
Appendix C2

Biological Resources Assessment - Lassen Facility

July 21, 2023

12335

Arthur J. Wylene
Golden State Finance Authority
1215 K Street, Suite 1650
Sacramento, California 95814

**Subject: Biological Resources Assessment for the Forest Resiliency Program - Lassen Facility,
Lassen County, California**

Dear Mr. Wylene:

Dudek has prepared this Biological Resources Assessment for the Forest Resiliency Program – Lassen Facility (project), located in Lassen County, California. The purpose of the Biological Resources Assessment is to identify and characterize existing biological resources, with particular focus on the potential of the review area to support special-status plant and wildlife species and other sensitive resources, such as wetlands and other aquatic resources potentially under the regulatory jurisdiction of federal and/or state resource agencies. This assessment also identifies potential constraints to project implementation posed by the presence or potential presence of sensitive resources, and provides recommendations to minimize and/or avoid impacts to these resources.

1 Location

The 112.95-acre review area is at 551000 Roosevelt Avenue (sometimes spelled Roosevelt), approximately 3 miles southwest of the census-designated place of Bieber in northwestern Lassen County, California (Figure 1, Project Location). The review area is between State Route 299/Lassen State Highway and Babcock Road, immediately west of the common terminus of the former Western Pacific Railroad and Great Northern Railway (Figure 2, Project Site). The review area includes two parcels (Assessor's Parcel Number 001-270-080-000 [northern parcel] and a portion of Assessor's Parcel Number 001-270-26-11 [southern parcel]), situated in Township 38 North, Range 7 East, and Sections 28 and 33 of the U.S. Geological Survey Bieber, California 7.5-minute quadrangle (USGS 2021). The approximate center of the review area corresponds to 41° 05'33.60" north latitude and -121° 10'31.07 west longitude.

2 Methods

2.1 Preliminary Site Evaluation

Prior to conducting the survey, Dudek staff performed a review of pertinent online and literature sources. This consisted of a review of the following online databases and reports: the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPaC) Trust Resource Report; California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB); and the California Native Plant Society (CNPS) online

Inventory of Rare and Endangered Vascular Plants (USFWS 2023a; CDFW 2023; CNPS 2023a). The IPaC report was based on a query for the review area. The CNDDDB and CNPS databases were queried for the nine U.S. Geological Survey 7.5-minute quadrangles containing and immediately surrounding the review area (Bieber, Day, Lookout, Big Swamp, Hog Valley, Dixie Peak, Little Valley, Cable Mtn., and Pittville). Following a review of these resources, Dudek biologists determined the potential for special-status plant and wildlife species to occur in the review area. Determinations were based on a review of habitat types, soils, and elevation preferences, as well as the known geographic range and nearest occurrence records of each species. No protocol-level surveys for special-status species were conducted.

For this report, special-status plant and wildlife species are defined as those that are (1) listed, proposed for listing, or candidates for listing as Threatened or Endangered under the federal Endangered Species Act; (2) listed or candidates for listing as Threatened or Endangered under the California Endangered Species Act; (3) a state fully-protected species; (4) a CDFW Species of Special Concern; or (5) a species listed on the CNPS Inventory of Rare and Endangered Plants with a California Rare Plant Rank of 1 or 2.

2.2 Field Surveys

2.2.1 Biological Field Survey

Dudek biologists Allie Sennett and Paul Keating performed a biological field survey of the review area on September 21 and 22, 2021. The survey was conducted on foot to visually cover the entire review area. Dudek biologists used a Trimble Geo 7X GPS unit with submeter accuracy to map vegetation communities and record any sensitive biological resources within the review area. Representative site photographs of the review area are provided in Attachment A.

All plant species encountered were identified to the lowest taxonomic level needed to determine rarity. Those species that could not be immediately identified were brought into the laboratory for further investigation. Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2023), and common names follow the U.S. Department of Agriculture Natural Resources Conservation Service PLANTS Database (USDA 2023a).

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly into a field notebook. The review area was also scanned with binoculars to aid in the identification of wildlife. A list of plant and wildlife species identified in the review area during the survey is included in Attachment B.

2.2.2 Aquatic Resources Delineation

Concurrent with the biological field survey, Dudek biologists performed a preliminary field delineation to identify and map the extent of aquatic resources within or adjacent to the review area that are potentially subject to regulation under federal Clean Water Act Sections 401 and 404, California Fish and Game Code Section 1600, or the provisions of the Porter–Cologne Water Quality Act. Follow-up delineation fieldwork was conducted during the growing season on May 25 and 26, 2023, by Dudek biologists Jessica Baldrige and Elizabeth Meisman. Dudek biologists used a Trimble Geo 7X GPS unit and Trimble® R1 GNSS Receiver with submeter accuracy to map potential aquatic resources in the review area. Results of the aquatic resources delineation are incorporated into this assessment.

3 Results

3.1 Review Area Description

The review area is within Big Valley at the eastern edge of the Big Valley Mountain range. Elevation in the review area is approximately 4,120 feet above mean sea level. The review area is surrounded by widely scattered rural development and open space generally composed of cropland, sagebrush scrub, and wet meadow. The review area is in a semi-arid climate where annual temperatures range from 33.8°F to 63.4°F, and the average annual precipitation is 15.56 inches. On average, the months with the highest rainfall are January and February, and July has the least precipitation (WRCC 2021).

3.2 Soils

There are three soil mapping units mapped in the review area: Cupvar silty clay, 0%–2% slopes; Pit silty clay, drained, 0%–2% slopes; and Bieber–Modoc Complex, 0%–5% slopes (USDA 2023b) (Figure 3, Soil Types). These soil series are described below. No exposed serpentine soils or outcrops were observed in the review area during the field survey. According to Calflora (2021), no serpentine soils or acidic/alkaline soils are mapped in the review area; the nearest serpentine soils are mapped in the Shasta–Trinity National Forest northwest of the review area.

Cupvar Silty Clay, 0%–2% Slopes: This soil unit is dominated by the Cupvar series, which consists of moderately deep to duripan, moderately well-drained soils formed in alluvium from extrusive igneous rock. Cupvar soils are in basins. None of the soil map unit is classified as hydric (USDA 2023c). This map unit comprises the southwestern corner of the review area. The Esperanza and Pittville series are secondary soil series within this unit. The Esperanza soil series consists of deep to hardpan, well-drained soils on stream terraces formed in alluvium from tuff, basalt, and diatomite. The Pittville soil series consists of very deep, well-drained soils on stream terraces and toe slopes that are formed in alluvium from extrusive igneous rock.

Pit Silty Clay, Drained, 0%–2% Slopes: This soil unit is dominated by the Pit series, which consists of very deep, poorly drained soils that formed in fine-textured alluvium weathered from extrusive and basic igneous rocks. Pit soils are on floodplains and in basins. This soil map unit is classified as hydric¹ (USDA 2023c). This map unit comprises a majority of the review area. The Pastolla, Henhill, and Cupvar (described above) series are secondary soil series within this unit. The Pastolla soil series consists of very deep, very poorly drained soils in basins and on low stream terraces that formed in stratified alluvium from ash and lacustrine deposits. The Henhill soil series consists of very deep, somewhat poorly drained soils on stream terraces adjacent to rivers or creeks that formed in lake sediments and alluvium from extrusive igneous rock.

Bieber–Modoc Complex, 0%–5% Slopes: The Bieber–Modoc soil type is composed of the Bieber and Modoc soil series. The Bieber soil series consists of very shallow and shallow to duripan, well-drained or moderately well-drained soils that formed in alluvium derived from volcanic rocks. Bieber soils are on stream terraces and fan remnants. The Modoc series consists of moderately deep to duripan, well-drained soils that formed in volcanic ash over lacustrine deposits or alluvium derived from basalt, andesite, and pyroclastic rocks. Modoc soils are on lake terraces and alluvial fan remnants.

¹ Hydric soils are commonly associated with wetlands and exhibit characteristic resulting from repeated periods of saturation or inundation for more than a few days.

3.3 Hydrology

The review area occurs within the Pit River hydrologic unit, in the Big Valley hydrologic area, within the Bieber subarea (Hydrologic Unit Code 1802000219). The review area is in a natural basin that receives runoff from the Big Valley Mountains flowing from west to east into a matrix of freshwater emergent wetlands and sloughs that generally drain in a southerly direction toward the Pit River. Surface run-off in the review area is generally directed to the east through six constructed drainage ditches and two seasonal wetland swales. The Pit River flows from east to west approximately 3 miles south of the review area, eventually terminating into Lake Shasta.

The USFWS National Wetlands Inventory identifies two aquatic resources within the review area that are both excavated riverine channels (R2ABFx and R5UBFx) (USFWS 2023b) (Figure 4, Hydrologic Setting). The National Wetlands Inventory dataset is based on coarse aerial mapping without ground-truthing and is unlikely to include features that are not visible in aerial photography. According to Federal Emergency Management Agency Flood Zone data, a majority of the review area occurs within a 100-year floodplain (FEMA 2010).

3.4 Vegetation Communities and Land Cover Types

Land cover in the review area consists of a mix of natural and non-natural vegetation communities and non-vegetative land covers. The vegetation communities and land covers described herein have been adapted from the Manual of California Vegetation, Online Edition (CNPS 2023b). Great Basin grassland, seasonal wetland, and disturbed habitat were documented in the review area (Figure 5, Vegetation Communities and Land Cover Types). Table 1 provides a breakdown of the cover types present, and a detailed discussion of cover types in the review area is included below.

Table 1. Vegetation Communities and Land Cover Types Mapped in the Review Area

Vegetation Community/ Land Cover Type	Vegetation Alliance and CDFW Alliance Code	Rarity Rank ¹	Acreage
Vegetation Communities			
Great Basin Grassland	Ashy ryegrass - Creeping wildrye turfs (<i>Leymus cinereus</i> - <i>Leymus triticoides</i> Herbaceous Alliance; 41.081.00	S3, G3	57.06
Seasonal Wetland	Kentucky bluegrass - Redtop - Creeping bentgrass meadows (<i>Poa pratensis</i> - <i>Agrostis gigantea</i> - <i>Agrostis stolonifera</i>); Herbaceous Semi-Natural Alliance; 45.107.00	N/A	44.99
Other Land Cover Types			
Disturbed Habitat	N/A	N/A	10.90
Total²			112.95

Notes:

CDFW = California Department of Fish and Wildlife; N/A = not applicable.

¹ State (S) ranks of 1-3 are considered highly imperiled by CDFW (2023). Global (G) ranks are as follows: GX - eliminated; GH - presumed eliminated; G1 - critically imperiled; G2 - imperiled; G3 - vulnerable; G4 - apparently secure; G5 - secure.

² Totals may not sum due to rounding.

3.4.1 Great Basin Grassland

Great Basin grassland is the dominant vegetation community in the review area. This community is generally present in undeveloped areas throughout the review area. Plant species present in this community include a mix of perennial grasses and forbs, with the dominant species consisting of ashy ryegrass (*Elymus cinereus*), bald brome (*Bromus racemosus*), and nineleaf biscuitroot (*Lomatium triternatum*). Other less dominant species include herbs such as a non-native lettuce species (*Lactuca serriola*) and common sheep sorrel (*Rumex acetosella*). The tree layer is absent in this vegetation community. The shrub layer is sparse, and where present is typically limited to small patches of big sagebrush (*Artemisia tridentata*).

3.4.2 Seasonal Wetland

There are seven seasonal wetlands and two seasonal wetland swales within the review area. These types of resources generally occur within low lying areas of the landscape. Aerial imagery shows these features seasonally fill with water, likely from precipitation events, but inundation is not consistent year to year (Google Earth 2021). These features collect and hold water seasonally and are discernible from adjacent upland areas by a distinct change in vegetation. The seasonal wetland features are dominated by wetland plant species timothy (*Phleum pratense*), jointleaf rush (*Juncus articulatus*), and camas (*Camassia* sp.). Other associated species with low cover in this feature include buttercup (*Ranunculus* sp.), western marsh cudweed (*Gnaphalium palustre*), and curly dock (*Rumex crispus*). Similar to the seasonal wetland, the seasonal wetland swales are narrower features that collect water seasonally and are discernible from the adjacent upland areas by a distinct change in vegetation. The seasonal wetland swale features support a dominance of two wetland plant species: pale spike rush (*Eleocharis macrostachya*) and Baltic rush (*Juncus balticus*).

3.4.3 Disturbed Habitat

This land cover type includes areas that have been heavily disturbed or completely altered by human activities and contain little to no vegetation. Such areas in the review area include buildings, stockpiling and staging areas, paved and gravel roadways, gravel lots, and other constructed environments. Infrastructure within disturbed habitat mapped in the review area includes a railroad and track yard, silo, storage barns, and a warehouse.

3.5 Potential Jurisdictional Aquatic Resources

During the field delineation, Dudek biologists mapped approximately 47.57 acres of potentially jurisdictional aquatic resources (Figure 6, Aquatic Resources Delineation). These resources are listed in Table 2. Findings with regard to federal jurisdiction are preliminary until verified by the Sacramento District of the U.S. Army Corps of Engineers (USACE). Refer to the separate Aquatic Resources Delineation Report for the project for additional information regarding aquatic resources present within the review area (Dudek 2023).

Table 2. Aquatic Resources Mapped in the Review Area

Feature Type	Anticipated Jurisdiction	Acreage*	Linear Feet
Wetlands			
Seasonal Wetland	USACE/RWQCB/CDFW	44.99	N/A

Table 2. Aquatic Resources Mapped in the Review Area

Feature Type	Anticipated Jurisdiction	Acreage*	Linear Feet
Seasonal Wetland Swale	USACE/RWQCB/CDFW	0.48	N/A
<i>Subtotal</i>		45.46	N/A
Non-Wetland Waters			
Drainage Ditch	USACE/RWQCB/CDFW	2.11	6,527
Total		47.57	6,527

Notes:

USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife; N/A = not applicable.

* Totals may not sum due to rounding.

3.6 Plant and Wildlife Species Observed

A total of 60 species of native or naturalized plants, 40 native (67%) and 20 non-native (33%), were recorded in the review area. Dudek biologists directly observed, or documented via scat, sign, or call, 14 native wildlife species and two non-native wildlife species in the review area during the field surveys. Observed wildlife included common bird species such as brewer’s blackbird (*Euphagus cyanocephalus*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), western meadowlark (*Sturnella neglecta*), turkey vulture (*Cathartes aura*), white-crowned sparrow (*Zonotrichia leucophrys*), and savannah sparrow (*Passerculus sandwichensis*). Other wildlife species detected via scat or other sign included coyote (*Canis latrans*) and black-tailed jackrabbit (*Lepus californicus*). A list of the plant and wildlife species identified in the review area during the field survey is included in Attachment B. No special-status plants or wildlife were observed during the field survey, although no focused surveys were conducted.

3.7 Special-Status Plant and Wildlife Species

Based on the known habitat life history requirements (e.g., vegetation types, soils, and elevation preferences) of the target list of special-status plant and wildlife species identified as a result of the literature and database review described in Section 2.1, Preliminary Site Evaluation, and the known geographic range and nearest occurrence records of each of these species, the potential of each of these species to occur in or adjacent to the review area was determined (Attachment C, Special-Status Plant Species Potential to Occur in the Review Area Region, and Attachment D, Special-Status Wildlife Species Potential to Occur in the Review Area Region). The potential for occurrence of each species was summarized according to the categories listed below. Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided.

- **Known to occur:** The species has been documented in the review area by a reliable source.
- **High potential to occur:** The species has not been documented in the review area but is known to recently occur in the vicinity and suitable habitat is present.
- **Moderate potential to occur:** The species has not been documented in the review area or in the project vicinity, but the review area is within the known range of the species and suitable habitat for the species is present.

- **Low potential to occur:** The species has not been documented in the project vicinity or in the review area, but the review area is within the known range of the species; however, suitable habitat for the species is of low quality.
- **Not expected to occur:** The review area is outside the known geographic or elevational range of the species and/or the review area does not support suitable habitat for the species.

3.7.1 Special-Status Plants

Results of USFWS, CNDDDB, and CNPS database searches revealed 17 special-status plant species that are known to occur in the region. Of these 17 species, all were determined to have a low potential to occur or are not expected to occur in the review area due to the lack of suitable habitat or the presence of very low quality habitat within or adjacent to the review area, the lack of documented occurrences near the review area, and/or the review area being outside of the species' known geographic or elevation range; these species are identified in Attachment C, but not addressed further in this report.

3.7.2 Special-Status Wildlife

Results of the USFWS and CNDDDB searches revealed 15 special-status wildlife species that are known to occur in the region. Of these 15 species, all were determined to have a low potential to occur or are not expected to occur in the review area due to the lack of suitable habitat or the presence of very low quality habitat within or adjacent to the review area, the lack of documented occurrences near the review area, or due to the review area being outside of the species' known geographic or elevation range; these species are identified in Attachment D, but not addressed further in this report.

3.7.3 Nesting Birds and Raptors

The review area provides suitable nesting habitat for numerous local and migratory bird or raptor species protected by the federal Migratory Bird Treaty Act and the California Fish and Game Code. Specifically, shrubs, open habitat, and human-made structures and buildings in the review area provide suitable nesting habitat. Multiple common bird species were detected during the September 20 and 21, 2021, and May 25 and 26, 2023, field surveys (refer to Attachment B). No active or inactive bird nests were observed, but a focused survey for nests was not conducted.

3.8 Sensitive Vegetation Communities

Two sensitive vegetation communities were identified in the review area: Great Basin grassland and seasonal wetland. Great Basin grassland is State Rarity S3 and Global Rarity G3. State (S) ranks of 3 is considered highly imperiled by CDFW (2023) and Global (G) ranks G3 is considered vulnerable. Further, seasonal wetlands are under the jurisdiction of CDFW pursuant to Section 1602 of the California Fish and Game Code.

4 Conclusions and Recommendations

4.1 Special-Status Plants

Based on the field assessment and relevant literature, no special-status plant species have a moderate or high potential to occur in the review area. In general, the review area lacks the unique habitat features or vegetation communities normally required by the special-status plants assessed in this report, such as Great Basin scrub, pinyon and juniper woodland, coniferous forest, marshes, swamps, meadows, seeps, or vernal pools. Thus, no impacts to special-status plants are anticipated, and no mitigation measures are recommended at this time.

4.2 Special-Status Wildlife

Nesting Birds. Eventual development in the review area could involve structure and vegetation removal, which has the potential to impact nesting birds protected by the federal Migratory Bird Treaty Act and California Fish and Game Code. To avoid impacting active nests, Dudek recommends conducting tree and vegetation removal outside of the nesting season (February through September). If not feasible, Dudek recommends implementing the following measures to avoid or minimize impacts to nesting birds:

- A qualified biologist shall conduct a pre-construction survey for nesting birds no more than 2 days prior to vegetation or structure removal or ground-disturbing activities conducted during the nesting season (February through September). The survey shall cover the limits of construction and suitable nesting habitat within 500 feet for raptors and 100 feet for other nesting birds, as feasible and accessible.
- If any active nests are observed during surveys, a qualified biologist shall establish a suitable avoidance buffer from the active nest. The buffer distance shall typically range from 50 to 500 feet, and shall be determined based on factors such as the species of bird, topographic features, intensity and extent of the disturbance, timing relative to the nesting cycle, and anticipated ground-disturbance schedule. Limits of construction to avoid active nests shall be established in the field with flagging, fencing, or other appropriate barriers, and shall be maintained until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist.
- If vegetation removal activities are delayed, additional nest surveys shall be conducted such that no more than 7 days elapse between the survey and vegetation removal activities.
- If an active nest is identified in or adjacent to the construction zone after construction has started, work in the vicinity of the nest shall be halted until the qualified biologist can provide appropriate avoidance and minimization measures to ensure that the nest is not disturbed by construction. Appropriate measures may include a no-disturbance buffer until the birds have fledged and/or full-time monitoring by a qualified biologist during construction activities conducted near the nest.

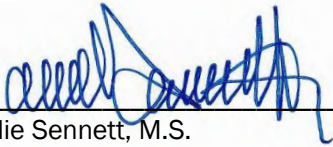
4.3 Aquatic Resources

Dudek biologists mapped approximately 48 acres of aquatic resources anticipated to meet the criteria to be considered jurisdictional aquatic resources under federal and state jurisdiction. Findings with regard to federal jurisdiction are preliminary until verified by the USACE Sacramento District.

Dudek recommends that eventual development in the review area avoid aquatic resources, including riparian vegetation (i.e., individual willows), where possible. Impacts to jurisdictional aquatic resources would be a significant impact under the California Environmental Quality Act and would require aquatic resource permits from USACE, the Regional Water Quality Control Board, and/or CDFW (e.g., 404 Nationwide Permit, 401 Water Quality Certification, and 1600 Streambed Alteration Agreement), as well as a Preliminary Jurisdictional Delineation from USACE to document aquatic resources in the review area within USACE jurisdiction. In addition, compensatory mitigation may be required for permanent impacts to aquatic resources to ensure no net loss of these resources. Potential compensatory mitigation options include purchasing mitigation credits from an agency-approved wetlands mitigation bank or paying an agency-approved in-lieu fee. Where direct impacts to jurisdictional aquatic resources can be avoided, exclusion fencing should be installed between the avoided aquatic resource and the limits of disturbance to protect the resources from impacts. A qualified wetland specialist should guide installation of the exclusion fencing. Appropriate best management practices and spill prevention measures should also be implemented to ensure protection of jurisdictional aquatic resources during project construction.

If you have any questions or concerns regarding the content of this report, please contact me at 916.521.5798 or asennett@dudek.com.

Sincerely,



Allie Sennett, M.S.
Biologist/Wetland Specialist

Atts.: *Figure 1 – Project Location*
Figure 2 – Project Site
Figure 3 – Soil Types
Figure 4 – Hydrologic Setting
Figure 5 – Vegetation Communities and Land Cover Types
Figure 6 – Aquatic Resources Delineation

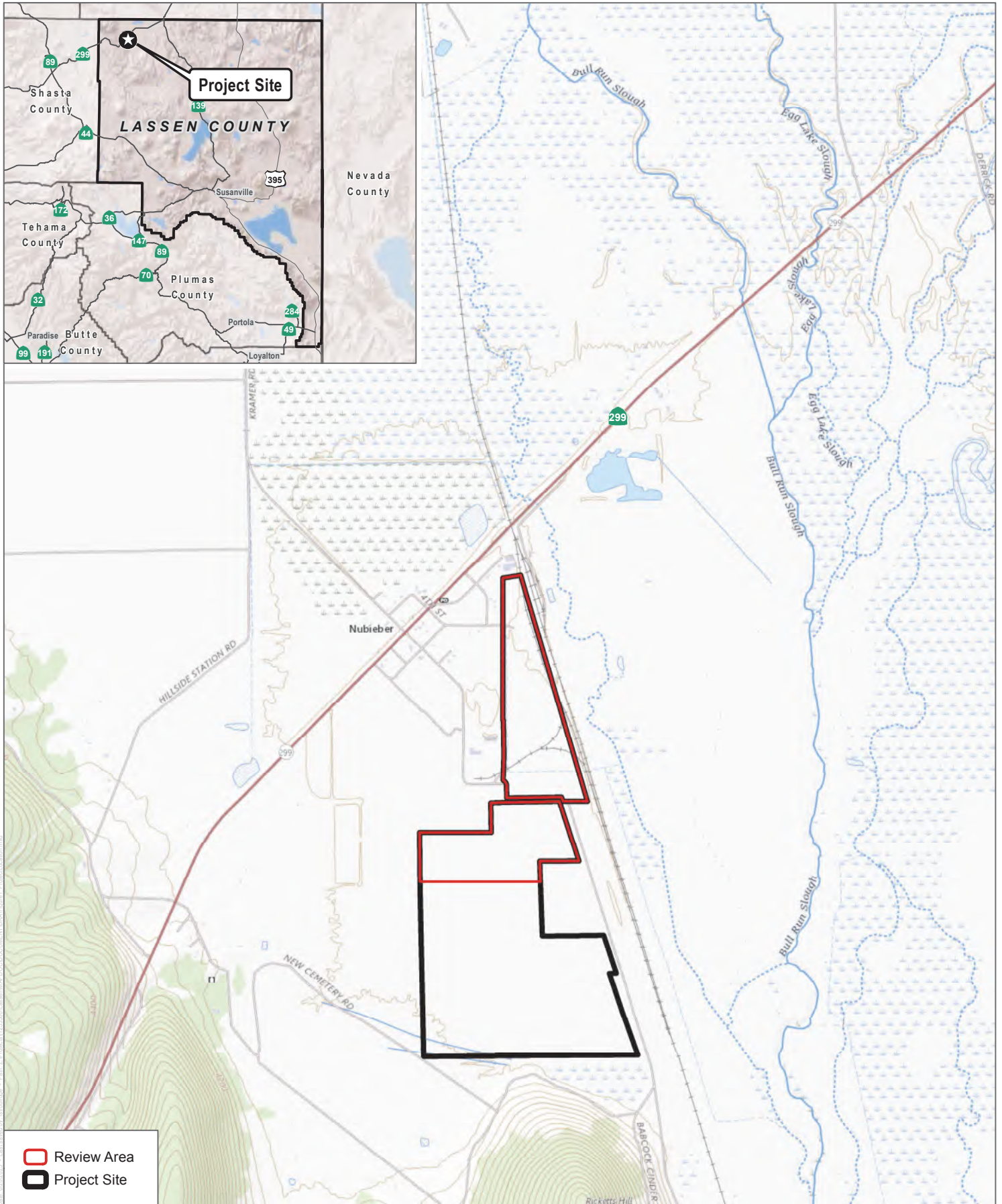
Attachment A, Representative Review Area Photos
Attachment B, List of Plant and Wildlife Species Observed in the Review Area
Attachment C, Special-Status Plant Species Potential to Occur in the Review Area Region
Attachment D, Special-Status Wildlife Species Potential to Occur in the Review Area Region

5 References

Calflora. 2021. Information on California Plants for Education, Research, and Conservation. Updated August 19, 2021. Berkeley, California: The Calflora Database [a non-profit organization]. Accessed September 2021. <https://www.calflora.org/>.

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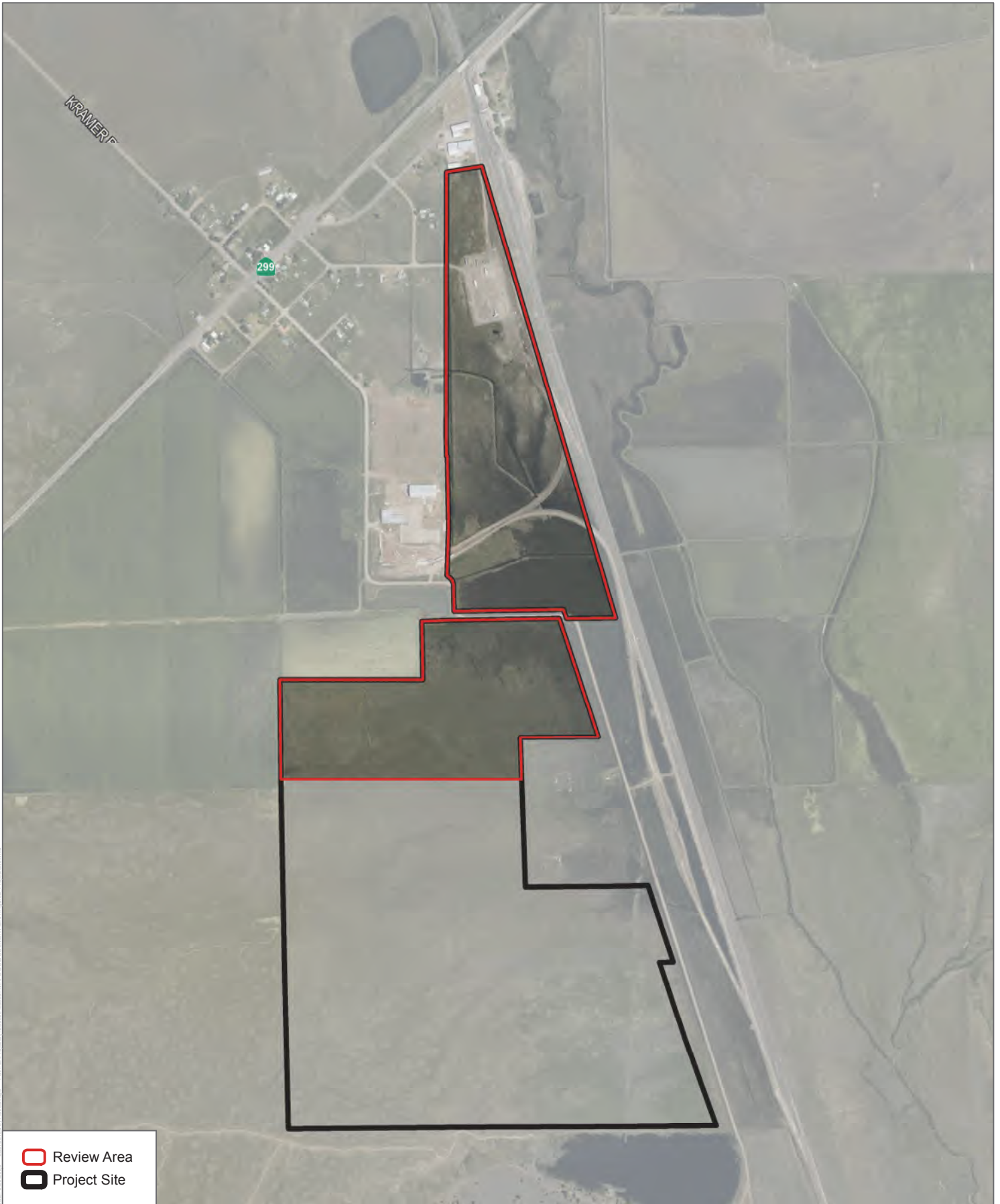
SOURCE: Bing Maps 2020, Lassen County 2015

FIGURE 1

Project Location

Forest Resiliency Program - Lassen Facility



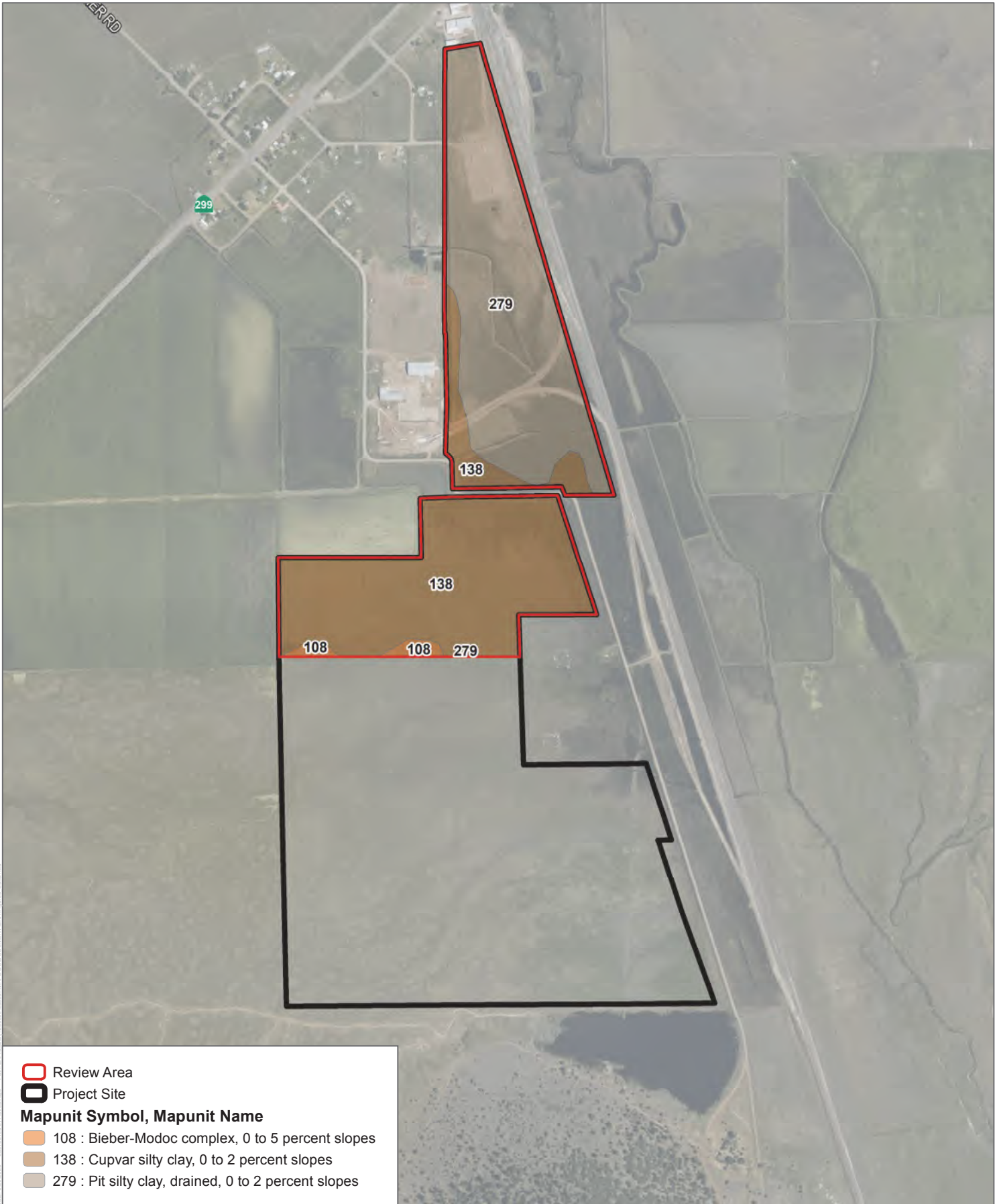


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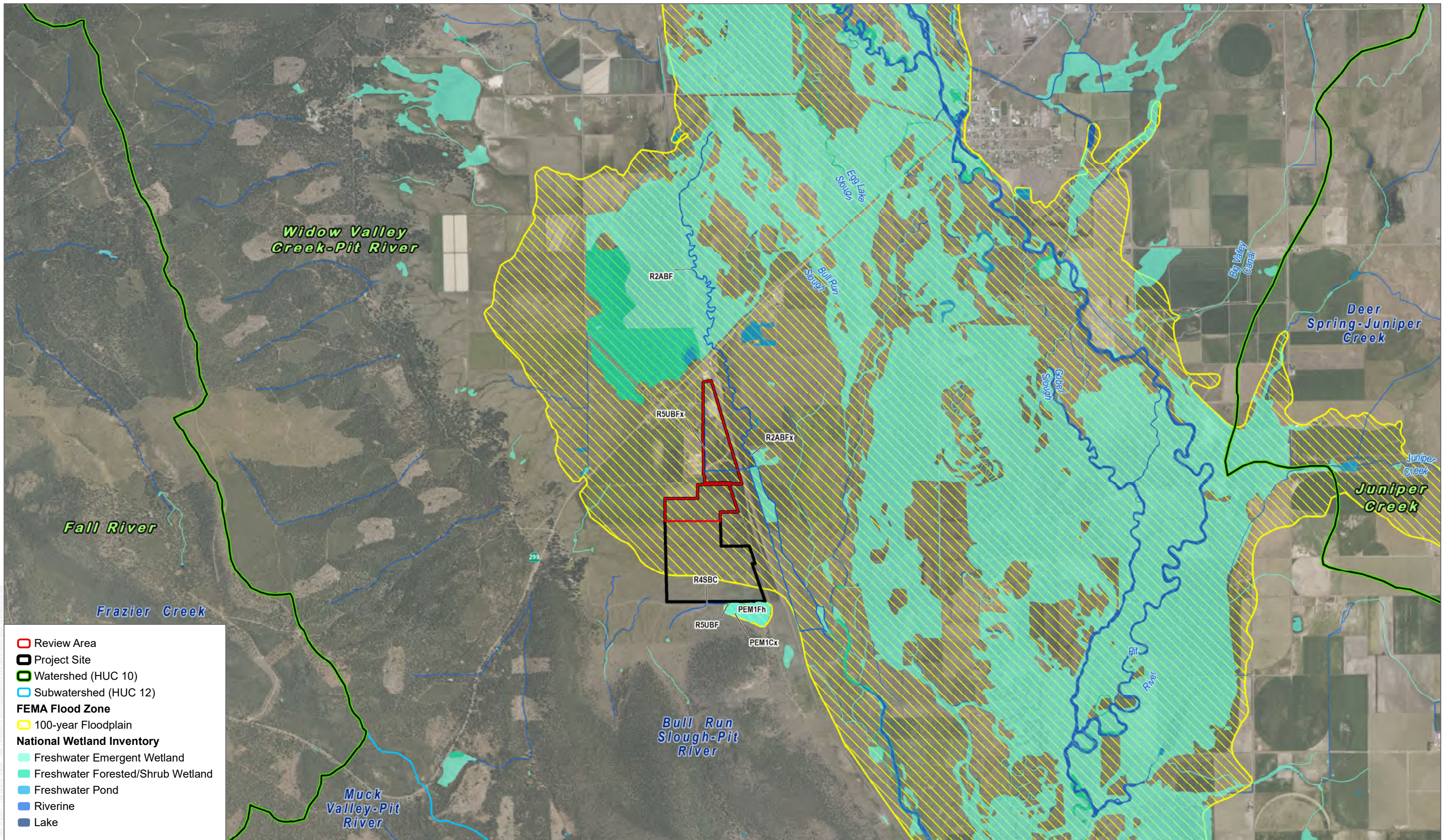
SOURCE: Bing Maps 2020, Lassen County 2015

FIGURE 2
Project Site

Forest Resiliency Program - Lassen Facility



SOURCE: Bing Maps 2020, Lassen County 2015, USDA SSURGO 2021



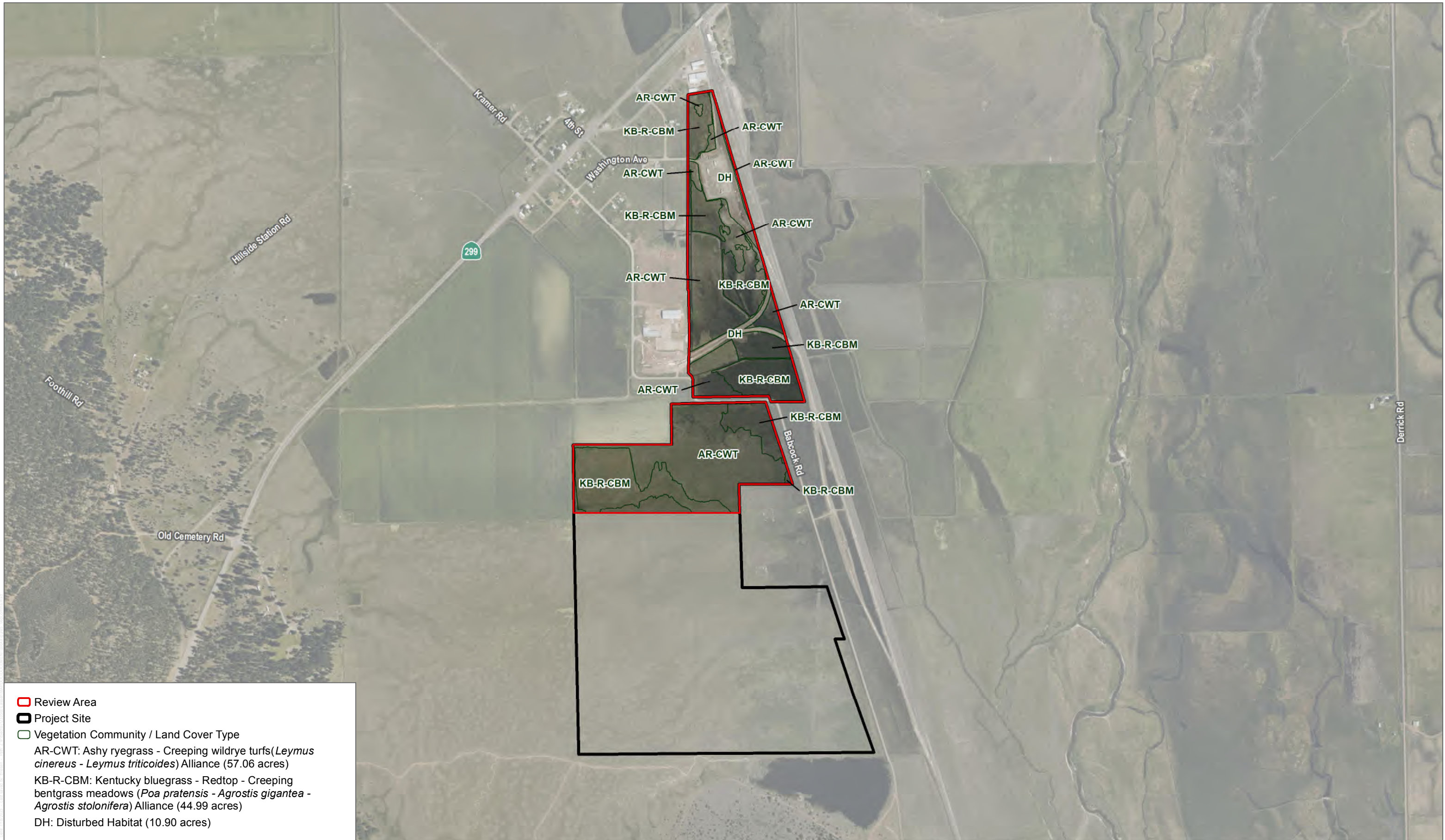
SOURCE: Bing Maps 2021, USFWS 2019, NHD, FEMA 2019



FIGURE 4

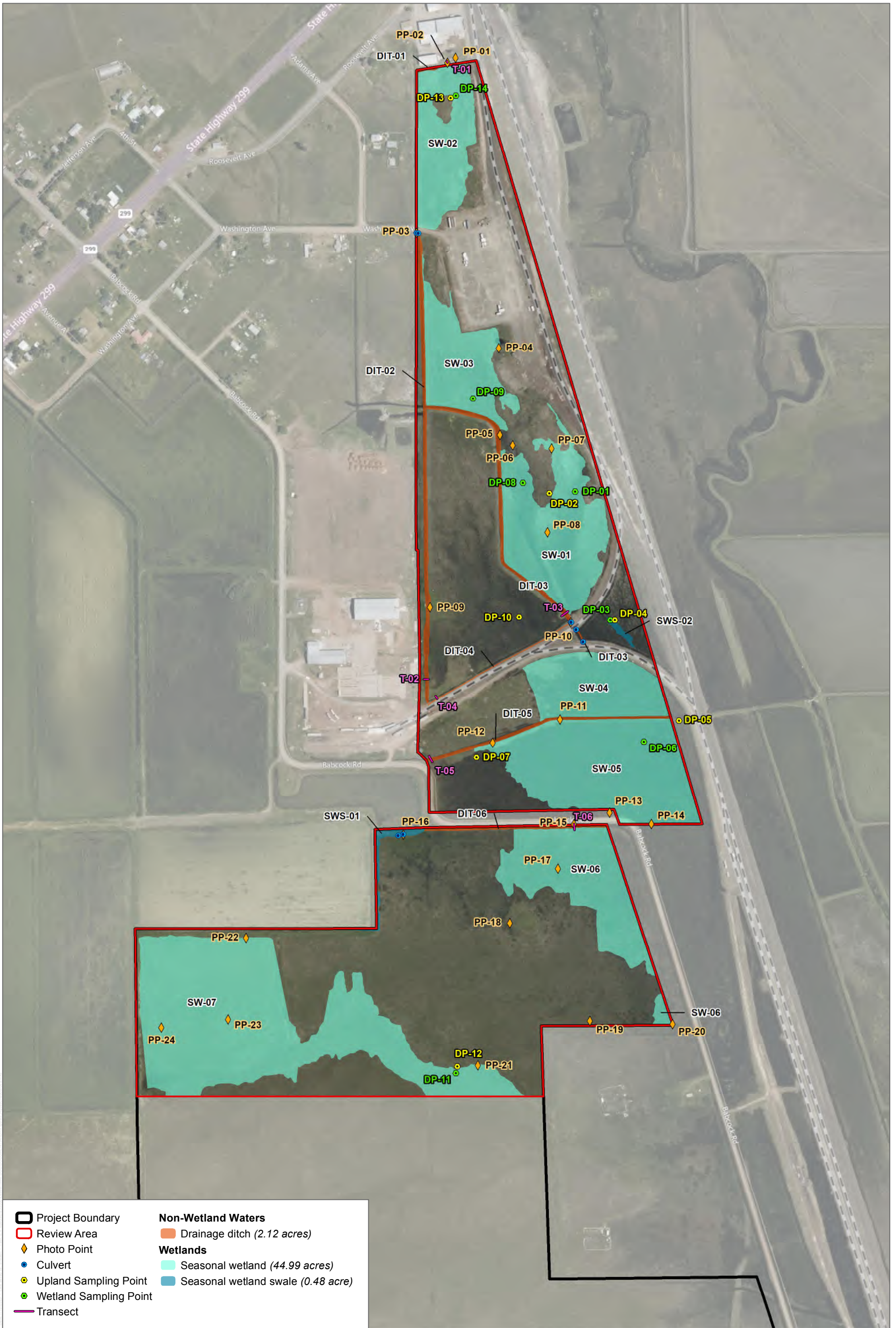
Hydrologic Setting

Forest Resiliency Program - Lassen Facility



SOURCE: Bing Maps 2021, Open Street Map 2019, FRAP 2015

FIGURE 5



SOURCE: Bing Maps 2023



FIGURE 6
 Aquatic Resources Delineation - USACE, CDFW, and RWQCB
 Forest Resiliency Program - Lassen Facility

Attachment A

Representative Review Area Photos



Photo 1. View facing south across ditch (DIT-01) at the seasonal wetland (SW-02). May 26, 2023.



Photo 2. View facing east from southern bank of ditch (DIT-01) of the review area. May 26, 2023.



Photo 3. View facing south at DIT-01 that runs along the west boundary of the northern portion of the review area. May 26, 2023.



Photo 4. View facing west at seasonal wetland (SW-03) in the northern portion of the review area. May 26, 2023.



Photo 5. View facing south at ditch (DIT-03) that runs through the middle of the northern portion of the review area. May 26, 2023.



Photo 6. View facing south at a transition from upland to seasonal wetland (SW-01). May 25, 2023.



Photo 7. View facing north at upland area north of seasonal wetland (SW-01). May 26, 2023.



Photo 8. View facing south at seasonal wetland (SW-01). May 25, 2023.



Photo 9. View facing north at upland area north of seasonal wetland (SW-01). May 26, 2023.



Photo 10. View facing west at ditch (DIT-04) adjacent to railway. May 25, 2023.



Photo 11. View facing east at ditch (DIT-05) with seasonal wetland (SW-04) on the left/north and seasonal wetland (SW-05) on the right/south. May 26, 2023.



Photo 12. View facing south at the intersection between seasonal wetland (SW-05) and upland area to the south. May 26, 2023.



Photo 13. View facing east at seasonal wetland (SW-05). May 26, 2023.



Photo 14. View facing west at ditch at seasonal wetland (SW-05). May 26, 2023.



Photo 15. View facing south across ditch (DIT-06) on south side of Babcock Road. May 26, 2023.



Photo 16. View facing east at seasonal wetland swale (SWS-02) in the low-lying depressional area that partially drains ditch (DIT-06). May 26, 2023.



Photo 17. View facing north at seasonal wetland (SW-06). May 26, 2023.



Photo 18. View facing north from middle of upland area between seasonal wetlands to the northeast (SW-06) and southwest (SW-07). May 26, 2023.



Photo 19. View facing west at upland area between seasonal wetlands to the northeast (SW-06) and southwest (SW-07). May 25, 2023.



Photo 20. View facing north at seasonal wetland (SW-06) in the southeast corner of the review area. May 26, 2023.



Photo 21. View facing west at upland area to the north/right and seasonal wetland (SW-07) on the south/left. May 25, 2023.



Photo 22. View facing south at seasonal wetland (SW-07). May 26, 2023.



Photo 23. View facing south at seasonal wetland (SW-07) with upland area shown in the far background. May 26, 2023.



Photo 24. View facing east at seasonal wetland (SW-07). May 25, 2023.

Attachment B

List of Plant and Wildlife Species Observed
in the Review Area

Plant Species

Eudicots

Vascular Species

APIACEAE – CARROT FAMILY

- Eryngium* sp. – eryngo
- Lomatium triternatum* – nineleaf biscuitroot

ASTERACEAE – SUNFLOWER FAMILY

- Artemisia tridentata* – big sagebrush
- Blepharipappus scaber* – rough eyelashweed
- * *Centaurea solstitialis* – yellow star-thistle
- * *Chondrilla juncea* – rush skeletonweed
- * *Cirsium vulgare* – bull thistle
- Ericameria nauseosa* – rubber rabbitbrush
- Gnaphalium palustre* – western marsh cudweed
- * *Grindelia squarrosa* – curlycup gumweed
- Holocarpha* sp. – tarweed
- * *Lactuca saligna* – willowleaf lettuce
- Senecio hydrophiloides* – sweet marsh ragwort
- Symphotrichum* sp. – aster
- * *Tragopogon* sp. – salsify

BORAGINACEAE – BORAGE FAMILY

- Phacelia thermalis* – heated phacelia
- Plagiobothrys bracteatus* – bracted popcornflower

BRASSICACEAE – MUSTARD FAMILY

- * *Lepidium chalepense* – lenspod whitetop

CAMPANULACEAE – BELLFLOWER FAMILY

- Downingia cuspidata* – toothed calicoflower

CARYOPHYLLACEAE – PINK FAMILY

- * *Paronychia* sp. – nailwort

CHENOPODIACEAE – GOOSEFOOT FAMILY

- Chenopodium* sp. – goosefoot

ELATINACEAE – WATERWORT FAMILY

Elatine californica – California waterwort

FABACEAE – LEGUME FAMILY

Acmispon americanus – Spanish clover

Lupinus brevicaulis – shortstem lupine

ONAGRACEAE – EVENING PRIMROSE FAMILY

Epilobium brachycarpum – tall annual willowherb

OROBANCHACEAE – BROOM-RAPE FAMILY

Castilleja campestris – vernal pool Indian paintbrush

PLANTAGINACEAE – PLANTAIN FAMILY

Collinsia parviflora – maiden blue eyed Mary

Veronica peregrina – neckweed

POLEMONIACEAE – PHLOX FAMILY

Microsteris gracilis – slender phlox

Polemonium micranthum – annual polemonium

POLYGONACEAE – BUCKWHEAT FAMILY

* *Polygonum aviculare* – prostrate knotweed

* *Rumex acetosella* – common sheep sorrel

* *Rumex crispus* – curly dock

RANUNCULACEAE – BUTTERCUP FAMILY

Delphinium depauperatum – slim larkspur

Ranunculus alismifolius – plantainleaf buttercup

Ranunculus occidentalis – western buttercup

SALICACEAE – WILLOW FAMILY

Salix exigua – sandbar willow

Gymnosperms and Gnetophytes

PINACEAE – PINE FAMILY

Abies magnifica – red fir

Monocots

AGAVACEAE – AGAVE FAMILY

Camassia leichtlinii – large camas

Camassia quamash – small camas

ALLIACEAE – ONION FAMILY

Allium amplexans – narrowleaf onion

Allium lemmonii – Lemmon's onion

CYPERACEAE – SEDGE FAMILY

Carex athrostachya – slenderbeak sedge

Eleocharis macrostachya – pale spike rush

Eleocharis parishii – Parish's spike rush

JUNCACEAE – RUSH FAMILY

Juncus articulatus – jointleaf rush

Juncus balticus – Baltic rush

POACEAE – GRASS FAMILY

* *Agrostis stolonifera* – creeping bentgrass

* *Bromus racemosus* – bald brome

* *Bromus tectorum* – cheatgrass

* *Elymus caput-medusae* – medusahead

Elymus cinereus – ashy ryegrass

Elymus trachycaulus – slender wheatgrass

* *Festuca bromoides* – brome fescue

Festuca idahoensis – Idaho fescue

Festuca microstachys – small fescue

* *Festuca myuros* – rat-tail fescue

* *Gastridium phleoides* – nit grass

* *Phleum pratense* – timothy

* *Poa pratensis* – Kentucky blue grass

TYPHACEAE – CATTAIL FAMILY

Typha sp. – cattail

Wildlife Species

Birds

Blackbirds, Orioles, and Allies

ICTERIDAE – BLACKBIRDS

- Agelaius phoeniceus* – red-winged blackbird
- Euphagus cyanocephalus* – Brewer's blackbird
- Sturnella neglecta* – western meadowlark

Flycatchers

TYRANNIDAE – TYRANT FLYCATCHERS

- Sayornis nigricans* – black phoebe

Hawks

ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

- Buteo jamaicensis* – red-tailed hawk

New World Vultures

CATHARTIDAE – NEW WORLD VULTURES

- Cathartes aura* – turkey vulture

Pigeons and Doves

COLUMBIDAE – PIGEONS AND DOVES

- Zenaida macroura* – mourning dove
- * *Streptopelia decaocto* – Eurasian collared-dove

Shorebirds

CHARADRIIDAE – LAPWINGS AND PLOVERS

- Charadrius vociferus* – killdeer

SCOLOPACIDAE – SANDPIPERS, PHALAROPES, AND ALLIES

- Tringa semipalmata* – willet

Starlings and Allies

STURNIDAE – STARLINGS

- * *Sturnus vulgaris* – European starling

Swallows

HIRUNDINIDAE – SWALLOWS

- Hirundo rustica* – barn swallow

New World Sparrows

PASSERELLIDAE – NEW WORLD SPARROWS

- Passerculus sandwichensis* – savannah sparrow
- Zonotrichia leucophrys* – white-crowned sparrow

Mammals

Canids

CANIDAE – WOLVES AND FOXES

- Canis latrans* – coyote

Hares and Rabbits

LEPORIDAE – HARES AND RABBITS

- Lepus californicus* – black-tailed jackrabbit

- * Signifies introduced (non-native) species.

Attachment C

Special-Status Plant Species Potential to Occur in the Review Area Region

Scientific Name	Common Name	Status (Federal/ State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Astragalus lemmonii</i>	Lemmon's milk-vetch	None/None/1B.2	Great Basin scrub, meadows and seeps, marshes and swamps (lake shores)/perennial herb/May–Aug(Sep)/3,300–7,215	Not expected to occur. Suitable habitat for this species is absent from the review area. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The nearest documented occurrence is approximately 10 miles northeast of the review area (CDFW 2023).
<i>Calochortus longebarbatus</i> var. <i>longebarbatus</i>	long-haired star-tulip	None/None/1B.2	Great Basin scrub, lower montane coniferous forest (openings and drainages), meadows and seeps, vernal pools; clay, mesic/perennial bulbiferous herb/June–Aug(Sep)/3,295–6,230	Low potential to occur. Wetland habitat for this species occurs within the review area. The nearest documented occurrence is approximately 6.5 miles northeast of the review area (CDFW 2023).
<i>Carex atherodes</i>	wheat sedge	None/None/2B.2	Meadows and seeps, marshes and swamps, pinyon and juniper woodland; mesic/perennial rhizomatous herb/June–Aug/4,265–5,050	Not expected to occur. Suitable woodland habitat for this species is absent from the review area. Moreover, the review area is at the lower elevational limit for this species. The nearest documented occurrence is approximately 7 miles north of the review area (CDFW 2023).
<i>Carex sheldonii</i>	Sheldon's sedge	None/None/2B.2	Lower montane coniferous forest (mesic), marshes and swamps (freshwater), riparian scrub/perennial rhizomatous herb/May–Aug/3,935–6,600	Not expected to occur. Suitable woodland habitat for this species is absent from the review area. The nearest documented occurrence is approximately 8.5 miles northeast of the review area (CDFW 2023).
<i>Crepis runcinata</i>	fiddleleaf hawksbeard	None/None/2B.2	Mojavean desert scrub, pinyon and juniper woodland; mesic, alkaline/perennial herb/May–Aug/4,100–7,200	Not expected to occur. Suitable woodland habitat for this species is absent from the review area. Moreover, the review area is at the lower elevational limit for this species. The nearest documented occurrence is approximately 9 miles northeast of the review area (CDFW 2023).

Scientific Name	Common Name	Status (Federal/ State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Downingia laeta</i>	Great Basin downingia	None/None/2B.2	Great Basin scrub (mesic), meadows and seeps, marshes and swamps (assorted shallow freshwater), pinyon and juniper woodland (mesic), vernal pools/ annual herb/May–July/ 4,000–7,215	Low potential to occur. Wetland habitat for this species occurs within the review area. The nearest occurrence of this species was documented in a ditch with standing water along Highway 299, approximately 2 miles northeast of the review area, from 1949 (CDFW 2023).
<i>Erythranthe inflatula</i>	ephemeral monkeyflower	None/None/1B.2	Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodland; gravelly or rocky, vernal mesic/annual herb/May–Aug/4,100–5,705	Not expected to occur. Suitable woodland habitat for this species is absent from the review area. Moreover, the review area is at the lower elevational limit for this species. The nearest documented occurrence is approximately 7.5 miles north of the review area (CDFW 2023).
<i>Frasera albicaulis</i> var. <i>modocensis</i>	Modoc green-gentian	None/None/2B.3	Great Basin grassland, upper montane coniferous forest (sometimes); openings/ perennial herb/May–July/ 2,950–5,740	Not expected to occur. Suitable habitat for this species is absent from the review area. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The nearest documented occurrence is approximately 10 miles northeast of the review area (CDFW 2023).
<i>Geum aleppicum</i>	Aleppo avens	None/None/2B.2	Great Basin scrub, lower montane coniferous forest, meadows and seeps/perennial herb/June–Aug/ 1,475–4,920	Not expected to occur. Suitable habitat for this species is absent from the review area. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The nearest documented occurrence is approximately 7 miles north of the review area (CDFW 2023).
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	None/SE/1B.2	Marshes and swamps (lake margins), vernal pools; clay/ annual herb/Apr–Aug/33–7,790	Low potential to occur. Wetland habitat for this species occurs within the review area. There are no documented occurrences within 10 miles of the review area (CDFW 2023).
<i>Orcuttia tenuis</i>	slender Orcutt grass	FT/SE/1B.1	Vernal pools; Often gravelly./ annual herb/May–Sep(Oct)/ 115–5,770	Low potential to occur. Wetland habitat for this species occurs within the review area. There are no documented occurrences within 10 miles of the review area (CDFW 2023).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Polygonum polygaloides</i> ssp. <i>esotericum</i>	Modoc County knotweed	None/None/1B.3	Great Basin scrub, lower montane coniferous forest, meadows and seeps, vernal pools; mesic/annual herb/May-Sep/2,900-5,540	Low potential to occur. Wetland habitat for this species occurs within the review area. The nearest documented occurrence is approximately 10 miles north of the review area (CDFW 2023).
<i>Ranunculus macounii</i>	Macoun's buttercup	None/None/2B.2	Great Basin scrub, meadows and seeps, pinyon and juniper woodland; mesic/perennial herb/June-July/4,590-5,905	Not expected to occur. The review area is outside of the species' known elevation range. The nearest documented occurrence is approximately 10 miles northeast of the review area (CDFW 2023).
<i>Scutellaria galericulata</i>	marsh skullcap	None/None/2B.2	Lower montane coniferous forest, meadows and seeps (mesic), marshes and swamps/perennial rhizomatous herb/June-Sep/0-6,885	Not expected to occur. Suitable habitat for this species is absent from the review area. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The nearest documented occurrence is approximately 9 miles northeast of the review area (CDFW 2023).
<i>Stachys pilosa</i>	hairy marsh hedge-nettle	None/None/2B.3	Great Basin scrub (mesic), meadows and seeps/perennial rhizomatous herb/June-Aug/3,935-5,805	Not expected to occur. Suitable habitat for this species is absent from the review area. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. There are no documented occurrences within 10 miles of the review area (CDFW 2023).
<i>Thelypodium howellii</i> ssp. <i>howellii</i>	Howell's thelypodium	None/None/1B.2	Great Basin scrub, meadows and seeps (alkaline)/perennial herb/May-July/3,935-6,000	Not expected to occur. Suitable habitat for this species is absent from the review area. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The nearest documented occurrence is approximately 8.5 miles west of the review area (CDFW 2023).

Scientific Name	Common Name	Status (Federal/ State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Triteleia grandiflora</i>	large-flowered triteleia	None/None/2B.1	Great Basin scrub, pinyon and juniper woodland/perennial bulbiferous herb/Apr-June/2,295-4,920	Not expected to occur. Suitable habitat for this species is absent from the review area. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The nearest documented occurrence is approximately 9 miles northeast of the review area (CDFW 2023).

Status Legend

FT = Federally threatened

SE = State endangered

CRPR = California Rare Plant Rank

CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere

.1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

.2 Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)

.3 Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

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CDFW (California Department of Fish and Wildlife). 2023. California Natural Diversity Database (CNDDDB). RareFind, Version 5. (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed July 2023. <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>.

Attachment D

Special-Status Wildlife Species Potential to Occur in the Review Area Region

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Invertebrates				
<i>Danaus plexippus</i> pop. 1	monarch	FC/None	Wind-protected tree groves with nectar sources and nearby water sources.	Not expected to occur. There is no suitable habitat present. There are no documented occurrences within 5 miles of the review area (CDFW 2023a).
Amphibians				
<i>Lithobates pipiens</i> (native populations only)	northern leopard frog	None/SSC	Adjacent to permanent and semi-permanent water in a range of habitats.	Not expected to occur. There is no suitable aquatic habitat present. There are no documented occurrences within 25 miles of the review area (CDFW 2023a).
Reptiles				
<i>Actinemys marmorata</i>	northwestern pond turtle	USFS/SSC	Highly aquatic species found in a broad range of aquatic habitats, including rivers and streams, permanent lakes, ponds, reservoirs, settling ponds, marshes, and other inundated wetlands. May use brackish, semi-permanent, or ephemeral features when inundated. Requires basking sites and loose soil in surrounding uplands suitable for nest excavation. Occurs throughout non-desert California from near sea level to approximately 6,700 feet. Isolated populations are known from the Mojave River, Susan River, Truckee River, Carson River, and Klamath Basin (Thomson et al. 2016).	Not expected to occur. The review area lacks potential aquatic habitat and suitable soils for upland nesting or overwintering habitat. The nearest documented occurrence is approximately 5.5 miles northeast of the review area (CDFW 2023a).
Birds				
<i>Accipiter gentilis</i>	northern goshawk	USFS/SSC	Prefers nesting in middle- and higher-elevation immature, dense conifer forests. Habitat requirements include meadows and riparian habitat. Usually nests near water on north slopes in the densest parts of vegetation stands, staying close to openings (CDFW 2023b). Nest stands consistently have	Not expected to occur. The review area lacks suitable forested habitat and is close to regular human disturbance from Highway 299 and an adjacent train track with active loading. The nearest documented occurrence is approximately 2.5 miles northeast of the review area (CDFW 2023a).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
			larger trees, greater canopy cover, and relatively more open understories than stands lacking nests (Shuford and Gardali 2008). Generally does not nest near areas of human habitation or paved roads (USFWS 2001).	
<i>Agelaius tricolor</i> (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture.	Low potential to occur. Cattails are present in the review area, but they are sparse and provide low-quality nesting habitat. The nearest documented occurrence is approximately 10.5 miles southwest of the review area (CDFW 2023a).
<i>Antigone canadensis tabida</i> (nesting and wintering)	greater sandhill crane	None/FP, ST	Winter foraging in cropland, grazed and mowed grassland, pasture, alfalfa fields, and shallow wetlands; roosting sites are flooded and support several inches of water.	Low potential to occur. The review area is unlikely to support roosting habitat except during heavy rain years. The review area has low-quality suitable foraging habitat. The nearest documented occurrence is approximately 2.5 miles northeast of the review area (CDFW 2023a).
<i>Buteo swainsoni</i> (nesting)	Swainson's hawk	None/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture.	Low potential to occur. The review area does not contain suitable nesting habitat. Foraging habitat in the review area is low quality. The nearest documented occurrence is approximately 10 miles northeast of the review area (CDFW 2023a).
<i>Centrocercus urophasianus</i> (nesting and leks)	greater sage-grouse	None/SSC	Uses a variety of sagebrush (<i>Artemisia</i> spp.) habitats year-round; also uses bitterbrush and alkali desert scrub.	Low potential to occur. Small, fragmented patches of suitable (sagebrush) habitat are present in the southern portion of the review area. Traditional lek locations tend to be reused by the species each year, so there is a lower potential for lekking to occur if this has not been previously recorded. The nearest documented occurrence is from 1981 and located approximately 10.5 miles northeast of the review area (CDFW 2023a). The next

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				nearest occurrences, documented as a part of a 3-year long telemetry study in Lassen County from April 1998 to July 2001, are limited to intact and expansive sagebrush scrub habitat in Grasshopper Valley, approximately 26 miles southeast of the review area (CDFW 2021).
<i>Chlidonias niger</i> (nesting colony)	black tern	BCC/SSC	Freshwater marsh with emergent vegetation; in the Central Valley primarily nests and forages in rice fields and other flooded agricultural fields with weeds and other residual aquatic vegetation.	Not expected to occur. The review area lacks suitable marsh habitat. The nearest documented occurrence is approximately 7 miles north of the review area (CDFW 2023a).
<i>Haliaeetus leucocephalus</i>	bald eagle	USFS, FDL, BCC/FP, SE	Occurs along coasts, rivers, and large, deep lakes and reservoirs in California. More widespread as a winter migrant. Requires large bodies of water or free-flowing rivers with abundant fish and perching sites. Nests in large old growth and dominant live trees with open branchwork. Favors Ponderosa pine (CDFW 2023b).	Not expected to occur. The review area lacks nesting and open water foraging habitat. The nearest documented occurrence is approximately 7 miles north of the review area (CDFW 2023a).
<i>Pelecanus erythrorhynchos</i> (nesting colony)	American white pelican	BCC/SSC	Nests colonially on sandy, earthen, or rocky substrates on isolated islands in freshwater lakes; minimal disturbance from predators; access to foraging areas on inland marshes, lakes, or rivers; winters on shallow coastal bays, inlets, and estuaries.	Not expected to occur. The review area lacks suitable habitat for this species. There are no documented occurrences within 10 miles of the review area (CDFW 2023a).
<i>Progne subis</i> (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats, including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways.	Not expected to occur. The review area lacks suitable woodland habitat. The nearest occurrence is approximately 3 miles southwest of the review area (CDFW 2023a).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Mammals				
<i>Lepus americanus klamathensis</i>	Oregon snowshoe hare	None/SSC	Riparian with thickets of deciduous trees, such as alders and willows, dense thickets of conifers, and sometimes ceanothus and manzanita.	Not expected to occur. Riparian habitat in the review area is limited to just a couple small willows. There are no documented occurrences within 25 miles of the review area (CDFW 2023a).
<i>Pekania pennanti</i>	fisher – West Coast Distinct Population Segment	USFS/SSC, ST	Uncommon permanent resident of Sierra Nevada, Cascades, Klamath Mountains, and the north Coast Range. Occurs above 3,200 feet in the Sierra Nevada and Cascades (Jameson and Peeters 2004). Prefers coniferous or deciduous riparian habitats with intermediate to large trees and closed canopies. Canopy closure must be greater than 50% to be suitable habitat. Dens in a variety of protected cavities, brush piles, logs, and upturned trees. Hollow logs, trees, and snags are especially important (CDFG 2010).	Not expected to occur. No suitable habitat is present on or adjacent to the review area. The nearest documented occurrence is approximately 10.5 miles southwest of the review area (CDFW 2023a).
<i>Vulpes vulpes necator</i>	Sierra Nevada red fox	USFS, FC/ST	Found in the Cascades in Siskiyou County, and from Lassen County south to Tulare County. Found in a variety of habitats, including alpine dwarf-shrub, wet meadow, subalpine conifer, aspen, montane chaparral, montane riparian, and mixed conifer forest (e.g., red fir, Ponderosa pine, lodgepole pine). Most sightings in the Sierra Nevada are above 7,000 feet, with a range of 3,900 to 11,900 feet above mean sea level. Den sites include rock outcrops; hollow logs and stumps; and burrows in deep, loose soil. Prefers forests interspersed with meadows or alpine fell-fields. Edge habitats are used extensively. Moves downslope in winter to Ponderosa pine and mixed conifer,	Not expected to occur. The review area lacks suitable habitat and is close to regular human disturbance from Highway 299 and an adjacent train track with active loading. In addition, there are only two populations known to exist: one near Lassen Peak and the other near Sonora Pass (CDFW 2023b). The nearest documented occurrence is approximately 8 miles west of the review area (CDFW 2023a).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
			and upslope in summer to lodgepole pine, subalpine conifer, alpine dwarf-shrub, and red fir habitats (CDFW 2023b).	

Status Abbreviations

Federal

BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

FC: Federal Candidate

FDL: Federally Delisted

USFS: U.S. Forest Service Sensitive Species

State

FP: California Fully Protected Species

SE: State Endangered

SSC: California Species of Special Concern

ST: State Threatened

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