BIOLOGICAL RESOURCES ASSESSMENT
FOR THE PROPOSED COMMERCIAL BUILDING
15880 AND 15884 KUGELMAN ST, LOWER LAKE, CALIFORNIA

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TABLE OF CONTENTS

1. INTRODUCTION 2
1.1. PROJECT LOCATION AND DESCRIPTION 2
1.2. SCOPE OF ASSESSMENT 2
1.3. REGULATORY SETTING 2
1.3.1. Special-status Species Regulations 2
1.3.2. Water Resource Protection 3
2. ENVIRONMENTAL SETTING 4
3. METHODOLOGY 5
3.1. PRELIMINARY DATA GATHERING AND RESEARCH 5
3.2. FIELD SURVEY 5
3.3. MAPPING AND OTHER ANALYSES 5
4. RESULTS 7
4.1. INVENTORY OF FLORA AND FAUNA FROM FIELD SURVEY 7
4.2. VEGETATION TYPES AND SENSITIVE COMMUNITIES 8
4.2.1. CNPS Vegetation Types 8
4.2.2. Critical Habitat and Special-status Habitat 8
4.2.3. Habitat Plans and Wildlife Corridors 8
4.3. LISTED SPECIES AND OTHER SPECIAL-STATUS SPECIES 8
4.3.1. Reported Occurrences of Listed Species and Other Special-status Species 9
4.3.2. Listed Species or Special-status Species Observed During Field Survey 11
4.3.3. Potential for Listed Species or Special-status Species to Occur in the Project Area 11
4.4. POTENTIALLY-JURISDICTIONAL WATER RESOURCES 11
5. IMPACT ANALYSES AND MITIGATION MEASURES 12
5.1. IMPACT SIGNIFICANCE CRITERIA 12
5.2. IMPACT ANALYSIS 12
5.2.1. Potential Direct / Indirect Adverse Effects Upon Special-status Species 12
5.2.2. Potential Direct / Indirect Adverse Effects Upon Special-status Habitats or Natural Communities or Corridors 13
5.2.3. Potential Direct / Indirect Adverse Effects on Jurisdictional Water Resources 13
5.2.4. Potential Impacts to Wildlife Movement, Corridors, etc. 14
5.2.5. Potential Conflicts with Ordinances, Habitat Conservation Plans, etc. 14
6. REFERENCES 15
EXHIBITS ..... A
APPENDIX 1: USFWS SPECIES LIST ..... B
APPENDIX 2: SITE PHOTOS C
APPENDIX 3: SPECIAL-STATUS SPECIES TABLE AND POTENTIAL TO OCCUR ..... D

1. INTRODUCTION

1.1. PROJECT LOCATION AND DESCRIPTION

A biological resources assessment was conducted on 2 parcels at 15880 and 15884 Kugelman St, Lower Lake, California: APN 012-025-33 (5 acre) and 012-025-480 (2.5 acre). The proposed project is the construction of a commercial building (3,000 square feet) and graveled parking lot with a couple of ADA accessible parking spots paved (see Exhibits). The footprint of the building and parking lot are about 0.4 acres, and this Project Area was the subject of the impact analysis. The entire 7.5-acre property was defined as the Study Area. The Study Area is defined to identify biological resources adjacent to the Project Area, and is the area subject to potential indirect effects from Project implementation.

1.2. SCOPE OF ASSESSMENT

This assessment provides information about the biological resources within the Project Area, the regulatory environment affecting such resources, any potential Project-related impacts upon these resources, and finally, to identify mitigation measures and other recommendations to reduce the significance of these impacts. The specific scope of services performed for this assessment consisted of the following tasks:

- Compile all readily-available historical biological resource information about the Project Area;
- Spatially query state and federal databases for any occurrences of special-status species or habitats within the Project Area and vicinity;
- Perform a reconnaissance-level field survey of the Project Area, including photographic documentation;
- Inventory all flora and fauna observed during the field survey;
- Characterize and map the habitat types present within the Project Area, including any potentially-jurisdictional water resources;
- Evaluate the likelihood for the occurrence of any special-status species;
- Assess the potential for the Project to adversely impact any sensitive biological resources;
- Recommend mitigation measures designed to avoid or minimize Project-related impacts; and
- Prepare and submit a report summarizing all of the above tasks.

1.3. REGULATORY SETTING

The following section summarizes some applicable regulations of biological resources on real property in California.

1.3.1. Special-status Species Regulations

The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service implement the Federal Endangered Species Act of 1973 (FESA) (16 USC §1531 et seq.). Threatened and endangered species on the federal list (50 CFR §17.11, 17.12) are protected from “take” (direct or indirect harm), unless a FESA Section 10 Permit is granted or a FESA Section 7 Biological Opinion with incidental take provisions is rendered. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC §1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require mitigation. Species that are candidates for listing are not protected under FESA; however,

USFWS advises that a candidate species could be elevated to listed status at any time, and therefore, applicants should regard these species with special consideration.

The California Endangered Species Act of 1970 (CESA) (California Fish and Game Code §2050 *et seq*., and CCR Title 14, §670.2, 670.51) prohibits "take" (defined as hunt, pursue, catch, capture, or kill) of species listed under CESA. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Section 2081 establishes an incidental take permit program for state-listed species. Under CESA, California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of threatened and endangered species designated under state law (CFG Code 2070). CDFW also maintains lists of species of special concern, which serve as "watch lists." Pursuant to requirements of CESA, an agency reviewing proposed projects within its jurisdiction must determine whether any state-listed species may be present in the Project Area and determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation.

California Fish and Game Code Sections 4700, 5050, and 5515 designates certain mammal, amphibian, and reptile species "fully protected", making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The California Native Plant Protection Act of 1977 (CFG Code §1900 *et seq*.) requires CDFW to establish criteria for determining if a species or variety of native plant is endangered or rare. Section 19131 of the code requires that landowners notify CDFW at least 10 days prior to initiating activities that will destroy a listed plant to allow the salvage of plant material.

Many bird species, especially those that are breeding, migratory, or of limited distribution, are protected under federal and state regulations. Under the Migratory Bird Treaty Act of 1918 (16 USC §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury or death, and project-related disturbances must be reduced or eliminated during the nesting cycle. California Fish and Game Code (§3503, 3503.5, and 3800) prohibits the possession, incidental take, or needless destruction of any bird nests or eggs. Fish and Game Code §3511 designates certain bird species "fully protected", making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The Bald and Golden Eagle Protection Act (16 USC §668) specifically protects bald and golden eagles from harm or trade in parts of these species.

California Environmental Quality Act (CEQA) (Public Resources Code §15380) defines "rare" in a broader sense than the definitions of threatened, endangered, or fully protected. Under the CEQA definition, CDFW can request additional consideration of species not otherwise protected. CEQA requires that the impacts of a project upon environmental resources must be analyzed and assessed using criteria determined by the lead agency. Sensitive species that would qualify for listing but are not currently listed may be afforded protection under CEQA. The CEQA Guidelines (§15065) require that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines (§15380) provide for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Plant species on the California Native Plant Society CRPR Lists 1A, 1B, or 2 are typically considered rare under CEQA. California "Species of Special Concern" is a category conferred by CDFW on those species that are indicators of regional habitat changes or are considered potential future protected species. While they do not have statutory protection, Species of Special Concern are typically considered rare under CEQA and thereby warrant specific protection measures.

1.3.2. Water Resource Protection

Real property that contains water resources are subject to various federal and state regulations and activities occurring in these water resources may require permits, licenses, variances, or similar authorization from federal, state and local agencies, as described next.

The Federal Water Pollution Control Act Amendments of 1972 (as amended), commonly known as the Clean Water Act (CWA), established the basic structure for regulating discharges of pollutants into "waters of the United States". Waters of the US includes essentially all surface waters, all interstate waters and their tributaries, all impoundments of these waters, and all wetlands adjacent to these waters. CWA Section 404 requires approval prior to dredging or discharging fill material into any waters of the US, especially wetlands. The permitting program is designed to minimize impacts to waters of the US, and when impacts cannot be avoided, requires compensatory mitigation. The US Army Corps of Engineers (USACE) is responsible for administering Section 404 regulations. Substantial impacts to jurisdictional wetlands may require an Individual Permit. Small-scale projects may require only a Nationwide Permit, which typically has an expedited process compared to the Individual Permit process. Mitigation of wetland impacts is required as a condition of the CWA Section 404 Permit and may include on-site preservation, restoration, or enhancement and/or off-site restoration or enhancement. The characteristics of the restored or enhanced wetlands must be equal to or better than those of the affected wetlands to achieve no net loss of wetlands.

Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification that the proposed activity will comply with State water quality standards. The California State Water Resources Control Board is responsible for administering CWA Section 401 regulations.

Section 10 of the Rivers and Harbors Act of 1899 requires approval from USACE prior to the commencement of any work in or over navigable Waters of the US, or which affects the course, location, condition or capacity of such waters. Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use, as a means to transport interstate or foreign commerce up to the head of navigation. Rivers and Harbors Act Section 10 permits are required for construction activities in these waters.

California Fish and Game Code (§1601 - 1607) protects fishery resources by regulating "*any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake*." CDFW requires notification prior to commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of ''waters of the State". The limit of CDFW jurisdiction is subject to the judgment of the Department; currently, this jurisdiction is interpreted to be the "stream zone", defined as "*that portion of the stream channel that restricts lateral movement of water*" and delineated at "*the top of the bank or the outer edge of any riparian vegetation, whichever is more landward*". CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the CDFW and the applicant is the Streambed Alteration Agreement. Projects that require a Streambed Alteration Agreement may also require a CWA 404 Section Permit and/or CWA Section 401 Water Quality Certification.

For construction projects that disturb one or more acres of soil, the landowner or developer must obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ).

2. ENVIRONMENTAL SETTING

The Project Area is located within the Inner North Coast Range geographic subregion, which is contained within the Northwestern California geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). The Project Area and vicinity is in climate Zone 14 "Northern California's Inland Areas with Some Ocean Influence", with maritime air moderating temperatures that would otherwise be hotter in summer and colder in the winter (Sunset Western Garden Collection, 2025). The topography of

the Study Area is relatively flat, with a gentle slope to the north. The Project Area has gravel and rock piles; the fields are periodically mowed or hayed. The land uses of the Project Area are an existing commercial structure and pasture.

3. METHODOLOGY

3.1. PRELIMINARY DATA GATHERING AND RESEARCH

Prior to conducting the field survey, the following information sources were reviewed:

- Any readily-available previous biological resource studies pertaining to the Project Area or vicinity
- Aerial photography of the Project Area (current and historical)
- United States Geologic Service 7.5 degree-minute topographic quadrangles of the Project Area and vicinity
- USFWS National Wetland Inventory
- USDA Natural Resources Conservation Service soil survey maps
- California Natural Diversity Database (CNDDB), electronically updated monthly by subscription
- Query of the CNPS Rare Plant Inventory database (quadrangle search)(CNPS 2025a)
- USFWS species list (IPaC Trust Resources Report).

3.2. FIELD SURVEY

Consulting biologist Dr. Geo Graening conducted a reconnaissance-level field survey on August 30, 2025. Weather conditions were hot and sunny. A full coverage pedestrian survey was performed. All visible fauna and flora observed were recorded in a field notebook, and identified to the lowest possible taxon. Survey efforts emphasized the search for any special-status species that had documented occurrences in the CNDDB within the vicinity of the Project Area and those species on the USFWS species list (Appendix 1).

When a specimen could not be identified in the field, a photograph or voucher specimen (depending upon permit requirements) was taken and identified in the laboratory using a dissecting scope where necessary. Taxonomic determinations were facilitated by referencing museum specimens or by various texts and databases, including the following: Powell and Hogue (1979); Pavlik (1991); (1993); Stuart and Sawyer (2001); Lanner (2002); Sibley (2003); Jepson eFlora (UC Berkeley, 2025); Calflora (2025); NatureServe 2025.

The locations of any special-status species sighted were marked on aerial photographs and/or georeferenced with a geographic positioning system (GPS) receiver. Habitat types occurring in the Project Area were mapped on aerial photographs, and information on habitat conditions and the suitability of the habitats to support special-status species was also recorded. The Project Area was also informally assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats

3.3. MAPPING AND OTHER ANALYSES

Locations of species' occurrences and habitat boundaries within the Project Area were digitized to produce the final habitat maps. The boundaries of potentially jurisdictional water resources within the Project Area were identified and measured in the field, and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS Pro, ESRI, Inc.). Vegetation types (assemblages of plant species growing in an area of similar biological and environmental factors), were classified using the CNPS vegetation classification system (CNPS 2025b). Preliminary wetland delineation methods consisted of an abbreviated, visual assessment of the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the US Army Corps of Engineers Wetlands Delineation Manual

(Environmental Laboratory, 1987). Species' habitat requirements and life histories were identified using the following sources: Baldwin et al. (2012); CNPS (2021), Calflora (2021); CDFW (2021a,b,c); and University of California at Berkeley (2021a,b).

4. RESULTS

4.1. INVENTORY OF FLORA AND FAUNA FROM FIELD SURVEY

All plants detected during the field survey of the Project Area are listed in the table below. Only common animals were detected within the Study Area during the field survey, such as fence lizard (Sceloporus occidentalis); ants (Formicidae); grasshoppers (Orthoptera); coyote (scat; Canis latrans), common songbirds. No federally-listed species were detected. No special-status species were detected.

Scientific Name	Common Name
Agoseris grandiflora	California dandelion
Asclepias fascicularis	narrowleaf milkweed
Avena sp.	wild oat
Brassica sp.	mustard
Bromus hordeaceus	soft chess
Centaurea solstitialis	yellow star thistle
Chenopodium sp.	lamb's quarters
Cirsium vulgare	bull thistle
Convolvulus sp.	bindweed
Croton setigerus	turkey mullein
Eryngium sp.	coyote-thistle
Euphorbia sp.	spurge
Hemizonia congesta	hayfield tarweed
Holocarpha virgata	yellowflower tarweed
Hordeum murinum	mouse barley
Juncus effusus	common rush
Kickxia sp.	cancerwort
Lactuca serriola	prickly lettuce
Lolium perenne	perennial ryegrass
Lythrum salicaria	purple loosestrife
Oleander sp.	Oleander
Phalaris aquatica	canary-grass
Plantago lanceolata	narrowleaf plantain
Polygonum sp.	knotgrass
Quercus lobata	valley oak
Rumex crispus	curly dock
Sporobolus sp.	sacaton grass
Thlaspi arvense	field pennycress
Xanthium sp.	cocklebur

4.2. VEGETATION TYPES AND SENSITIVE COMMUNITIES

4.2.1. CNPS Vegetation Types

General vegetation communities occurring in the Study Area were mapped (see Exhibits). More specifically, the following terrestrial natural communities occur in the Study Area (as categorized by CNPS 2025b):

- 42.000.000 Non-native Grassland
  - 42.042.02 Centaurea solstitialis Star thistle field
  - 42.027.00 Wild Oats and Annual Brome Grasslands
- 11.000.00 Disturbed
  - 11.200.00 Disturbed Wetland
  - 12.000.00 Urban/Developed
- 18.000.00 Agriculture
  - 18.310.00 Field/Pasture

The Project Area contains only urban/developed habitat and field/pasture habitat.

4.2.2. Critical Habitat and Special-status Habitat

No critical habitat for any federally-listed species occurs within the Study Area. The CNDDB reported no special-status habitats within the Study Area. The CNDDB reported the following special-status habitats in a 10-mile radius outside of the Study Area: Central Valley Drainage Rainbow Trout/Cyprinid Stream; Clear Lake Drainage Resident Trout Stream; Coastal and Valley Freshwater Marsh; Northern Basalt Flow Vernal Pool; and Northern Volcanic Ash Vernal Pool. No special-status habitats were detected within the Project Area during the field survey but the Study Area has some seasonal wetlands in the drainage ditch.

4.2.3. Habitat Plans and Wildlife Corridors

Wildlife movement corridors link remaining areas of functional wildlife habitat that are separated primarily by human disturbance, but natural barriers such as rugged terrain and abrupt changes in vegetation cover are also possible. Wilderness and open lands have been fragmented by urbanization, which can disrupt migratory species and separate interbreeding populations. Corridors allow migratory movements and act as links between these separated populations.

No fishery resources exist in or adjacent to the Project Area; the nearest is Clear Lake and Cache Creek outlet. Although there are no designated wildlife corridors, the open space within the Project Area allows for animal movement. Perimeter fencing hinders some movement. The Project Area is not located within any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

4.3. LISTED SPECIES AND OTHER SPECIAL-STATUS SPECIES

For the purposes of this assessment, “special status” is defined to be species that are of management concern to state or federal natural resource agencies, and include those species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under the Federal Endangered Species Act;
- Listed as endangered, threatened, rare, or proposed for listing, under the California Endangered Species Act of 1970;
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as a species of special concern by CDFW;

- Plants considered to be rare, threatened or endangered in California by the California Native Plant Society (CNPS); this consists of species on Lists 1A, 1B, and 2 of the California Rare Plant Rank ranking system; or
- Plants listed as rare under the California Native Plant Protection Act.

4.3.1. Reported Occurrences of Listed Species and Other Special-status Species

A list of special-status plant and animal species that have occurred within the Project Area and vicinity was compiled based upon the following:

- Any previous and readily-available biological resource studies pertaining to the Project Area;
- Informal consultation with USFWS by generating an electronic Species List (Information for Planning and Conservation website at https://ecos.fws.gov/ipac/); and
- A spatial query of the CNDDB using the standard 9 quadrangle boundary
- A query of the California Native Plant Society's database *Inventory of Rare and Endangered Plants of California* (online edition).

The CNDDB was queried and any reported occurrences of special-status species were plotted in relation to the Project Area boundary using GIS software (see exhibits). The CNDDB reported 3 special-status species occurrences within the vicinity of the Project Area.

American bumble bee (*Bombus pensylvanicus*)
accuracy 1 mile
Presumed Extant
Record details are: "*VICINITY OF CACHE CREEK AT CA-53 CROSSING, JUST SE OF CLEAR LAKE. EXACT LOCATION UNKNOWN. MAPPED TO COORDINATES GIVEN BY MUSEUM FOR "CACHE CREEK", BUT COLLECTION COULD BE FROM ANYWHERE ALONG CACHE CREEK. 1 QUEEN COLLECTED BY N. SMITH ON 10 OCT 1974 (BMEC ENT #1961)*."

few-flowered navarretia (*Navarretia leucocephala* ssp*. pauciflora*)
accuracy 1 mile
Presumed Extant
Record details are: "*LOWER LAKE. EXACT LOCATION UNKNOWN, MAPPED IN GENERAL VICINITY OF LOWER LAKE. VERNAL POOL. BASED ON A 1938 DUTTON COLLECTION. A 1951 HOLM COLLECTION FROM "BETWEEN LOWER LAKE AND MIDDLETON" IS ALSO ATTRIBUTED TO THIS SITE. NEEDS FIELDWORK*."

Hall's harmonia (*Harmonia hallii*)
accuracy 1 mile
Presumed Extant
Record details are: "*LOWER LAKE. EXACT LOCATION NOT KNOWN. MAPPED BY CNDDB IN THE GENERAL VICINITY OF LOWER LAKE. ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1893 COLLECTION BY BLANKENSHIP. NEEDS FIELDWORK*."

Within a 10-mile buffer of the Project Area boundary, the CNDDB reported several special-status species occurrences, summarized in the table in the Appendix along with any additional CNPS species.

A USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System (see Appendix 1). This list is generated using a regional and/or watershed approach and does not necessarily indicate that the Project Area provides suitable habitat. The following listed species should be considered in the impact assessment:

- Northern Spotted Owl (Strix occidentalis caurina) Threatened

- Northwestern Pond Turtle (Actinemys marmorata) Proposed Threatened
- Clear Lake Hitch (Lavinia exilicauda chi) Proposed Threatened
- Monarch Butterfly (Danaus plexippus) Proposed Threatened
- Burke's Goldfields (Lasthenia burkei) Endangered
- Few-flowered Navarretia (Navarretia leucocephala ssp. pauciflora) Endangered
- Slender Orcutt Grass (Orcuttia tenuis) Threatened

Migratory birds should also be considered in the impact assessment.

4.3.2. Listed Species or Special-status Species Observed During Field Survey

During the field survey, no special-status species were detected within the Project Area.

4.3.3. Potential for Listed Species or Special-status Species to Occur in the Project Area

See the Appendix for a complete table of Special-status Species and their potential to occur in the Project Area. The pasture and non-native grasslands within the Project Area have a low potential for harboring special-status plant species due to the dominance of aggressive non-native grasses and forbs. There are permanent water resources within the Study Area that can sustain aquatic special-status species.

4.4. POTENTIALLY-JURISDICTIONAL WATER RESOURCES

The USFWS National Wetland Inventory reported no water features within the Project Area (see Exhibits). A preliminary assessment for the presence of potentially-jurisdictional water resources within the Project Area was also conducted during the field survey. The field survey determined that the Project Area does not contain any channels or wetlands. The surrounding Study Area has one water resource: an agricultural ditch. This earthen ditch is 8 feet wide, 1 to 2 feet deep. Soils in the ditch have a higher clay content than in upland areas. *Phalaris aquatica* is dominant grass near ditch, and inside are obligate and facultative species: *Eryngium sp.; Juncus effusus; Kickxia sp.; Sporobolus sp.;* and *Polygonum* sp. The ditch originates upstream to the east in a culvert: a plastic corrugated pipe, 24 inch diameter, from corporation yard; it is fed by smaller ditches in the corporation yard.

There are no vernal pools or other isolated wetlands in the Project Area.

5. IMPACT ANALYSES AND MITIGATION MEASURES

This section establishes the impact criteria, then analyzes potential Project-related impacts upon the known biological resources within the Project Area, and then suggests mitigation measures to reduce these impacts to a less-than-significant level.

5.1. IMPACT SIGNIFICANCE CRITERIA

The significance of impacts to biological resources depends upon the proximity and quality of vegetation communities and wildlife habitats, the presence or absence of special-status species, and the effectiveness of measures implemented to protect these resources from Project-related impacts. As defined by CEQA, the Project Area would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a special-status species in local or regional plans, policies, or regulations, or by USFWS or CDFW
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by USFWS or CDFW
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved governmental habitat conservation plan.

5.2. IMPACT ANALYSIS

The following discussion evaluates the potential for Project-related activities to adversely affect biological resources. The Project boundaries were digitized and then overlaid on the habitat map using GIS to quantify potential impacts. Historical aerial photos were also analyzed for changes in land use.

5.2.1. Potential Direct / Indirect Adverse Effects Upon Special-status Species

- *Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The Project Area is located in habitats that are ruderal, developed, and pasture, which will be impacted by project implementation. Special-status plants have a very low potential to occur in these habitats. There is a moderate potential for special-status species to occur in the ditch, but the project is 100 feet away from the ditch. No special-status animals were observed within the Project Area. No direct impacts to special-status animals are expected from implementation of the proposed project.

The Project Area contains suitable nesting habitat for various bird species because of the presence of shrubs and tall grass. These areas must be inspected for the presence of active bird nests before ground clearing. If active nests are present in the project area during construction of the project, CDFW should be consulted to develop measures to avoid “take” of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing

or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

Recommended Mitigation Measures

No mitigation is necessary.

5.2.2. Potential Direct / Indirect Adverse Effects Upon Special-status Habitats or Natural Communities or Corridors

- *Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The Project Area is not within any designated listed species' critical habitat. The Project Area does not contain special-status habitats. The surrounding Study Area contains one special-status habitat: wetlands in the agricultural ditch, but the project is 100 feet away from the ditch. There is no indication that project implementation will impact any special-status habitats.

Recommended Mitigation Measures

No mitigation is necessary.

5.2.3. Potential Direct / Indirect Adverse Effects on Jurisdictional Water Resources

- *Will the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Potential direct impacts to water resources could occur during construction by modification or destruction of stream banks or riparian vegetation or the filling of wetlands or channels. However, the Project Area does not contain any water resources. The surrounding Study Area contains one resource: wetlands in the agricultural ditch, but the project is 100 feet away from the ditch. Because of this setback, no direct impacts to water resources are expected.

Potential indirect impacts to water resources could occur during construction. Surface water quality has the potential to be degraded from storm water transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. This is a potentially significant impact. However, for projects 1 acre in size or larger, the landowner must enroll under the State Water Quality Control Board's Construction General Permit prior to the initiation of construction. In conjunction with enrollment under this Permit, a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Implementation of these measures mandated by law would reduce potential construction-related impacts to water quality to a less-than-significant level.

Recommended Mitigation Measures

No impacts were identified, and therefore no mitigation measures are proposed.

5.2.4. Potential Impacts to Wildlife Movement, Corridors, etc.

- *Will the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in CNDDB) exist within or near the Project Area, the open space in the Study Area allows for animal movement; perimeter fences hinder some movement. Implementation of the proposed project would necessitate erection of security fences around the project. The Project would not have a significant impact on this movement because it would not block movement and the majority of the open space in the Study Area would still be available. Thus, implementation of the proposed project is a less than significant impact upon wildlife movement. Implementation of the project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Recommended Mitigation Measures

No mitigation is necessary.

5.2.5. Potential Conflicts with Ordinances, Habitat Conservation Plans, etc.

- *Will the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- *Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Implementation of the proposed project will not require the removal of mature trees. The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan. The Project Area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Recommended Mitigation Measures

No mitigation is necessary.

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EXHIBITS

PLOT PLAN

PROPERTY DATA:

ZONING PDC
LOT AREA 5.04 ACRES
FLOOD ZONE: X

PROPERTY OWNER:

NAME: EUGENE BROTT
STREET: 22 HILL VIEW
CITY: COTATI
STATE: CA
ZIP: 94931

UTILITIES:

SEWER: LAKE CO. SPECIAL DISTRICTS
WATER: LOWER LAKE CO. WATERWORKS
POWER: PG&E

VanDerWall Engineering
PO BOX 431
Kelseyville, CA 95451
(707) 279-4887
www.vdwengr.com

LEGEND

PROPERTY LINE
EASEMENT LINE
W WATER LINE
S SEWER LINE
PROPERTY PIN
POWER POLE (E)

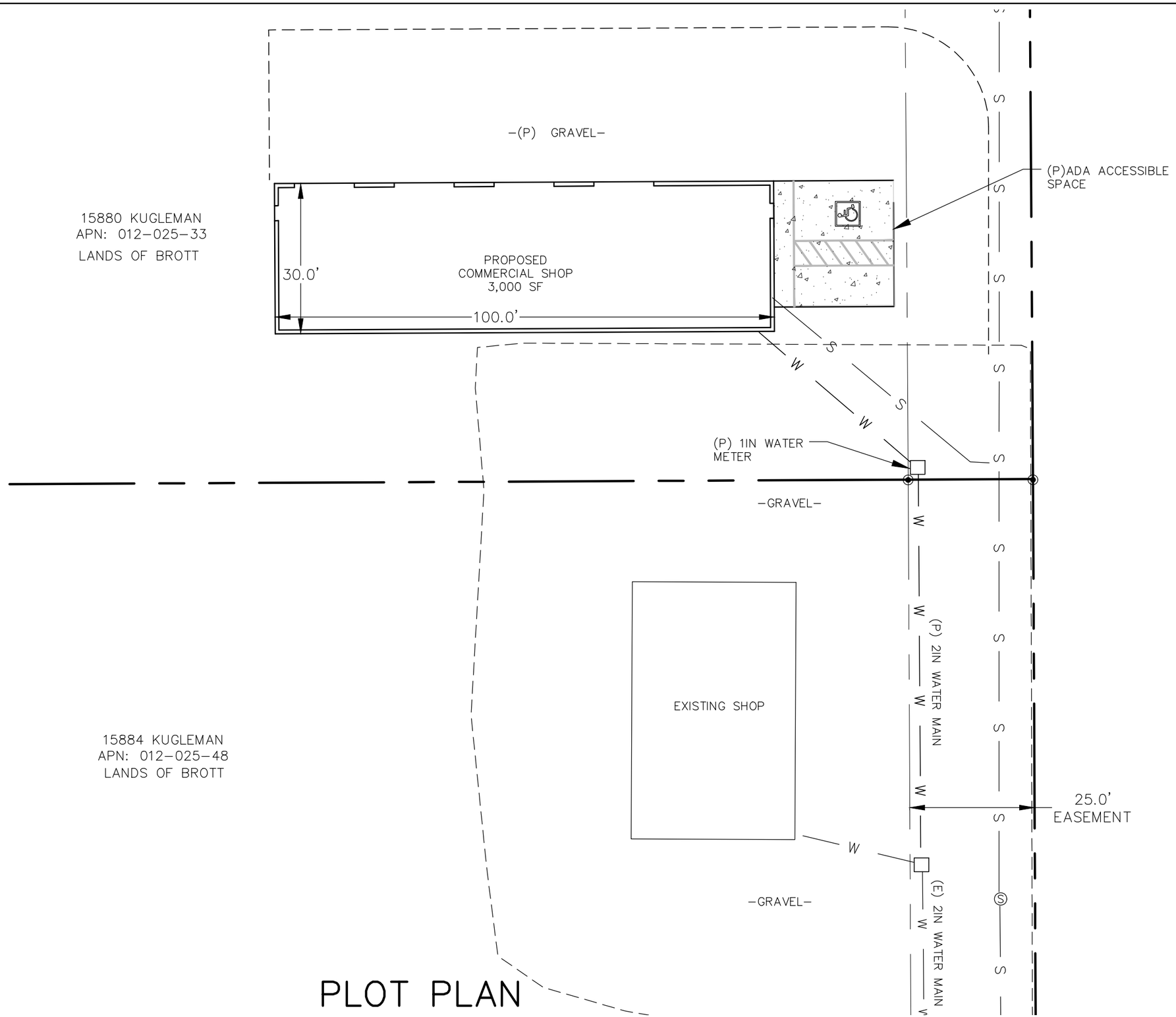
SHEET INDEX

SHEET 1: PLOT PLAN
SHEET 2: PLOT PLAN DETAIL

PLOT PLAN

SITE: 15880 KUGLEMAN
LOWER LAKE, CA
APN: 012-025-33

Scale: 1"=100'
Scale: 1 OF 2
Date: JUNE 2025



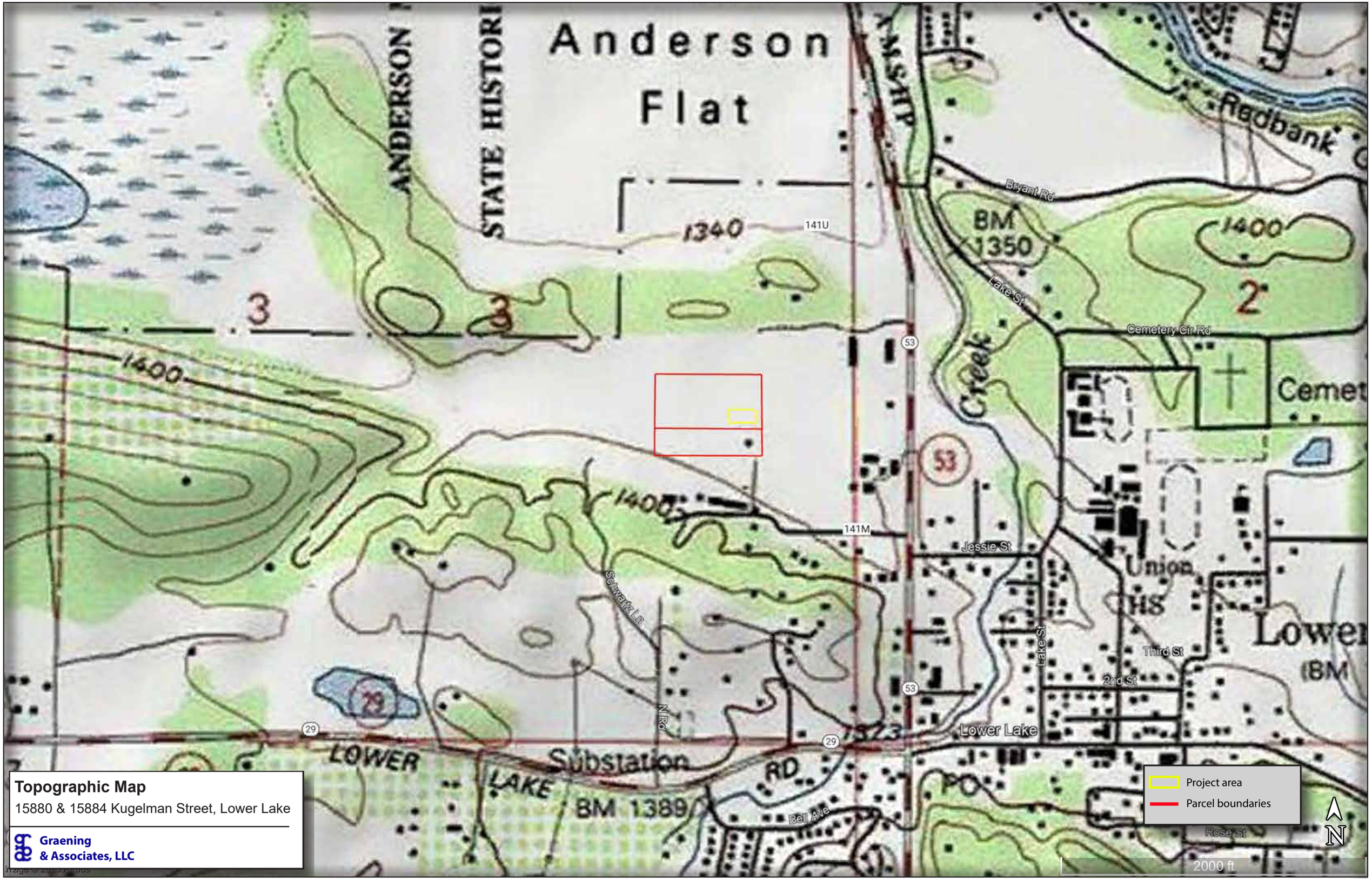
VanDerWall Engineering
PO BOX 431
Kelseyville, CA 95451
(707) 279-4887
www.vdwengr.com

0 20 40 Feet

PLOT PLAN

SITE: 15880 KUGLEMAN
LOWER LAKE, CA
APN: 012-025-33

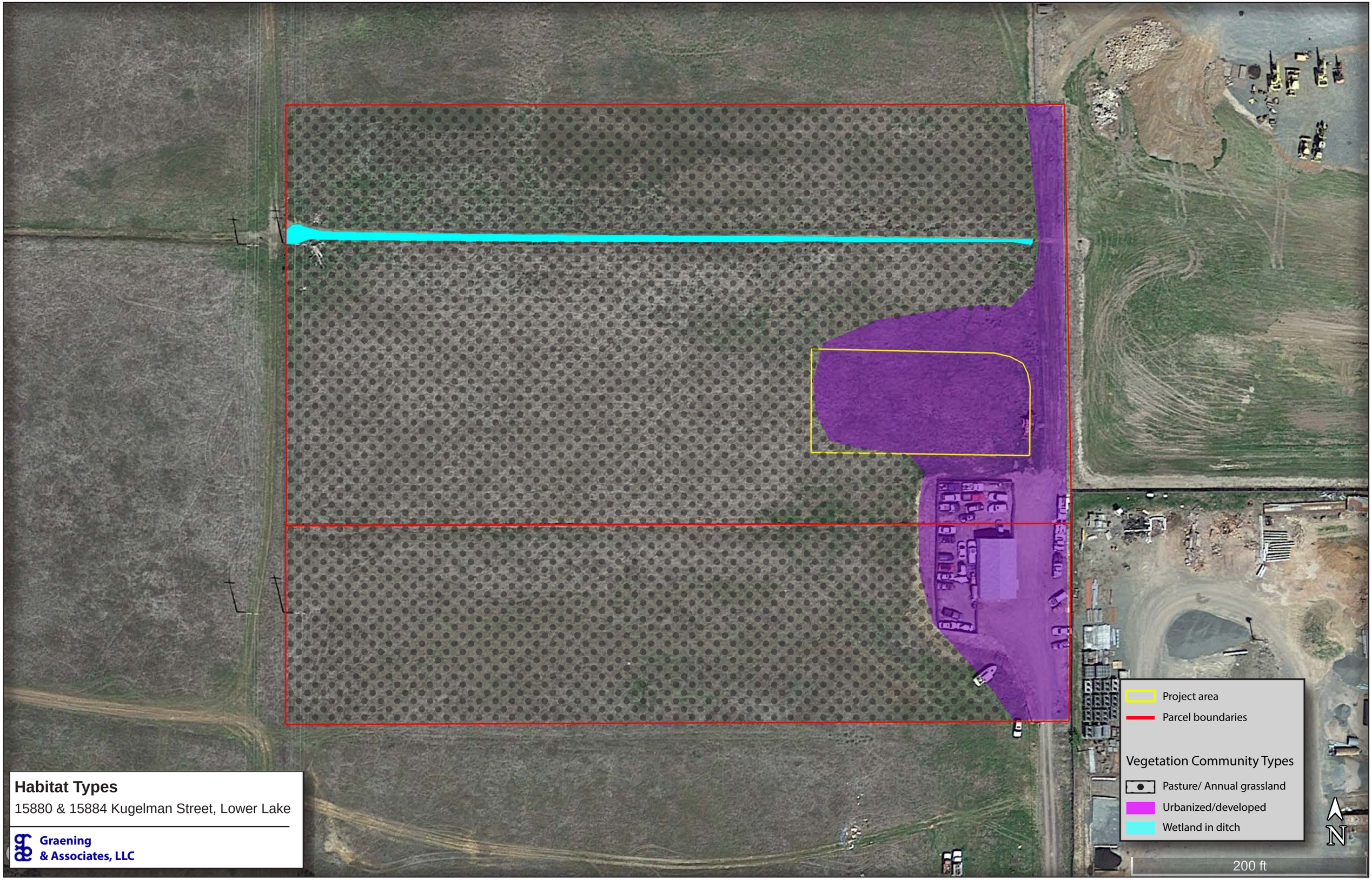
Scale: 1"=200'
Scale: 2 OF 2
Date: JUNE 2025



Topographic Map

15880 & 15884 Kugelman Street, Lower Lake

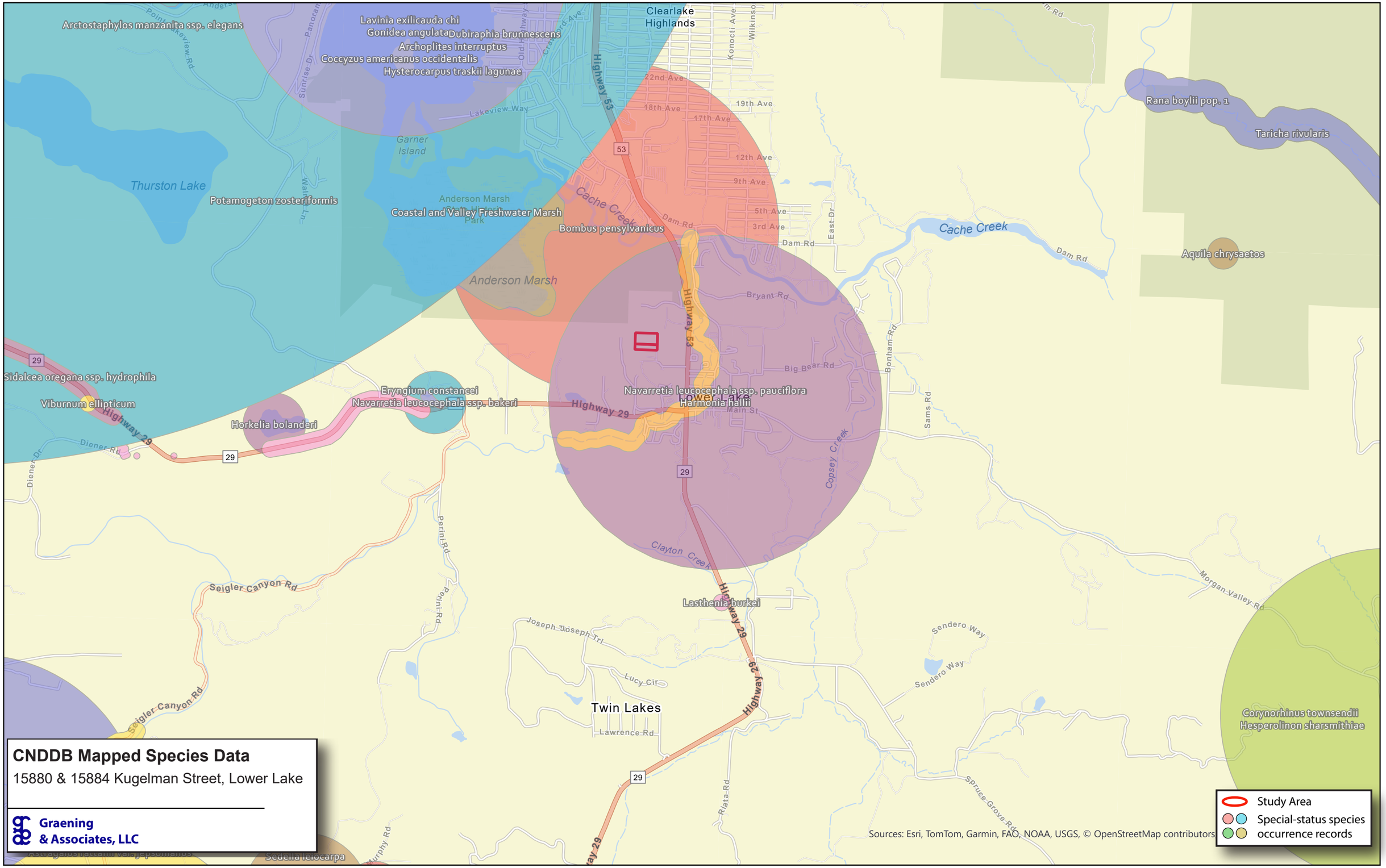
Graening
& Associates, LLC



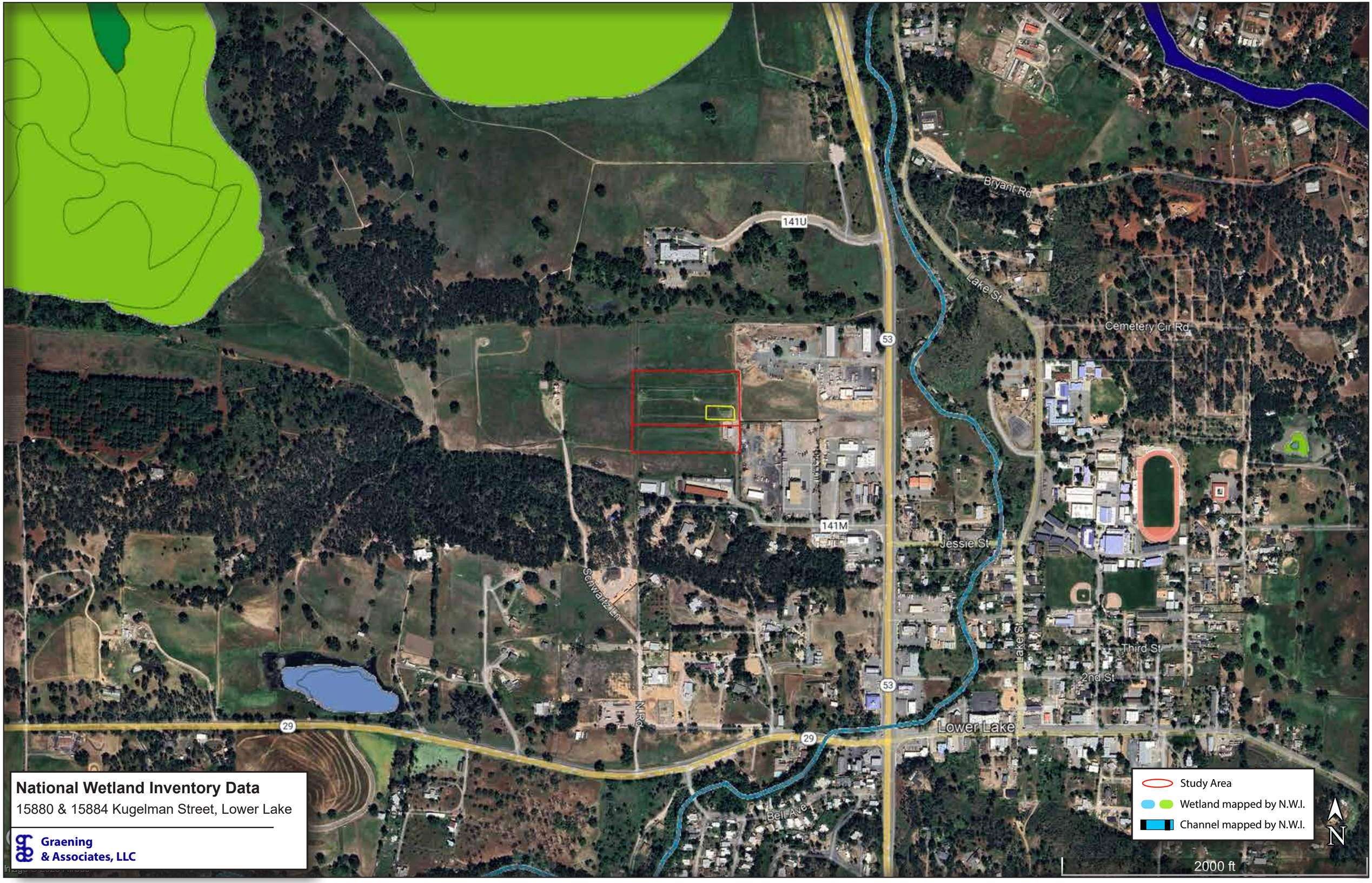
Habitat Types

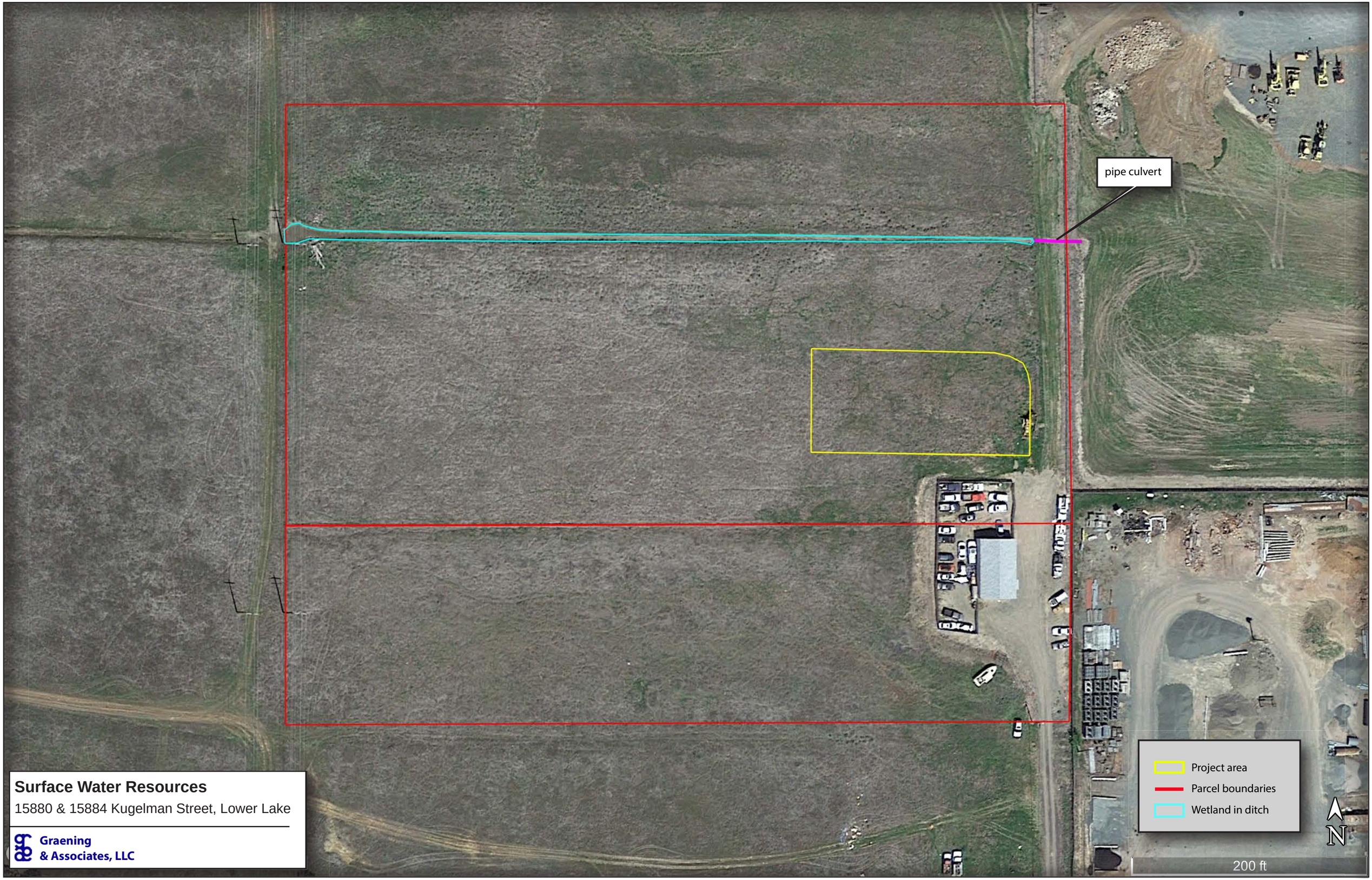
15880 & 15884 Kugelman Street, Lower Lake

Graening & Associates, LLC



CNDDB Mapped Species Data
15880 & 15884 Kugelman Street, Lower Lake
Graening & Associates, LLC
Study Area
Special-status species occurrence records
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors
Arctostaphylos manzanita ssp. elegans
Lavinia exilicauda chi
Gonidea angulata
Dubiraphia brunnescens
Archoplites interruptus
Coccyzus americanus occidentalis
Hysterocarpus traskii lagunae
Clearlake Highlands
Rana boylii pop. 1
Taricha rivularis
Thurston Lake
Potamogeton zosteriformis
Coastal and Valley Freshwater Marsh
Bombus pensylvanicus
Anderson Marsh
Cache Creek
Aquila chrysaetos
Sidalcea oregana ssp. hydrophila
Viburnum ellipticum
Eryngium constancei
Navarretia leucocephala ssp. bakeri
Horkelia bolanderi
Navarretia leucocephala ssp. pauciflora
Harmonia hallii
Lower Lake
Lasthenia burkei
Twin Lakes
Corynorhinus townsendii
Hesperolinon sharsmithiae
Highway 53
Highway 29
Dam Rd
Bryant Rd
Big Bear Rd
Main St
Copsey Creek
Clayton Creek
Seigler Canyon Rd
Morgan Valley Rd
Sendero Way
Lawrence Rd
Lucy Cir
Joseph Joseph Trl
Perini Rd
Diener Rd
Bonham Rd
Sams Rd
Spruce Grove Rd
Riata Rd
Murphy Rd
Lakeview Way
Sunrise Dr
Walker Ln
Old Highway
Crawford Ave
Konocti Ave
Wilkinson
22nd Ave
18th Ave
17th Ave
19th Ave
12th Ave
9th Ave
5th Ave
3rd Ave
East Dr
Sedella leiocarpa


National Wetland Inventory Data
15880 & 15884 Kugelman Street, Lower Lake
Graening
& Associates, LLC
Study Area
Wetland mapped by N.W.I.
Channel mapped by N.W.I.
2000 ft
N
141U
141M
53
29
Bryant Rd
Lake St
Cemetery Cir Rd
Jessie St
Third St
2nd St
Lower Lake
Schwartz Ln
N Rd
Bel Ave



Surface Water Resources

15880 & 15884 Kugelman Street, Lower Lake

Graening & Associates, LLC

APPENDIX 1: USFWS SPECIES LIST

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 09/08/2025 17:25:06 UTC
Project Code: 2025-0146177
Project Name: commercial building

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2025-0146177
Project Name: commercial building
Project Type: Commercial Development
Project Description: commercial building and parking lot
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.915900300000004,-122.61692149150471,14z

Counties: Lake County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

FISHES

NAME	STATUS
Clear Lake Hitch *Lavinia exilicauda chi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9298	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Burke's Goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Few-flowered Navarretia *Navarretia leucocephala ssp. pauciflora (=N. pauciflora)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8242	Endangered
Slender Orcutt Grass *Orcuttia tenuis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1063	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: G.O. Graening
Address: 343 Carpenter Hill Road
City: Folsom
State: CA
Zip: 95630
Email ggraening@gmail.com
Phone: 9164525442

APPENDIX 2: SITE PHOTOS

APPENDIX 3: SPECIAL-STATUS SPECIES TABLE AND POTENTIAL TO OCCUR

Special-status Species Reported by CNDDB and CNPS in the Vicinity of the Study Area

Scientific Name	Common Name	Status*	General Habitat**	Microhabitat**	Potential to Occur in Project Area
Actinemys marmorata	western pond turtle	FP	A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BE	NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYIN	None: no water resources present.
Amsinckia lunaris	bent-flowered fiddleneck	1B.2	CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	50-500M.	Low potential to occur in pasture
Antrozous pallidus	pallid bat	CSSC	DESERTS, GRASSLANDS, SHRUBLANDS, WOODLANDS & FORESTS. MOST COMMON IN OPEN, DRY HABITATS WITH ROCKY AREAS FOR ROOSTING.	ROOSTS MUST PROTECT BATS FROM HIGH TEMPERATURES. VERY SENSITIVE TO DISTURBANCE OF ROOSTING SITES.	None: suitable habitat not present.
Aquila chrysaetos	golden eagle	CSSC	ROLLING FOOTHILLS, MOUNTAIN AREAS, SAGE-JUNIPER FLATS, & DESERT.	CLIFF-WALLED CANYONS PROVIDE NESTING HABITAT IN MOST PARTS OF RANGE; ALSO, LARGE TREES IN OPEN AREAS.	None: suitable habitat not present.
Archoplites interruptus	Sacramento perch	CSSC	HISTORICALLY FOUND IN THE SLOUGHS, SLOW-MOVING RIVERS, AND LAKES OF THE CENTRAL VALLEY.	PREFERS WARM WATER. AQUATIC VEGETATION IS ESSENTAL FOR YOUNG. TOLERATES WIDE RANGE OF PHYSIO-CHEMICAL WATER CONDITIONS.	None: no water resources present.
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	1B.3	CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	VOLCANIC SOILS. 395-1400M.	No manzanita present
Arctostaphylos stanfordiana ssp. raichei	Raiche's manzanita	1B.1	CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.	ON PERIPHERY OF MCNAB CYPRESS GROVE ON SERPENTINE. SLOPES AND RIDGES. 450-1000M.	No manzanita present
Astragalus rattanii var. jepsonianus	Jepson's milk-vetch	1B.2	CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND, CHAPARRAL.	COMMONLY ON SERPENTINE IN GRASSLAND OR OPENINGS IN CHAPARRAL. 320-700M.	None: suitable habitat not present.
Bombus occidentalis	western bumble bee	CP	GRASSLANDS		Low potential to occur in pasture
Bombus pensylvanicus	American bumble bee	CSSC	GRASSLANDS		Low potential to occur in pasture
Brasenia schreberi	watershield	2B.3	FRESHWATER MARSHES AND SWAMPS.	AQUATIC FROM WATER BODIES BOTH NATURAL AND ARTIFICIAL IN CALIFORNIA.	None: suitable habitat not present.
Carex praticola	northern meadow sedge	2B.2	MEADOWS.	MOIST TO WET MEADOWS. 0-3200M.	Low potential to occur in ditch
Castilleja rubicundula var. rubicundula	pink creamsacs	1B.2	CHAPARRAL, MEADOWS AND SEEPS, VALLEY AND FOOTHILL GRASSLAND.	OPENINGS IN CHAPARRAL OR GRASSLANDS. ON SERPENTINE. 20-900M.	None: suitable habitat not present.
Ceanothus confusus	Rincon Ridge ceanothus	1B.1	CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, CISMONTANE WOODLAND.	KNOWN FROM VOLCANIC OR SERPENTINE SOILS, DRY SHRUBBY SLOPES. 75-1065M.	None: suitable habitat not present.
Ceanothus divergens	Calistoga ceanothus	1B.2	CHAPARRAL, CISMONTANE WOODLAND.	ROCKY, SERPENTINE OR VOLCANIC SITES. 165-950M.	None: suitable habitat not present.
Chlorogalum pomeridianum var. minus	dwarf soaproot	1B.2	CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND.	SERPENTINE. 240-970M.	None: suitable habitat not present.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FT, CE	RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.	NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, W/ LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.	None: suitable habitat not present.
Corynorhinus townsendii	Townsend's big-eared bat	CSSC	THROUGHOUT CALIFORNIA IN A WIDE VARIETY OF HABITATS. MOST COMMON IN MESIC SITES.	ROOSTS IN THE OPEN, HANGING FROM WALLS & CEILINGS. ROOSTING SITES LIMITING. EXTREMELY SENSITIVE TO HUMAN DISTURBANCE.	None: suitable habitat not present.
Dicamptodon ensatus	California giant salamander	CSSC	STREAMS, PONDS, MOIST ENVIRONMENTS		None: no water resources present.
Downingia willamettensis	Cascade downingia	2B.2	Marshes, wet meadows and edges of ponds		None: suitable habitat not present.
Dubiraphia brunnescens	brownish dubiraphian riffle beetle	CSSC	AQUATIC; KNOWN ONLY FROM THE NE SHORE OF CLEAR LAKE, LAKE COUNTY.	INHABITS EXPOSED, WAVE-WASHED WILLOW ROOTS.	None: suitable habitat not present.
Eriastrum brandegeeae	Brandegee's eriastrum	1B.1	chaparral and woodlands of the North Coast Ranges, generally on volcanic soils.		None: suitable habitat not present.
Erigeron greenei	Greene's narrow-leaved daisy	1B.2	CHAPARRAL.	SERPENTINE AND VOLCANIC SUBSTRATES, GENERALLY IN SHRUBBY VEGETATION. 75-1060M.	None: suitable habitat not present.
Eriogonum nervulosum	Snow Mountain buckwheat	1B.2	CHAPARRAL.	DRY SERPENTINE OUTCROPS, BALDS, AND BARRENS. 300-2100M.	None: suitable habitat not present.
Eryngium constancei	Loch Lomond button-celery	FE, CE	VERNAL POOLS.	VOLCANIC ASH FLOW VERNAL POOLS. 460-855 M.	None: no vernal pools present.
Fritillaria pluriflora	adobe-lily	1B.2	CHAPARRAL, CISMONTANE WOODLAND, FOOTHILL GRASSLAND.	USUALLY ON CLAY SOILS; SOMETIMES SERPENTINE. 55-820M.	Low potential to occur in ditch.

Gonidea angulata	western ridged mussel	CSSC	PRIMARILY CREEKS & RIVERS & LESS OFTEN LAKES. ORIGINALLY IN MOST OF STATE, NOW EXTIRPATED FROM CENTRAL & SOUTHERN CALIF.		None: suitable habitat not present.
Gratiola heterosepala	Boggs Lake hedge-hyssop	CE	MARSHES AND SWAMPS (FRESHWATER), VERNAL POOLS.	CLAY SOILS; USUALLY IN VERNAL POOLS, SOMETIMES ON LAKE MARGINS. 5-2400M.	None: suitable habitat not present.
Grimmia torenii	Toren's grimmia	1B.3	chaparral, cismontane woodland, and lower montane coniferous forest habitats between 325 and 1160 meters		None: suitable habitat not present.
Haliaeetus leucocephalus	bald eagle	CE	OCEAN SHORE, LAKE MARGINS, & RIVERS FOR BOTH NESTING & WINTERING. MOST NESTS WITHIN 1 MI OF WATER.	NESTS IN LARGE, OLD-GROWTH, OR DOMINANT LIVE TREE W/OPEN BRANCHES, ESPECIALLY PONDEROSA PINE. ROOSTS COMMUNALLY IN WINTE	None: suitable habitat not present.
Harmonia hallii	Hall's harmonia	1B.2	CHAPARRAL.	SERPENTINE HILLS AND RIDGES. OPEN, ROCKY AREAS WITHIN CHAPARRAL. 500-900M.	None: suitable habitat not present.
Hedychridium milleri	Borax Lake cuckoo wasp	CSSC	ENDEMIC TO CENTRAL CALIFORNIA. ONLY COLLECTION IS FROM THE TYPE LOCALITY.	EXTERNAL PARASITE OF WASP AND BEE LARVA.	Low potential to occur in pasture
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	1B.2	Northern Coastal Scrub, Valley Grassland		Low potential to occur in pasture
Hesperolinon adenophyllum	glandular western flax	1B.2	CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	SERPENTINE SOILS; GENERALLY FOUND IN SEPENTINE CHAPARRAL. 425-1315M.	None: suitable habitat not present.
Hesperolinon bicarpellatum	two-carpellate western flax	1B.2	SERPENTINE CHAPARRAL.	SERPENTINE BARRENS AT EDGE OF CHAPARRAL. 150-820M.	None: suitable habitat not present.
Hesperolinon didymocarpum	Lake County western flax	CE	CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	SERPENTINE SOIL IN OPEN GRASSLAND AND NEAR CHAPARRAL. 330-365M.	None: suitable habitat not present.
Hesperolinon sharsmithiae	Sharsmith's western flax	1B.2	CHAPARRAL.	SERPENTINE SUBSTRATES. 270-300 M.	None: suitable habitat not present.
Horkelia bolanderi	Bolander's horkelia	1B.2	mountain forests of the North Coast Ranges		None: suitable habitat not present.
Hysterocarpus traskii lagunae	Clear Lake tule perch	CSSC	CLEAR LAKE AND TRIBUTARIES		None: suitable habitat not present.
Imperata brevifolia	California satintail	2B.1	COASTAL SCRUB, CHAPARRAL, RIPARIAN SCRUB, MOJAVEAN SCRUB, MEADOWS AND SEEPS (ALKALI).	MESIC SITES, ALKALI SEEPS, RIPARIAN AREAS. 0-500M.	None: suitable habitat not present.
Lasionycteris noctivagans	silver-haired bat	CSSC	HABITATS WITH TREES	ROOSTS IN HOLLOW TREES, BENEATH EXFOLIATING BARK, ABANDONED WOODPECKER HOLES & RARELY UNDER ROCKS. NEEDS DRINKING WATER.	None: suitable habitat not present.
Lasiurus cinereus	hoary bat	CSSC	HABITATS WITH TREES		None: suitable habitat not present.
Lasiurus frantzii	western red bat	CSSC	HABITATS WITH TREES		None: suitable habitat not present.
Lasthenia burkei	Burke's goldfields	FE, CE	VERNAL POOLS, MEADOWS AND SEEPS.	MOST OFTEN IN VERNAL POOLS AND SWALES. 15-600 M.	None: no vernal pools present.
Lavinia exilicauda chi	Clear Lake hitch	CT	FOUND ONLY IN CLEAR LAKE, LAKE CO, AND ASSOCIATED PONDS. SPAWNS IN STREAMS FLOWING INTO CLEAR LAKE.	ADULTS FOUND IN THE LIMNETIC ZONE. JUVENILES FOUND IN THE NEARSHORE SHALLOW-WATER HABITAT HIDING IN THE VEGETATION.	None: no water resources present.
Layia septentrionalis	Colusa layia	1B.2	CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	SCATTERED COLONIES IN FIELDS AND GRASSY SLOPES IN SANDY OR SERPENTINE SOIL. 145-1095M.	None: suitable habitat not present.
Legenere limosa	legenere	1B.1	VERNAL POOLS. MANY HISTORICAL OCCURRENCES ARE EXTIRPATED.	IN BEDS OF VERNAL POOLS. 1-880M.	None: no vernal pools present.
Leptosiphon jepsonii	Jepson's leptosiphon	1B.2	CHAPARRAL, CISMONTANE WOODLAND.	OPEN TO PARTIALLY SHADED GRASSY SLOPES. ON VOLCANICS OR THE PERIPHERY OF SERPENTINE SUBSTRATES. 100-500M.	None: suitable habitat not present.
Lupinus sericatus	Cobb Mountain lupine	1B.2	CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	IN STANDS OF KNOBCONE PINE-OAK WOODLAND, ON OPEN WOODED SLOPES IN GRAVELLY SOILS; SOMETIMES ON SERPENTINE. 180-1500M.	None: suitable habitat not present.
Myotis evotis	long-eared myotis	CSSC	FOUND IN ALL BRUSH, WOODLAND & FOREST HABITATS FROM SEA LEVEL TO ABOUT 9000 FT. PREFERS CONIFEROUS WOODLANDS & FORESTS.	NURSERY COLONIES IN BUILDINGS, CREVICES, SPACES UNDER BARK, & SNAGS. CAVES USED PRIMARILY AS NIGHT ROOSTS.	None: suitable habitat not present.
Myotis thysanodes	fringed myotis	CSSC	IN A WIDE VARIETY OF HABITATS, OPTIMAL HABITATS ARE PINYON-JUNIPER, VALLEY FOOTHILL HARDWOOD & HARDWOOD-CONIFER.	USES CAVES, MINES, BUILDINGS OR CREVICES FOR MATERNITY COLONIES AND ROOSTS.	None: suitable habitat not present.
Navarretia leucocephala ssp. bakeri	Baker's navarretia	1B.1	CISMONTANE WOODLAND, MEADOWS AND SEEPS, VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND, LOWER MONTANE CONIFEROUS FOREST.	VERNAL POOLS AND SWALES; ADOBE OR ALKALINE SOILS. 5-950M.	None: suitable habitat not present.
Navarretia leucocephala ssp. pauciflora	few-flowered navarretia	FE, CT	VERNAL POOLS.	VOLCANIC ASH FLOW, AND VOLC SUBSTRATE VERNAL POOLS. 400-855 M.	None: no vernal pools present.

Navarretia leucocephala ssp. plieantha	many-flowered navarretia	FE, CE	VERNAL POOLS.	VOLCANIC ASH FLOW VERNAL POOLS. 30-950 M.	None: no vernal pools present.
Navarretia paradoxinota	Porter's navarretia	1B.3	VERNAL POOLS.		None: no vernal pools present.
Orcuttia tenuis	slender Orcutt grass	FT, CE	VERNAL POOLS.	OFTEN IN GRAVELLY POOLS. 35-1760 M.	None: no vernal pools present.
Panicum acuminatum var. thermale	Geysers panicum	CE	CLOSED-CONE CONIFEROUS FOREST, RIPARIAN FOREST, VALLEY AND FOOTHILL GRASSLAND.	USUALLY AROUND MOIST, WARM SOIL IN THE VICINITY OF HOT SPRINGS. 305-2470 M.	None: suitable habitat not present.
Penstemon newberryi var. sonomensis	Sonoma beardtongue	1B.3	CHAPARRAL.	CREVICES IN ROCK OUTCROPS AND TALUS SLOPES. 700-1370 M.	None: suitable habitat not present.
Potamogeton zosteriformis	eel-grass pondweed	2B.2	MARSHES AND SWAMPS.	PONDS, LAKES, STREAMS. 0-1860M.	None: no water resources present.
Progne subis	purple martin	CSSC	INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.	NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.	None: suitable habitat not present.
Pyrgulopsis ventricosa	Clear Lake pyrg	CSSC	CLEAR LAKE AND TRIBUTARIES		None: no water resources present.
Rana boylii pop. 1	foothill yellow-legged frog - north coast DPS	CSSC	STREAMS, PONDS, MOIST ENVIRONMENTS		None: no water resources present.
Rana draytonii	California red-legged frog	FT, CE	LOWLANDS & FOOTHILLS IN OR NEAR PERMANENT SOURCES OF DEEP WATER WITH DENSE, SHRUBBY OR EMERGENT RIPARIAN VEGETATION.	REQUIRES 11-20 WEEKS OF PERMANENT WATER FOR LARVAL DEVELOPMENT. MUST HAVE ACCESS TO ESTIVATION HABITAT.	None: no water resources present.
Saldula usingeri	Wilbur Springs shorebug	CSSC	REQUIRES SPRINGS/CREEKS WITH HIGH CONCENTRATIONS OF NA, CL, & LI.	FOUND ONLY ON WET SUBSTRATE OF SPRING OUTFLOWS.	None: no water resources present.
Sedella leiocarpa	Lake County stonecrop	FE, CE	VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, CISMONTANE WOODLAND.	LEVEL AREAS THAT ARE SEASONALLY WET AND DRY OUT IN LATE SPRING; SUBSTRATE USUALLY OF VOLCANIC ORIGIN. 365-790 M.	None: suitable habitat not present.
Sedella leiocarpa	Lake County stonecrop	FE, CE	VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, CISMONTANE WOODLAND.	LEVEL AREAS THAT ARE SEASONALLY WET AND DRY OUT IN LATE SPRING; SUBSTRATE USUALLY OF VOLCANIC ORIGIN. 365-790 M.	None: suitable habitat not present.
Sidalcea oregana ssp. hydrophila	marsh checkerbloom	1B.2	MEADOWS AND SEEPS, RIPARIAN FOREST.	WET SOIL OF STREAMBANKS, MEADOWS. 545-2300M.	None: suitable habitat not present.
Streptanthus brachiatus ssp. brachiatus	Socrates Mine jewelflower	1B.2	CHAPARRAL, CLOSED-CONE CONIFEROUS FOREST.	SERPENTINE AREAS AND SERPENTINE CHAPARRAL. 545-1000 M.	None: suitable habitat not present.
Streptanthus brachiatus ssp. hoffmanii	Freed's jewelflower	1B.2	CHAPARRAL, CISMONTANE WOODLAND.	SERPENTINE ROCK OUTCROPS, PRIMARILY IN GEOTHERMAL DEVELOPMENT AREAS. 490-1220 M.	None: suitable habitat not present.
Streptanthus hesperidis	green jewelflower	1B.2	CHAPARRAL, CISMONTANE WOODLAND.	OPENINGS IN CHAPARRAL OR WOODLAND; SERPENTINE, ROCKY SITES. 130-760M.	None: suitable habitat not present.
Strix occidentalis caurina	Northern spotted owl	FT	OLD GROWTH FORESTS		None: suitable habitat not present.
Taricha rivularis	red-bellied newt	CSSC	STREAMS, PONDS, MOIST ENVIRONMENTS		None: no water resources present.
Trifolium hydrophilum	saline clover	1B.2	MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.	MESIC, ALKALINE SITES. 0-300M.	None: suitable habitat not present.
Viburnum ellipticum	oval-leaved viburnum	2B.3	CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	215-1400M.	None: suitable habitat not present.

*Definitions of Status Codes: FE = Federally listed as endangered; FT = Federally listed as threatened; FC = Candidate for Federal listing; CE = California State listed as endangered; CT = California State listed as threatened; CSSC = California species of special concern; CRPR (California Rare Plant Rank) List 1A = Plants presumed extinct in California by; CRPR List 1B = Plants designated rare, threatened or endangered in California and elsewhere; CRPR List 2A = Plants presumed extirpated in California but common elsewhere; CRPR 2B = Plants rare threatened or endangered in California, but more common elsewhere; CRPR 3 Review List: Plants about which more information is needed. CRPR Threat Ranks: 0.1 = seriously threatened in California; 0.2 = moderately threatened in California; 0.13 = not very threatened in California .

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