Photograph 12: W-13, facing north.

Photograph 13: W-14, facing north.

Photograph 14: W-15, facing northeast.

Photograph 15: W-16, facing southwest.

Photograph 16: W-17, facing north.

Photograph 17: W-18, facing southeast.

Photograph 18: W-19, facing northwest.

ATTACHMENT H: POTENTIALLY JURISDICTIONAL WATER FEATURES TABLES

ATTACHMENT H: POTENTIALLY JURISDICTIONAL WATER FEATURES TABLES

Table H-1: Potentially Jurisdictional Wetland Features

Wetland Identification Number	Vegetation Type	Cowardin Classification	Page Number in Attachment A	Potential USACE-Jurisdictional Area within Survey Area (acres)	Potential RWQCB-Jurisdictional Area within Survey Area (acres)	Potential CDFW-Jurisdictional Area within Survey Area (acres)
Tower A						
W-1	*Lolium perenne* Herbaceous Semi-Natural Alliance	PEM2*	1	--	0.36	--
W-2	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC**	1	--	0.02	--
W-3	*Brassica nigra – Centaurea* (*solstitialis*, *melitensis*) Herbaceous Semi-Natural Alliance	PUBC	1	--	0.03	--
W-4	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	<0.01	--
W-5	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	<0.01	--
W-6	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	<0.01	--
W-7	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	<0.01	--
W-8	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	0.01	--
W-9	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	0.01	--
W-10	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	<0.01	--
W-11	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	0.54	--
W-12	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	0.08	--
W-13	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	<0.01	--
W-14	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	<0.01	--
W-15	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	0.04	--

Wetland Identification Number	Vegetation Type	Cowardin Classification	Page Number in Attachment A	Potential USACE-Jurisdictional Area within Survey Area (acres)	Potential RWQCB-Jurisdictional Area within Survey Area (acres)	Potential CDFW-Jurisdictional Area within Survey Area (acres)
W-16	*Lolium perenne* Herbaceous Semi-Natural Alliance	PUBC	1	--	0.05	--
Tower B						
W-17	*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance	PUBC	2	--	0.01	--
W-18	*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance	PUBC	2	--	<0.01	--
W-19	*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance	PUBC	2	--	<0.01	--
Total* **	**--**	**--**	**--**	**--**	**1.19**	**--**

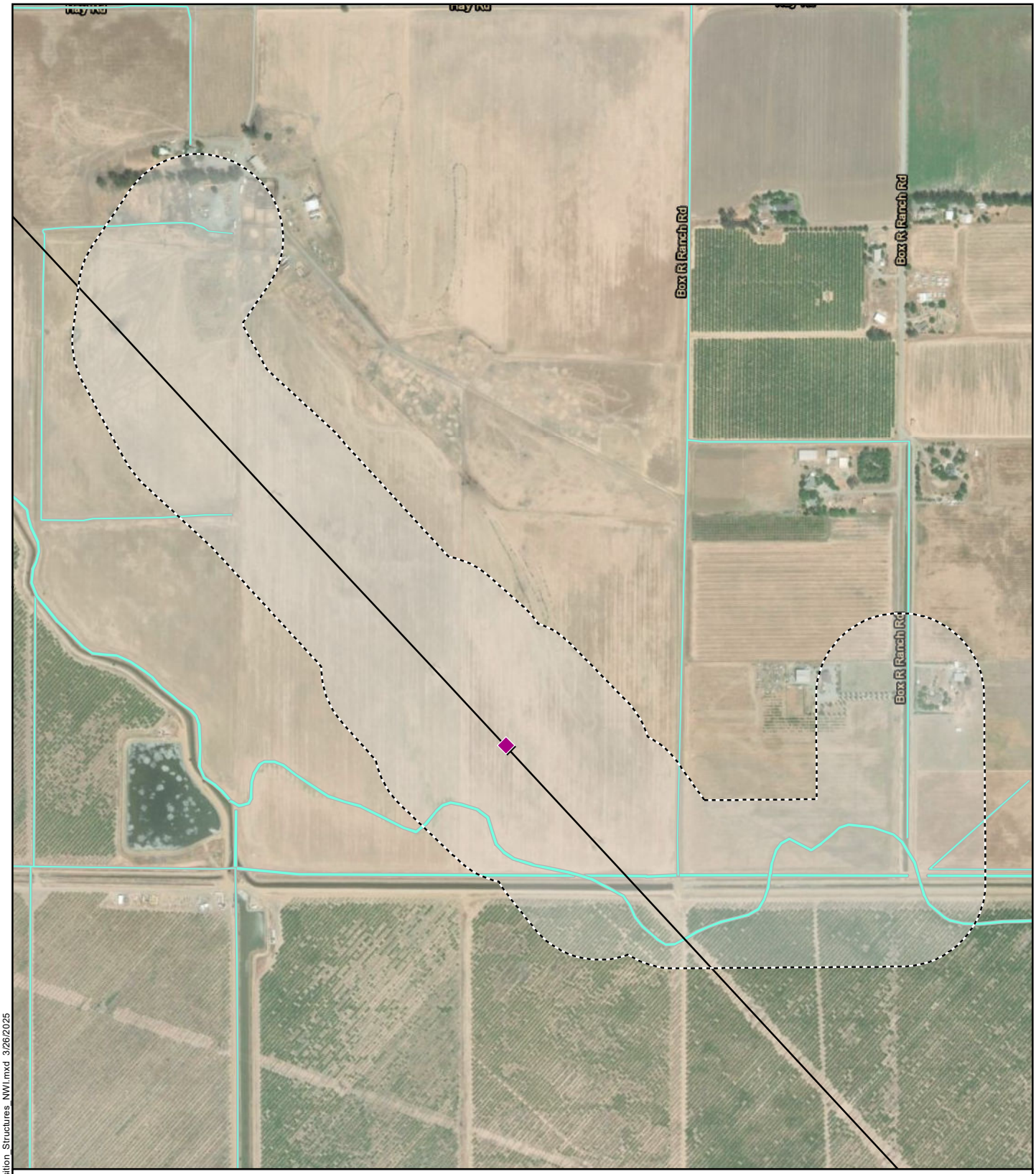
*PEM2 = Palustrine Emergent Non-persistent Wetland
**PUBC = Palustrine Unconsolidated Bottom, Seasonally Flooded
***Due to rounding, totals may not sum.
Notes: USACE = United States Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife

Table H-2: Potentially Jurisdictional Linear Water Features

ID	Feature Type	Page Number in Attachment A	Average Measurements (feet)					Jurisdictional Areas (acres)		
			Length	OHWM Width	OHWM Depth	TOB Width	TOB Depth	USACE	RWQCB	CDFW
Tower A										
D-1	Ephemeral	1	1,180.1	4.0	0.4	67.0	0.3	--	0.11	1.84
D-2	Ephemeral	1	2,923.1	2.0	0.4	35.0	10.0	0.13	0.13	2.35
D-3	Ephemeral	1	1,267.5	4.0	0.2	15.0	6.5	--	0.12	0.44
D-4	Ephemeral	1	1,574.9	40.0	2.0	60.0	15.0	--	1.46	2.20
Tower B										
D-5	Ephemeral	2	1,208.1	14.9	0.6	17.2	1.7	--	0.48	0.56
Tower C										
D-6	Ephemeral	3	588.9	1.5	0.4	8.5	3.25	--	0.02	0.12
D-7	Ephemeral	3	1,154.2	0.8	0.1	4.2	0.1	--	0.02	0.11
D-8	Ephemeral	3	687.4	1.2	0.1	1.2	0.1	--	0.02	0.02
D-9	Ephemeral	3	210.8	1.0	0.2	3.25	3.1	--	<0.01	0.02
Tower D										
D-10	Ephemeral	4	1,303.5	1.2	0.5	4.0	2.0	--	0.12	0.12
D-11	Ephemeral	4	1,363.2	0.7	0.1	3.0	1.0	--	0.09	0.09
D-12	Perennial	4	1,234.9	20.0	2.0	44.0	13.0	0.57	0.57	1.26
D-13	Perennial	4	774.4	20.0	2.0	40.0	15.0	0.36	0.36	0.73
Total*	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**0.93**	**3.51**	**9.85**

*Due to rounding, totals may not sum.
Notes: OHWM = ordinary high water mark; TOB = top of bank

ATTACHMENT I: NATIONAL WETLANDS INVENTORY MAP



Attachment I: National Wetlands Inventory Map 1 of 4

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 500 kV Transposition Structure
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- 500-Foot Buffer
- National Wetlands Inventory Feature

1:10,000

0 500 1,000 Feet

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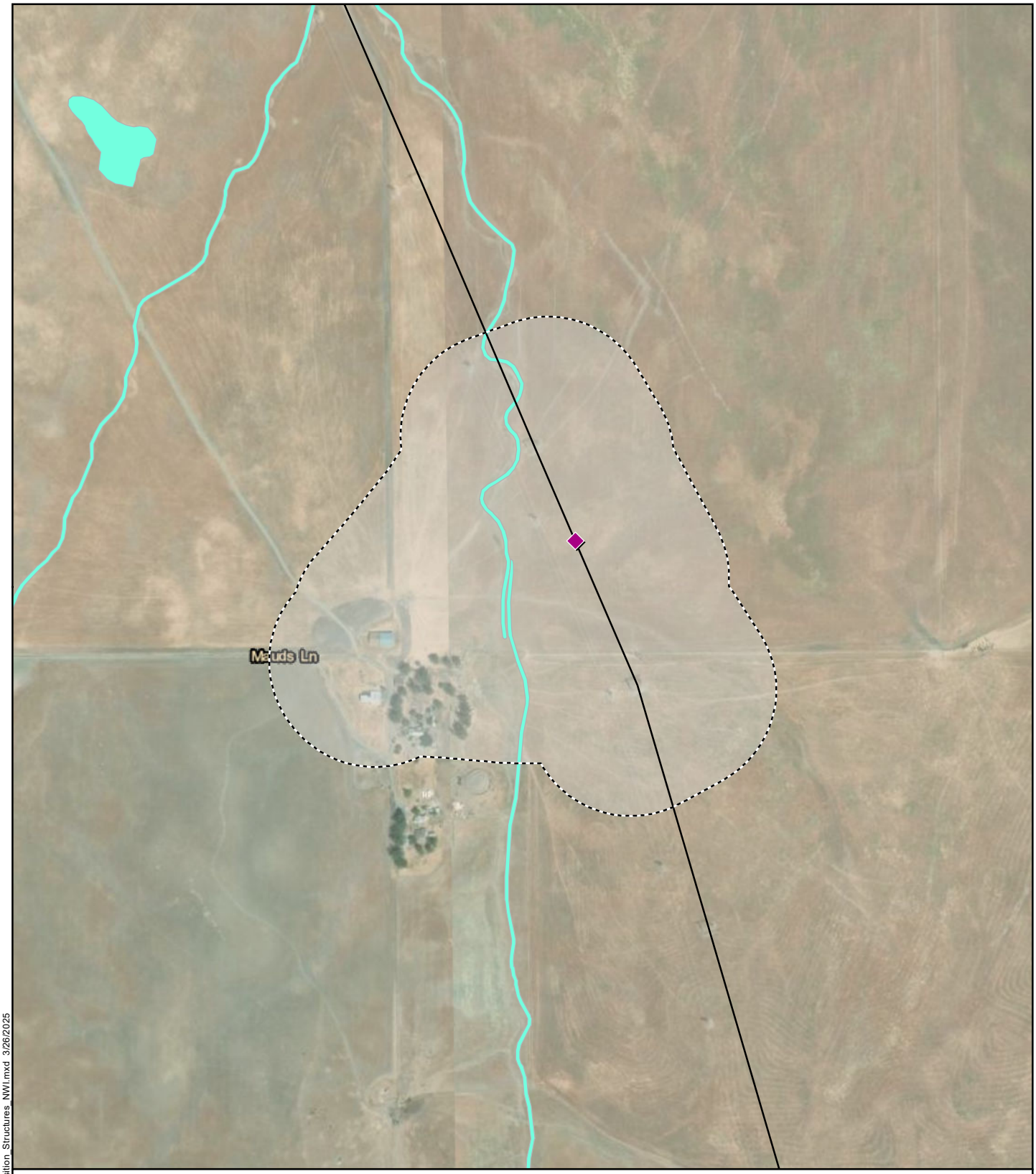

Attachment I: National Wetlands Inventory Map 2 of 4 **Collinsville 500/230 Kilovolt Substation Project**

- Proposed PG&E 500 kV Transposition Structure
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- 500-Foot Buffer
- National Wetlands Inventory Feature

1:8,000

0 500 1,000 Feet

LS POWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

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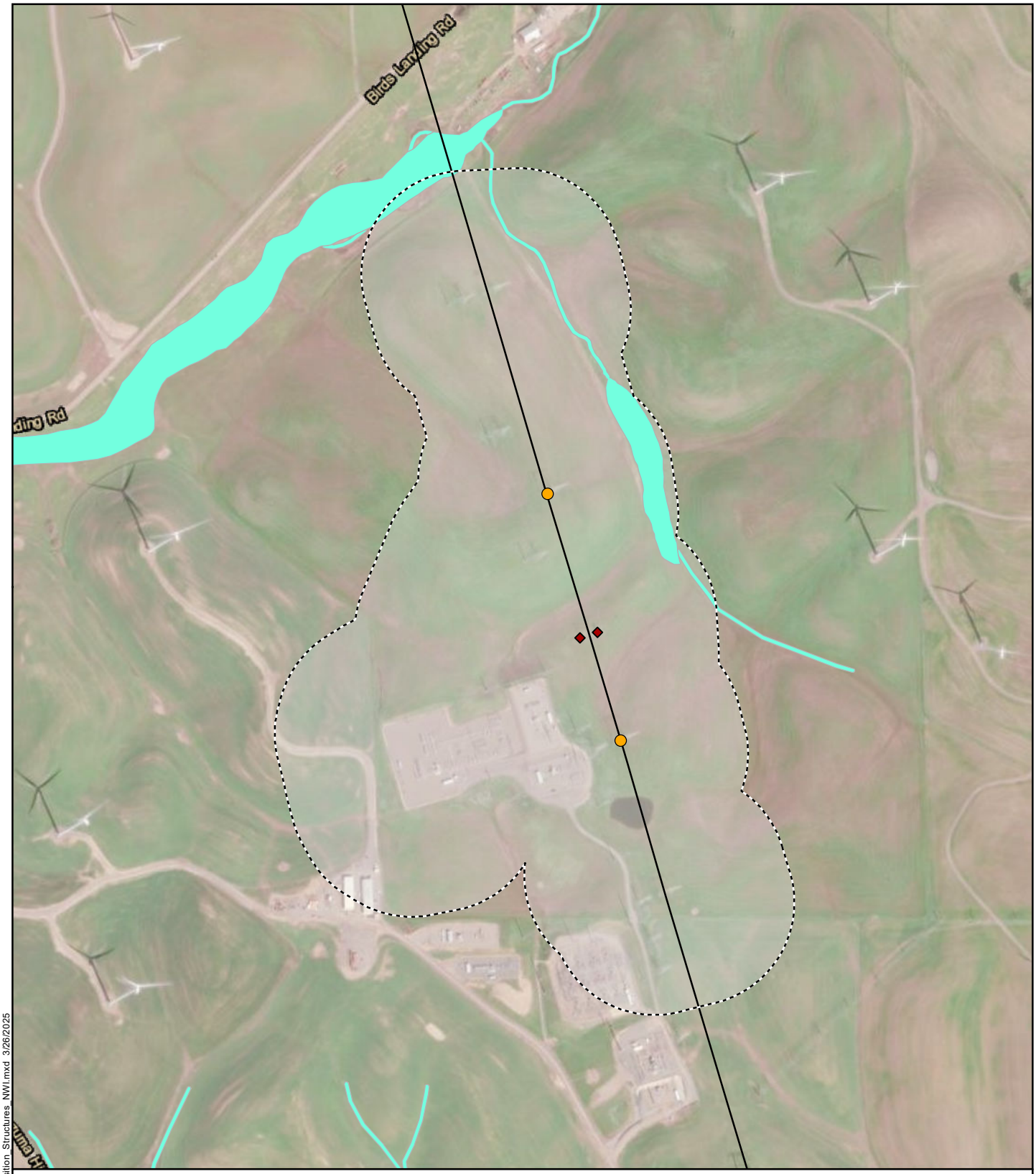

Attachment I: National Wetlands Inventory Map 3 of 4 **Collinsville 500/230 Kilovolt Substation Project**

- Proposed PG&E LSP Removal
- Proposed PG&E Three-Pole Dead-End TSP
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- 500-Foot Buffer
- National Wetlands Inventory Feature

1:8,000

0 500 1,000 Feet

LS POWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

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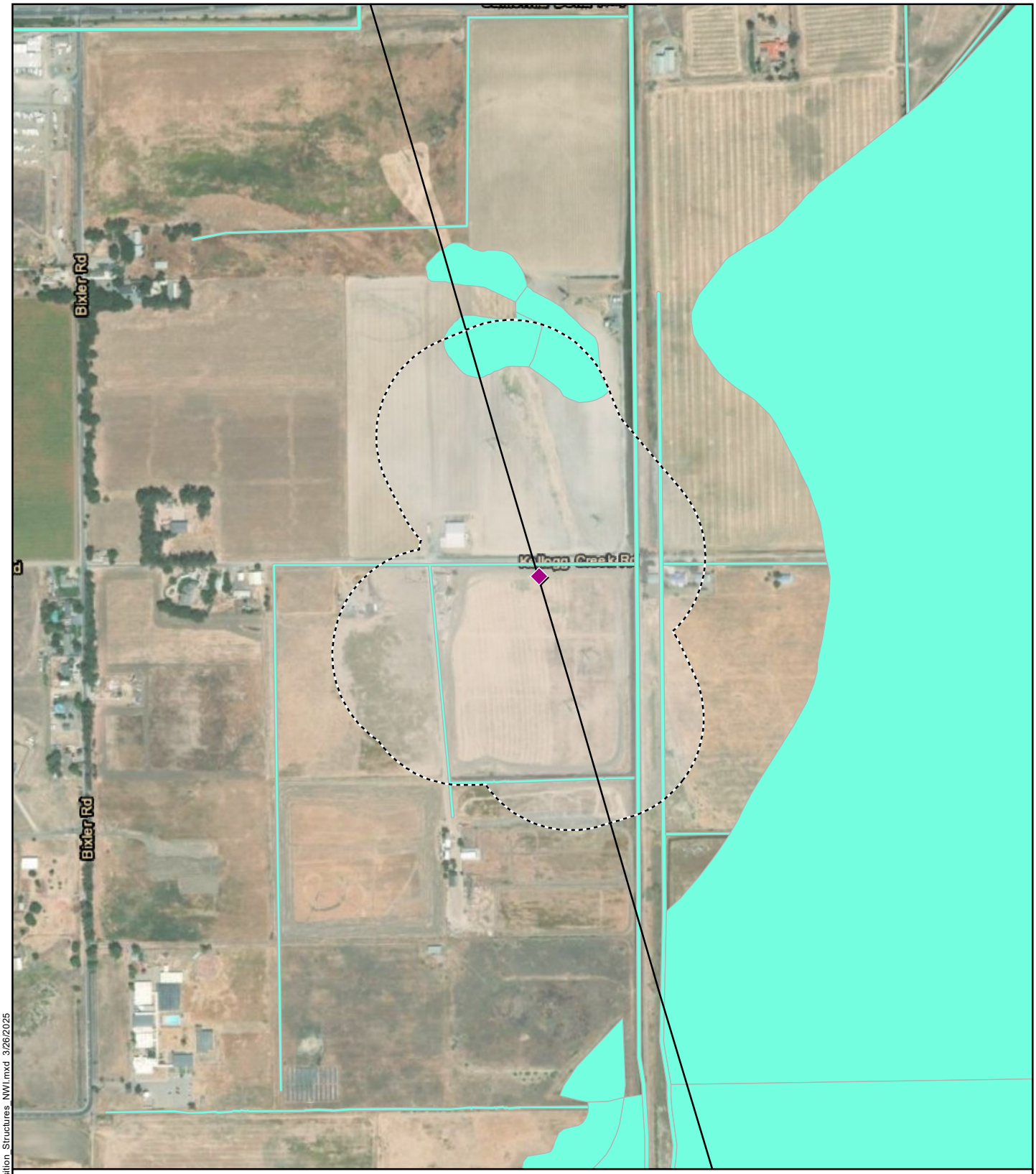

Attachment I: National Wetlands Inventory Map 4 of 4 **Collinsville 500/230 Kilovolt Substation Project**

- Proposed PG&E 500 kV Transposition Structure
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- 500-Foot Buffer
- National Wetlands Inventory Feature

1:8,000

0 500 1,000 Feet

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