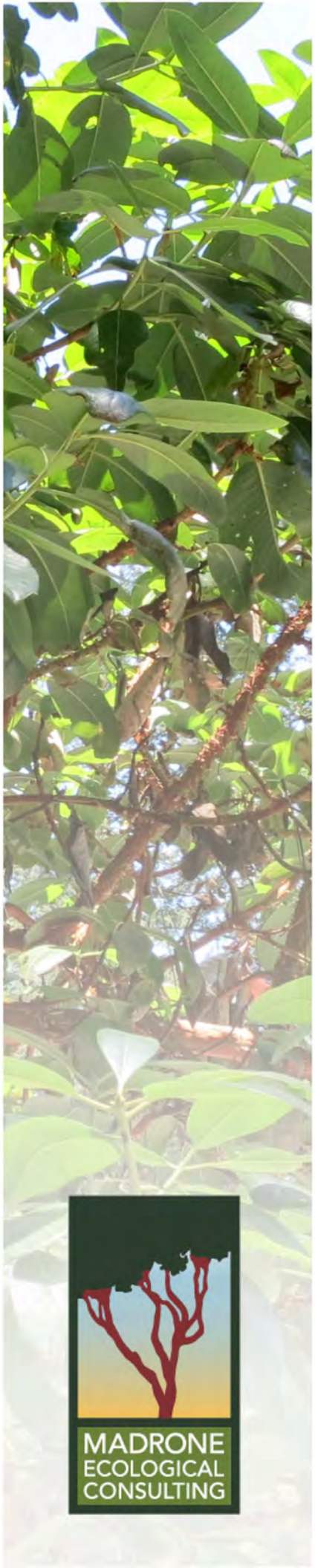

Biological Resources Assessment

The Reserve

Town of Loomis, Placer County, California

September 2025

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1.0 INTRODUCTION

This report presents the results of a Biological Resources Assessment conducted for The Reserve Property (Study Area), which was formerly known as the Premier Montair Property. The approximately 26.5-acre Study Area is located south of Rocklin Road and west of Barton Road in the Town of Loomis, Placer County, California. The Study Area is located in a portion of Section 21, Township 11 North, Range 7 East (MDB&M) of the "Rocklin, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) at a Latitude 38.786425, Longitude -121.194851 (**Figure 1**).

1.1 Project Description

The project proposed within the Study Area is a residential subdivision located in the Town of Loomis (Town) (**Figure 2**). The subdivision will include 20 single-family residential lots and related infrastructure and frontage improvements. All single-family lots will be zoned Rural Residential and are intended to be used for single-family residences, associated auxiliary buildings and accessory dwelling units. The Project applicant also proposes a front-setback variance to help protect existing natural resources (i.e., trees) in select locations within the future backyards of the lots.

2.0 REGULATORY SETTING

This section describes federal, state and local laws and policies that are relevant to this biological resources assessment.

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects species that are federally listed as endangered or threatened with extinction. FESA prohibits the unauthorized "take" of listed wildlife species. Take includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such activities. Harm includes significant modifications or degradations of habitats that may cause death or injury to protected species by impairing their behavioral patterns. Harassment includes disruption of normal behavior patterns that may result in injury to or mortality of protected species. Civil or criminal penalties can be levied against persons convicted of unauthorized "take." In addition, FESA prohibits malicious damage or destruction of listed plant species on federal lands or in association with federal actions, and the removal, cutting, digging up, damage, or destruction of listed plant species in violation of state law. FESA does not afford any protections to federally listed plant species that are not also included on a state endangered species list on private lands with no associated federal action.

2.1.2 Clean Water Act, Section 404

Section 404 of the Federal Clean Water Act requires that a Department of the Army permit be issued prior to the discharge of dredged or fill material into waters of the United States (U.S.), including some wetlands. The U.S. Army Corps of Engineers (USACE) administers this program, with oversight from the U.S. Environmental Protection Agency. As of the date of this document, waters of the U.S. are defined as follows (40 CFR 120.2):

1. Waters which are:
    i. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
    ii. The territorial seas; or
    iii. Interstate waters;
2. Impoundments of waters otherwise defined as waters of the U.S. under this definition, other than impoundments of waters identified under item (5) below;
3. Tributaries of waters identified in items (1) or (2) above that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
    i. Waters identified in item (1) of this section; or
    ii. Relatively permanent, standing or continuously flowing bodies of water identified in items (2) or (3) above and with a continuous surface connection to those waters;
5. Intrastate lakes and ponds not identified in paragraphs (1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items (1) or (3) above.

Under the current definition of waters of the U.S., "adjacent" means *having a continuous surface connection*.

Waters of the U.S. subject to regulation under Section 404 are referred to as "jurisdictional waters".

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any native migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11). Likewise, Section 3513 of the California Fish & Game Code prohibits the "take or possession" of any migratory non-game bird identified under the Migratory Bird Treaty Act. Therefore, activities that may result in the injury or mortality of native migratory birds, including eggs and nestlings, would be prohibited under the Migratory Bird Treaty Act.

2.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (as amended) provides for the protection of bald eagle and golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter,

transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit [16 USC 668(a); 50 CFR 22]. The U.S. Fish and Wildlife Service (USFWS) may authorize take of bald eagles and golden eagles for activities where the take is associated with, but not the purpose of, the activity and cannot practicably be avoided (50 CFR 22.26).

2.2 State Regulations

2.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires evaluations of project effects on biological resources. Determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect effects on adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

- Substantial adverse effects on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife (CDFW) or USFWS (these effects could be either direct or via habitat modification);
- Substantial adverse impacts to species designated by the California Department of Fish and Game (2009) as Species of Special Concern;
- Substantial adverse effects on riparian habitat or other sensitive habitat identified in local or regional plans, policies, or regulations or by the CDFW and USFWS;
- Substantial adverse effects on federally protected wetlands defined under Section 404 of the Clean Water Act (these effects include direct removal, filling, or hydrologic interruption of marshes, vernal pools, coastal wetlands, or other wetland types);
- Substantial interference with movements of native resident or migratory fish or wildlife species population, or with use of native wildlife nursery sites;
- Conflicts with local policies or ordinances protecting biological resources (e.g., tree preservation policies); and
- Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

2.2.2 State Endangered Species Act

With limited exceptions, the California Endangered Species Act (CESA) of 1984 protects state-designated endangered and threatened species in a way similar to FESA. For projects on private property (i.e., that for which a state agency is not a lead agency), CESA enables the CDFW to authorize take of a listed species that is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code Section 2081).

2.2.3 California Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the FESA and CESA. Lists of Fully Protected Species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most Fully Protected Species have since been listed as threatened or endangered under FESA and/or CESA. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code, § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish) provide that Fully Protected Species may not be taken or possessed at any time. Furthermore, the CDFW prohibits any state agency from issuing incidental take permits for Fully Protected Species. The CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit.

2.2.4 California Species of Special Concern

The Species of Special Concern are defined by the CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under FESA or CESA or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not state) threatened or endangered or meets the state definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status.

Species of Special Concern are typically associated with habitats that are threatened. Project-related impacts to Species of Special Concern, state-threatened or endangered species are considered "significant" under CEQA.

2.2.5 Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying the CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

2.2.6 Clean Water Act, Section 401

Section 401 of the Clean Water Act requires any applicant for a 404 permit in support of activities that may result in any discharge into waters of the U.S. to obtain a water quality certification with the Regional Water Quality Control Board (RWQCB). This program is meant to protect these waters and wetlands by ensuring that waste discharged into them meets state water quality standards. Because the water quality certification program is triggered by the need for a Section 404 permit (and both programs are a part of the Clean Water Act), the definition of waters of the U.S. under Section 401 is the same as that used by the USACE under Section 404.

2.2.7 California Water Code, Porter-Cologne Act

Waters that are not considered waters of the U.S. may be considered waters of the State of California (waters of the State) under the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne, from Division 7 of the California Water Code, requires any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state to file a report of waste discharge (RWD) with the RWQCB. The RWQCB can waive the filing of a report, but once a report is filed, the RWQCB must either waive or adopt Waste Discharge Requirements (WDR). Waters of the State are defined as any surface water or groundwater, including saline waters, within the boundaries of the state of California.

2.2.8 California Fish and Game Code, Section 1600 – Streambed and Lake Alteration

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code, Section 1602, requires notification to the CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams, and lakes includes those that are dry for periods of time as well as those that flow year round. If notification is required and the CDFW believes the proposed activity is likely to substantially adversely affect fish and wildlife resources, it will require that the parties enter into a Lake or Streambed Alteration Agreement.

2.2.9 California Fish and Game Code, Section 3503.5 – Raptor Nests

Section 3503.5 of the Fish and Game Code makes it unlawful to take, possess, or destroy hawks or owls, unless permitted to do so, or to destroy the nest or eggs of any hawk or owl.

2.2.10 California Fish and Game Code, Section 3511, 4700, 5050, and 5515 – Fully Protected Species

California Fish and Game Code identifies "Fully Protected Species" in sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish). The state initially identified Fully Protected Species in the 1960s to identify and provide additional protection to animals that were rare or faced possible extinction. Subsequent passage of CESA has offered additional protection to some Fully Protected Species.

Fully Protected Species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research, relocation of the bird species for the protection of livestock, or if they are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan.

2.3 Local Regulations

2.3.1 Town of Loomis Tree Conservation Ordinance

Chapter 13.54 of the Town of Loomis Municipal Code titled "Tree Conservation" (Town of Loomis 2025) (Tree Ordinance) regulates the removal and preservation of trees within the Town boundaries. The highest priority of the Tree Ordinance is to maximize the preservation of existing protected trees. As defined by the Tree Ordinance, a "Protected Tree" includes any native oak tree with a trunk that is a minimum of 6 inches in diameter as measured at breast height (DBH) for interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), and oracle oak (hybrid of *Quercus kelloggii* and *Quercus wislizeni*) and 4 inches DBH for blue oak (*Quercus douglasii*); any oak tree with multiple trunks that have an aggregate DBH of at least 10 inches, or any heritage tree (defined as any tree identified by Town Council resolution).

Each Protected Tree has a "Critical Root Zone" which is a circle equal to the largest radius of a Protected Tree's dripline plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the Protected Tree's dripline. The Tree Ordinance requires a tree permit for the removal of a Protected Tree or any activity within the Critical Root Zone of a Protected Tree related to a discretionary project, unless otherwise exempted.

2.3.2 Town of Loomis General Plan Conservation Element

The Town *of Loomis General Plan 2020-2040* (Town of Loomis 2024) contains policies governing conservation of resources within its jurisdiction. The applicable policies for Biological Resources are generally summarized below with more detailed measures outlined in the full General Plan document.

Policy BIO-1.1.1: The Town will actively encourage the preservation of vegetation communities that provide habitat for sensitive plant and wildlife species.

Policy BIO-1.2.1: The Town will require projects to avoid or minimize direct and indirect impacts to streams and associated riparian habitats to the maximum extent feasible.

Policy BIO-1.2.2: The Town will prohibit grading activities during the rainy season (approximately November-March), unless adequately mitigated to avoid sedimentation of streams and damage to riparian areas.

Policy BIO-1.3.1: Aquatic resources, including wetlands, shall be preserved whenever feasible. Appropriate mitigation approved by the Town and applicable regulatory agencies shall be implemented when direct or indirect impacts to aquatic resources cannot be avoided.

Policy BIO-1.4.1: Oak woodland and trees subject to the Town Tree Ordinance will be preserved and protected.

Policy BIO-1.4.2: The Town will require the preservation, replacement, and expansion of tree canopy within Town limits, provided adequate planting space is available. Such preservation, replacement, and expansion shall be undertaken in accordance with good forestry practices and in a manner that protects public health and safety.

3.0 METHODOLOGY

3.1 Literature Review

A list of special-status species with potential to occur within the Study Area was developed by conducting a query of the following databases:

- California Natural Diversity Database (CNDDB) (CNDDB 2025) query of the Study Area and all areas within 5 miles of the Study Area (**Figures 3** and **4**);
- USFWS Information for Planning and Conservation (IPaC) (USFWS 2025) query for the Study Area (**Attachment A**);
- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (CNPS 2025a) query of the "Rocklin, California" quadrangle map, and the eight surrounding quadrangle maps (**Attachment B**;
- The Calflora Database (Calflora 2025);
- California Consortium of Herbaria Database (CCH1 Portal 2025);
- Western Bat Working Group (WBWG) Priority Matrices (WBWG 2025a);
- The Cornell Laboratory's eBird Database (eBird 2025);
- The Western Monarch Milkweed Mapper Database (WMMM 2025);
- The Xerces Society's Bee Watch Database (Xerces Society et al. 2025); and
- The iNaturalist Database (iNaturalist 2025).

In addition, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the Study Area.

For the purposes of this Biological Resources Assessment, special-status species are defined as those species that are:

- listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service;
- listed as threatened or endangered and candidates for listing by the CDFW;
- identified as Fully Protected Species or Species of Special Concern by the CDFW;
- identified as Medium or High priority species by the WBWG (WBWG 2025); and
- plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW [California Rare Plant Rank (CRPR) 1, 2, and 3]:
    - CRPR 1A: Plants presumed extinct.
    - CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
    - CRPR 2A: Plants extirpated in California, but common elsewhere.
    - CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
    - CRPR 3: Plants about which the CNPS needs more information – a review list.

3.2 Field Surveys

Madrone senior biologist Bonnie Peterson and Tara Collins conducted field surveys of various portions of the Study Area on 23 August and 7 October 2022, 2 May and 27 June 2023, and 18 March 2025 to identify and map aquatic resources and assess the suitability of habitats onsite to support special-status species. Meandering pedestrian surveys were performed on foot throughout the Study Area. Vegetation communities were classified in accordance with *Manual of California Vegetation, Second Edition* as updated online (CNPS 2025), and plant taxonomy was based on the nomenclature in the Jepson eFlora (Jepson Flora Project 2025). A list of all wildlife species observed during field surveys is included as **Attachment C**.

The results of several additional surveys were also incorporated into this report:

- Dry season sampling for federally listed large branchiopods conducted throughout the Study Area (Helm 2010);
- An aquatic resources delineation conducted by Madrone throughout the Study Area (Madrone 2022);
- Special-status plant surveys conducted by Madrone throughout the Study Area (Madrone 2023); and
- Arborist surveys conducted by California Tree and Landscaping Consulting, Inc. (CalTLC) conducted within the Study Area (CalTLC 2022).

4.0 EXISTING CONDITIONS

The Study Area occurs within Assessor Parcel Numbers (APNs) 045-161-033-000 and 045-161-034-000. The Study Area is situated on rolling terrain at an average elevation of approximately 350 feet above mean sea level to about 405 feet above mean sea level. The site drains to a large perennial pond on the southwest corner, which appears to have been manmade. A portion of Rocklin Road runs east-west along the northern portion of the Study Area, and Barton Road runs north-south along a portion of the east edge of the Study

Area. The Study Area includes a single-family residence on Rocklin Road. The surrounding lands in general represent a mix of rural, agricultural, and residential developments.

4.1 Terrestrial Vegetation Communities

Three terrestrial vegetation communities occur within the Study Are (**Figure 5**) and are described further below. The Study Area lies within the northern Sierra Valley Foothills California floristic province ecoregion (Jepson Flora Project 2025).

4.1.1 Rural Residential-Developed

One rural residence and portions of Rocklin Road and Barton Road occur within the Survey Area; these areas are considered rural residential-developed and total approximately 1.4 acres. The private residence lies off of Rocklin Road and includes a house with fenced front and back yards, a paved driveway/parking area, shed, and intensive landscaping. The driveways and parking area are largely unvegetated, with areas around the house supporting maintained landscaping including a regularly mowed lawn area, Italian cypress (*Cupressus sempervirens*), crepe myrtle (*Lagerstroemia* sp.), and ornamental roses (*Rosa* spp.). A portion of Rocklin Road, a paved two-lane road, runs east-west along the northern edge of the Survey Area, and a portion of Barton Road, a paved two-lane road, runs north-south along the eastern edge of the Survey Area.

4.1.2 Annual Brome Grassland

The northwestern portion of the Study Area meets the definition of disturbed annual brome grassland (CNPS 2025b). This vegetation community is dominated by soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), yellow star-thistle (*Centaurea solstitialis*), bristly dogtail grass (*Cynosurus echinatus*), Bermuda grass (*Cynodon dactylon*), prickly lettuce (*Lactuca serriola*), winter vetch (*Vicia villosa*), and smooth cat's-ear (*Hypochaeris glabra*). Other species commonly occurring in this community within the Study Area include filaree (*Erodium botrys*), elegant clarkia (*Clarkia unguiculata*), hairy hawkbit (*Leontodon saxatilis*), slender wild oat (*Avena barbata*), ryegrass (*Festuca perennis*), rose clover (*Trifolium hirtum*), and goose grass (*Galium aparine*). This non-native annual grassland community also dominates the understory of the oak woodland. A couple scattered valley oaks and live oaks, as well as some planted fruit trees, occur in this area.

4.1.3 Mixed Oak Forest and Woodland

The remaining non-aquatic portions of the Study area support a vegetation community that meets the definition of mixed oak forest and woodland alliance (CNPS 2025b). The overstory of this terrestrial vegetation community is dominated by interior live oak (*Quercus wislizeni*), blue oak (*Quercus douglasii*), and grey pine (*Pinus sabiniana*). A number of shrubs and other perennials occur in the understory, including western poison oak (*Toxicodendron diversilobum*), California coffee berry (*Frangula californica*), Armenian blackberry (*Rubus armeniacus*), chaparral honeysuckle (*Lonicera interrupta*), and bindweed (*Convolvulus*

arvensis). The herbaceous understory is largely similar to the disturbed annual brome grassland described above.

4.2 Aquatic Resources

A protocol-level aquatic resources delineation was conducted in 2022 which included the majority of the Study Area (Madrone 2022). The USACE issued a preliminary jurisdictional determination for this delineation on 28 February 2023 (USACE 2023) (**Attachment D**). A small sliver of the Study Area was not included in the 2022 delineation; however, this area contains a segment of Barton Road, a paved two-lane road, and does not contain any aquatic resources.

A total of 5.06 acres of aquatic resources were delineated within the Study Area (**Figure 5)** and are displayed by type in **Table 1** below. The various aquatic resources mapped within the Study Area are described below.

Table 1. Aquatic Resources Mapped within the Study Area

Aquatic Resource Type	Acreage[1]
Wetlands	
Seasonal Wetland	0.03
Seasonal Wetland Swale	0.35
Seep	0.08
Subtotal	0.46
Other Waters	
Pond	4.60
Subtotal	4.60
Total	**5.06**

[1] *Summation errors may occur due to rounding.*

4.2.1 Seasonal Wetland

Three seasonal wetlands were delineated within the Study Area. Seasonal wetlands are depressional wetlands that pond water seasonally. Within the Study Area the seasonal wetlands are hydrologically driven by rainfall and fall within shallow depressions that lack sufficient flow to be characterized as seasonal wetland swales. Within the Study Area, these are relatively shallow features that are occupied by a mix of facultative and wetland plant species in topographic low points. Plant species commonly observed in seasonal wetlands within the Study Area include rye grass (*Festuca perennis*), green dock (*Rumex conglomeratus*), iris-leaved rush (*Juncus xiphioides*), Baltic rush (*Juncus balticus*), and Mediterranean barley (*Hordeum marinum*).

4.2.2 Seasonal Wetland Swale

Four seasonal wetland swales were delineated within the Study Area. Seasonal wetland swales are sloping, linear seasonal wetlands that convey surface runoff, and may detain it for short periods of time. Within the

Study Area the seasonal wetland swales contained undefined grass-dominated portions which were interspersed with eroded sections with a distinct bed and bank. Dominant plant species within the seasonal wetland swales include rye grass, annual rabbitfoot grass (*Polypogon monspeliensis*), common velvet grass (*Holcus lanatus*), and green dock. Other species commonly observed in these features within the Study Area include western goldenrod (*Euthamia occidentalis*), tall nutsedge (*Cyperus eragrostis*), cattail (*Typha* sp.), Italian thistle (*Carduus pycnocephalus*), and Armenian blackberry. All four seasonal wetland swales appear to be natural drainage features that convey seasonal runoff from upslope of the Study Area into the pond.

4.2.3 Seep

One seep was delineated within the northwestern portion of the Study Area. Seeps are wetlands that occur on slopes and receive hydrology almost exclusively from subsurface flow or groundwater as differentiated from the seasonal wetlands with precipitation driven surface hydrology. Dominant plant species in the seep within the Study Area includes a Goodding's black willow (*Salix gooddingii*), iris-leaved rush, Baltic rush, common velvet grass, and Armenian blackberry. A berm or old stockpile is located south of the seep and the seep is hydrologically isolated from the pond to the south.

4.2.4 Pond

One perennial pond with adjacent wetlands was delineated in the southwest corner of the Study Area. Adjacent wetlands mapped within the pond appear to seasonally inundate during wetter times of the year when the water level of the pond is at its highest. For the purpose of the 2022 aquatic resources delineation, wetlands adjacent to the pond were differentiated from seasonal wetlands and seasonal wetland swales that drain directly into the pond because they are influenced by backwater flooding from the pond. Willows (*Salix* spp.), Fremont cottonwood (*Populus fremontii*), soft rush (*Juncus effusus*), swamp prickle grass (*Crypsis schoenoides*), rabbitfoot grass, water primrose (*Ludwigia peploides*), northern water plantain (*Alisma triviale*), brome fescue (*Festuca bromoides*), tall nutsedge, willow herb (*Epilobium densiflorum*), slender willow herb (*Epilobium ciliatum*), western goldenrod, cattail, and Armenian blackberry represent some of the observed wetland plant species within these aquatic resources. Seasonally, the open water portion of the pond is covered with mosquito fern (*Azolla filiculoides*) and duckweed (*Lemna* sp.).

The pond is a human-induced feature which first appears on the 1968 USGS topo and was constructed between 1952 and 1957 (HistoricAerials.com 2025). The pond temporarily impounds water received from seasonal wetland swales to the east and northeast and is perennial in nature with the transition between emergent wetland fringes and open water shifting depending on the water year. A series of culverts and pipes indicated that at some point the pond may be artificially filled, though no evidence of pumping was observed during site visits. Spoils, from what is presumed to be ongoing pond maintenance, were observed within the Study Area in an area northwest of the pond. The western (offsite) perimeter of the pond appears to be made of a created rock berm. While the southwest pond outflow is on private property and was not accessible during site visits, it appears to drain through a culvert in the southwest along the created impoundment.

4.3 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2025), two soil mapping units occur within the Study Area (**Figure 6**): (106) Andregg coarse sandy loam, 2 to 9% slopes and (107) Andregg coarse sandy loam, 9 to 15% slopes.

The majority of the Study Area is Andregg coarse sandy loam, 2-9% slopes (106), which is moderately deep, well drained, and located over weathered granitic bedrock. The following inclusions are found within 106: Caperton coarse sandy loam (5%), Sierra sandy loam (5%), two unnamed Andregg-like soils (10% total), and one unnamed Sierra-like soil (5%). The northwest corner of the Study Area is Andregg coarse sandy loam, 9-15% slopes (107), which is a moderately deep, well drained typic haploxeroll. This rolling soil is situated above weathered, granitic bedrock, and contains inclusions of about 5% Caperton coarse sandy loam and 5% Sierra sandy loam. An additional 8% and 3% are made up of two unnamed Andregg-like inclusions and an unnamed Sierra-like inclusion, respectively. Both of the above Andregg soils contain bare rock outcrops.

Neither of the above soil map units are listed in *Hydric Soils of the United States* (NRCS 2025) however, (106) may contain hydric inclusions in drainageways (NRCS 2025).

5.0 RESULTS

Table 2 provides a list of special-status species that were evaluated, including their listing status, habitat associations, and their potential to occur in the Study Area. The following set of criteria was used to determine each species' potential for occurrence on the site:

- Present: Species occurs on the site based on CNDDB records, and/or was observed on the site during field surveys.
- High: The site is within the known range of the species and suitable habitat exists.
- Moderate: The site is within the known range of the species and very limited suitable habitat exists.
- Low: The site is within the known range of the species and there is marginally suitable habitat or the species was not observed during protocol-level surveys conducted onsite.
- Absent/No Habitat Present: The site does not contain suitable habitat for the species, the species was not observed during protocol-level floristic surveys conducted onsite, or the site is outside the known range of the species. This category was also used for all assessed raptor and songbird species that do not have the potential to breed onsite.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Plants				
Allium jepsonii Jepson's onion	--	CRPR 1B.2	Prefers cismontane woodland or lower montane coniferous forests associated with serpentine soils or volcanic slopes (elevation 985'-4,300')	**No Habitat Present.** No serpentine or volcanic soils present and outside of the elevational range of the species.
Balsamorhiza macrolepis Big-scale balsamroot	--	CRPR 1B.2	Prefers chaparral, cismontane woodland, and valley and foothill grasslands. Often associated with serpentine soils (elevation 150'-5,100').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Calycadenia spicata Spicate rosinweed	--	CRPR 1B.3	Occurs in disturbed areas and openings in cismontane woodland and annual grassland. Often associated with adobe clay, gravelly areas, rock outcrops and mine tailings (elevation 130'-4,600').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Calystegia stebbinsii Stebbins' morning glory	FE	CE, CRPR 1B.1	Foothill chaparral and cismontane woodland associated with gabbro soils (elevation 605'-3,575').	**No Habitat Present.** No cismontane woodland or gabbro soils present and outside of the elevational range of the species.
Carex xerophila Chaparral sedge	--	CRPR 1B.2	Prefers chaparral, cismontane woodland, lower montane coniferous forest with serpentine or gabbro soils (elevation 1,445'-2,525').	**No Habitat Present.** No cismontane woodland, lower montane coniferous forest with serpentine or gabbro soils present and outside of the elevational range of the species.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Ceanothus roderickii Pine Hill ceanothus	FE	CR, CRPR 1B.1	Foothill chaparral and cismontane woodland associated with gabbro and serpentine soils (elevation 805'-3,575').	**No Habitat Present.** No chaparral or cismontane woodland with serpentine or gabbro soils present and outside of the elevational range of the species.
Chlorogalum grandiflorum Red Hills soaproot	--	CRPR 1B.2	Preferers, cismontane woodland, chaparral, lower montane coniferous forest. Occurs frequently on serpentine or gabbro, but also on non-ultramafic substrates; often on "historically disturbed" sites (elevation 805'-5,545').	**No Habitat Present.** No cismontane woodland, chaparral, or lower montane coniferous forest with serpentine or gabbro soils present and outside of the elevational range of the species.
Chloropyron molle ssp. hispidum Hispid bird's-beak	--	CRPR 1B.1	Prefers seasonally flooded, saline-alkali soils. Occurs in valley and foothill grasslands, meadows and seeps (elevation 5'-510').	**No Habitat Present.** No alkaline soils present.
Crocanthemum suffrutescens Bisbee Peak rush rose	--	CRPR 3.2	Occurs in open areas within chaparral. Sometimes found in gabbro soils (elevation 245'-2,200').	**No Habitat Present.** No chaparral or gabbro soils present.
Downingia pusilla Dwarf downingia	--	CRPR 2B.2	Mesic areas in valley and foothill grassland, and vernal pools (elevation 3'-1,460').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Fremontodendron decumbens Pine Hill flannelbush	FE	CR, CRPR 1B.2	Foothill chaparral and cismontane woodland. Rocky ridges; gabbro or serpentine endemic; often among rocks and boulders (elevation 1,395'-2,495').	**No Habitat Present.** No chaparral, or cismontane woodland with rocky serpentine or gabbro soils present and outside of the elevational range of the species.
Fritillaria eastwoodiae Butte County fritillary	--	CRPR 3.2	Foothill chaparral, cismontane woodland, and openings in lower montane coniferous forest. Sometimes found on serpentine soils (elevation 160'-4,900).	**No Habitat Present.** No chaparral, cismontane woodland, or lower montane coniferous forest with serpentine soils present.
Galium californicum ssp. sierrae El Dorado bedstraw	FE	CR, CRPR 1B.2	Foothill chaparral and cismontane woodland. Restricted to gabbro or serpentine soils (elevation 330'-1,920').	**No Habitat Present.** No chaparral or cismontane woodland with gabbro or serpentine soils present.
Gratiola heterosepala Boggs Lake hedge-hyssop	--	CE, CRPR 1B.2	Vernal pools and margins of lakes/ponds on clay soils (elevation 35'-7,790').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Hibiscus lasiocarpos var. occidentalis Woolly rose-mallow	--	CRPR 1B.2	Occurs in freshwater wetlands/marshes including edges. Often in riprap on sides of levees (elevation 0'-395').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Juncus leiospermus var. ahartii Ahart's dwarf rush	--	CRPR 1B.2	Occurs along edges of vernal pool and other seasonally ponded features (elevation 100'-750').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Juncus leiospermus var. leiospermus Red Bluff dwarf rush	--	CRPR 1B.1	Occurs in vernal mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools (elevation 115'-4,100').	**No Habitat Present.** The Study Area is outside of the geographic range of the species. The nearby CNDDB occurrence is considered to be erroneous (CNDDB 2025).
Lathyrus sulphureus var. argillaceus Dubious pea	--	CRPR 3	Cismontane woodlands and coniferous forests (elevation 500'-3,050').	**No Habitat Present.** No chaparral or cismontane woodland present and outside of the elevational range of the species.
Legenere limosa Legenere	--	CRPR 1B.1	Occurs in vernal pools (elevation 5'-2,885').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Navarretia myersii ssp. myersii Pincushion navarretia	--	CRPR 1B.1	Found in vernal pools (often acidic) (elevation 65'-1,085').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Orcuttia viscida Sacramento Orcutt grass	FE	CE, CRPR 1B.1	Occurs in vernal pools (elevation 100'-330').	**No Habitat Present.** No suitable vernal pools present.
Packera layneae Layne's ragwort	FT	CR, CRPR 1B.2	Foothill chaparral and cismontane woodland with rocky, gabbro, or serpentine soils (elevation 655'-3,560').	**No Habitat Present.** No chaparral or cismontane woodland with rocky gabbro or serpentine soils present and outside of the elevational range of the species.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Sagittaria sanfordii Sanford's arrowhead	--	CRPR 1B.2	Occurs in emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches (elevation 0'-2,135').	**Absent.** Suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Viburnum ellipticum Oval-leaved viburnum	--	CRPR 2B.3	Found in chaparral, cismontane woodlands, and lower cismontane coniferous forests generally on north-facing slopes or otherwise more mesic areas (elevation 700'-4,600').	**Absent.** Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Wyethia reticulata El Dorado County mule ears	--	CRPR 1B.2	Foothill chaparral and cismontane woodland associated with clay or gabbro soils (elevation 605'-2065').	**No Habitat Present.** No chaparral or cismontane woodland with clay or gabbro soils present and outside of the elevational range of the species.
Invertebrates				
Bombus crotchii Crotch's bumble bee	--	CC	Occurs in open grasslands and scrub habitats. This species occurs primarily in California including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California. This species was historically common in the Central Valley of California but now appears to be absent from most of it, especially in the center of its historic range.	**Low.** Marginally suitable habitat is present; the annual brome grasslands and mixed oak woodlands could support suitable foraging flower populations and small burrows made by fossorial mammals (e.g., Botta's pocket gopher, California vole) provide potential nesting and overwintering habitat.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Branchinecta lynchi Vernal pool fairy shrimp	FT	--	Occurs in vernal pools.	**Low.** Extremely marginally suitable habitat is present within one of the seasonal wetlands (SW-1); protocol-level dry surveys conducted in 2010 did not identify this species within the Study Area.
Danaus plexippus Monarch butterfly	FC	--	Migratory species; most prevalent in the Central Valley in summer and early fall. Dependent upon milkweed (*Asclepias* species) plants as their exclusive larval host.	**Low.** A few scattered milkweed plants are present which could support larvae of this species, and adults could forage on floral resources within the Study Area. The Study Area is outside of the overwintering range of the species.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT	--	Dependent upon elderberry (*Sambucus* species) plant as primary host species.	**Absent.** No elderberry shrubs present.
Lepidurus packardi Vernal pool tadpole shrimp	FE	--	Occurs in vernal pools.	**Absent/No Suitable Habitat.** No suitable habitat is present as onsite seasonal wetlands and seasonal wetland swales do not exhibit sufficient hydroperiods to support this species; protocol-level dry surveys conducted in 2010 did not identify this species within the Study Area.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Fish				
Oncorhynchus mykiss irideus Steelhead – Central Valley Distinct Population Segment (DPS)	FE	--	This anadromous species requires freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	**No Habitat Present.** No freshwater water courses present.
Amphibians				
Spea hammondii Western spadefoot	FC	CSC	Breeds in vernal pools, seasonal wetlands and associated swales. Forages and hibernates in adjacent grasslands.	**Low.** Marginally suitable breeding habitat is present within the seasonal wetlands and some of the seasonal wetland swales and the undeveloped terrestrial vegetation communities presents suitable upland habitat refugia/foraging.
Reptiles				
Actinemys marmorata Northwestern pond turtle	FC	CSC	Occurs in ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	**High.** Suitable habitat for this species is present in the pond, and multiple turtles of unknown species were observed basking on logs along the pond during site visits. This species is known to occur on an adjacent property.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Birds				
Colonial nesting water birds	--	--	Water birds such as great blue heron (*Ardea herodias*), great egret (*Ardea alba*), snowy egret (*Egretta thula*), and black-crowned night heron (*Nycticorax nycticorax*) nest colonially in large groups known as "rookeries". Some of these species nest in large trees near perennial water, while others prefer to nest in or adjacent to dense emergent marsh.	**Absent.** Marginal nesting habitat is present in the trees adjacent to the pond. No rookeries have been observed onsite during surveys.
Accipiter cooperii Cooper's hawk	--	--	Inhabits forested habitats, forest edge, and riparian habitat, may forage in adjacent grassland and fields.	**High.** Onsite trees provide suitable nesting habitat and the oak woodland and annual brome grassland provide suitable foraging habitat.
Agelaius tricolor Tricolored blackbird	--	CE, CSC	Colonial nester in cattails (*Typha* spp.), bulrushes (*Scirpus* or *Schoenoplectus* spp.), blackberries (*Rubus* spp.), non-native mustards (*Brassica* spp.), thistles (*Cirsium* spp.), and mallows (*Malva* spp.) associated with marsh habitat sand in Triticale agriculture fields. Nesting habitat may be as small as 0.01 acres adjacent to suitable foraging habitat such as grazed grasslands, irrigated pasture, shallow wetlands, and agricultural fields.	**Low.** Small to medium-sized blackberry thickets and cattails patches around the pond margins provide marginally suitable nesting habitat and the annual brome grasslands provide foraging habitat.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Ammodramus savannarum Grasshopper sparrow	--	CSC	Typically found in expansive short to middle-height, moderately open grasslands with scattered shrubs or other song perches.	**Low.** The annual brome grassland is marginally suitable breeding and foraging habitat for this species.
Aquila chrysaetos Golden eagle	--	CFP	Forages in open areas including grasslands, savannahs, deserts, and early successional stages of shrub and forest communities. Nests in large trees and cliffs.	**Moderate.** Moderately suitable nesting habitat is present in scattered large trees onsite and the annual brome grassland provides marginally suitable foraging habitat.
Asio flammeus Short-eared owl	--	CSC	Typically found in open areas with few trees such as grasslands, prairies, dunes, meadows, and croplands.	**No Habitat Present.** This species does not breed in the range of the Study Area, could occasionally forage within the Study Area.
Athene cunicularia Burrowing owl	--	CC, CSC	Nests in abandoned ground squirrel (*Otospermophilus beecheyi*) burrows associated with open grassland habitats.	**No Habitat Present.** The Study Area does not support California ground squirrel burrows which provide suitable nesting habitat. Additionally, the acreage of the annual brome grassland is small surrounded by woodland and residential land uses which deters foraging.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Buteo regalis Ferruginous hawk	--	--	Not known to nest in California. Forages in open areas such as grasslands and fields for ground squirrels as well as other small mammals, birds, lizards, snakes, and rabbits.	**No Habitat Present.** This species does not breed in California, could occasionally forage within the Study Area.
Buteo swainsoni Swainson's hawk	--	CT	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	**Moderate.** Moderately suitable nesting habitat is present in scattered large trees onsite. The annual brome grassland acreage is too small to provide suitable foraging habitat.
Circus hudsonius (formerly *C. cyaneus*) Northern harrier	--	CSC	Nests in emergent wetland/marsh, open grasslands, or savannah habitats. Forages in open areas such as marshes, agricultural fields, and grasslands.	**Low.** The annual brome grassland and open areas along the pond provide marginally suitable nesting and foraging habitat for this species.
Contopus cooperi Olive-sided flycatcher	--	CSC	Nests in late-successional conifer forests with open canopies. Mostly associated with edges and openings in otherwise relatively dense forests, but they also occupy semi open forests.	**No Habitat Present.** No conifer forests present for breeding, could occasionally forage within the Study Area.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Cypseloides niger Black swift	--	CSC	Nest on ledges or in crevices in steep cliffs, either along the coast or near streams or waterfalls in mountains. Found in over mountains and coastal cliffs. They forage over a wide array of terrain but are local in occurrence, likely limited to regions with suitable nesting sites.	**No Habitat Present.** No cliffs, crevices, streams or waterfalls present for breeding, could occasionally forage within or high over the Study Area.
Elanus leucurus White-tailed kite	--	CFP	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	**High.** The trees present suitable nesting habitat the annual brome grassland provides suitable foraging habitat.
Empidonax traillii Willow flycatcher	--	CE	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 2000-8000 ft elevation. Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	**No Habitat Present.** No dense willow thickets present for breeding, could occasionally forage within the Study Area.
Falco columbarius Merlin	None	None	It is not known to nest in California, but it is a winter transient throughout most of the state with wintering populations in the Central Valley.	**No Habitat Present.** This species does not breed in California could occasionally forage within the Study Area.
Falco mexicanus Prairie falcon	--	--	Nests on scrapes on a sheltered ledge of cliffs overlooking a large, open area. Forages in open areas.	**No Habitat Present.** No ledges or cliffs present for breeding, could occasionally forage within the Study Area.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Haliaeetus leucocephalus Bald eagle	--	CE	Nest in large trees within 1 mile of lakes, rivers, or larger streams.	**Low.** Marginally suitable foraging habitat is present in the Study Area's pond and other ponds that occur within 1 mile of the Study Area, and marginally suitable nesting trees are present.
Icteria virens Yellow-breasted chat	--	CSC	This species occupies early-successional riparian habitats with well-developed shrub layer and open canopy along streams, creeks, sloughs, and rivers.	**No Habitat Present.** No dense riparian habitats present for breeding, could occasionally forage within the Study Area.
Botaurus exilis Least bittern	--	CSC	Nests in freshwater and brackish marshes with tall, dense emergent vegetation and clumps of woody plants over deep water.	**No Habitat Present.** No tall, dense emergent vegetation and clumps of woody plants present.
Lanius ludovicianus Loggerhead shrike	--	CSC	Occurs in open areas with sparse trees, shrubs, and other perches.	**No Habitat Present.** No large open areas with sparse trees present.
Laterallus jamaicensis coturniculus California black rail	--	CT, FP	Nests and forages in salt, brackish, and fresh marshes with abundant vegetative cover.	**No Habitat Present.** No marshes with abundant emergent vegetative cover present.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Melospiza melodia mailliardi Song sparrow "Modesto" population	--	CSC	Nests in emergent freshwater marshes dominated by bulrushes, and cattails as well as riparian willow (*Salix* spp.) thickets. This species also nests in riparian forests of valley oak with a blackberry understory, along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites.	**Moderate.** Moderately suitable nesting habitat is present within blackberry thickets scattered within the mixed oak forest and woodland, and the Study Area is near the edge of the range of this species. A song sparrow (not identified to subspecies) was heard calling within the Study Area.
Pandion haliaetus Osprey	--	CDFW-Special Animal	Forages along open ocean and lake shores and larger streams. Nests in the top of large trees located near foraging areas.	**No Habitat Present.** No open oceans, lake shores, or large streams present.
Pelecanus erythrorhynchos American white pelican (nesting colony)	--	CSC	Nests on isolated islands in lakes and feeds on shallow lakes, rivers, and marshes away from human disturbance.	**No Habitat Present.** No isolated islands present within the Study Area pond.
Progne subis Purple martin	--	CSC	Nests in tall bridges and overpasses near water and open areas.	**No Habitat Present.** No tall bridges or overpasses present for breeding.
Riparia riparia Bank swallow	--	CT	Colonial nester preferring vertical cliffs and banks with fine textured/sandy soils associated with riparian zones along streams, rivers, and lakes.	**No Habitat Present.** No fine-textured/sandy soils present for breeding.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Setophaga petechia Yellow warbler	--	CSC	Occupy riparian vegetation in close proximity to water along streams and in wet meadows. This species no longer breeds in the Central Valley but occurs as a common migrant in the fall and winter months.	**No Habitat Present.** This species no longer breeds in the Central Valley, could forage onsite.
Xanthocephalus xanthocephalus Yellow-headed blackbird	--	CSC	Colonial nester associated with deeper tule, bulrush, or cattail marsh habitats. May also be found in open areas such as grasslands or agricultural fields during migration.	**No Habitat Present.** No deep tule, bulrush, or cattail marshes present for breeding, could occasionally forage onsite.
Mammals				
Antrozous pallidus Pallid bat	--	CSC, WBWG H	Day and night roots include crevices in rocky outcrops and cliffs, caves, mines, trees, and various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings. Roosts generally have unobstructed entrances/exits, and are high above the ground, warm, and inaccessible to terrestrial predators; however, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards.	**High.** Trees and structures within the Study Area are suitable roosting habitat for this species.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Choeronycteris mexicana Mexican long-tongued bat	--	WBWG M	Primarily occurs in the San Diego area of California in a variety of habitats, including thorn scrub, Palo Verde-saguaro desert, semi-desert grassland, oak woodland, and tropical deciduous forests.	**No Habitat Present.** The Study Area is outside the known range of the species.
Corynorhinus townsendii Townsend's big-eared bat	--	CSC, WBWG H	Roosts in caves and cave analogues, such as abandoned mines, buildings, bridges, rock crevices and large basal hollows of coast redwoods (*Sequoia sempervirens*) and giant sequoia (*Sequoiadendron giganteum*). Extremely sensitive to human disturbance.	**No Habitat Present.** No caves or cave analogues present.
Euderma maculatum Spotted bat	--	CSC, WBWG H	Spotted bats have been found from below sea level to 2,700 m elevation, occurring from arid, low desert habitats to high elevation conifer forests. Prominent rock features appear to be a necessary feature for roosting. Roost sites are cracks, crevices, and caves, usually high in fractured rock cliffs.	**No Habitat Present.** No prominent rock features, caves, or high fractured rock cliffs present.
Eumops perotis californicus Western mastiff bat	--	CSC, WBWG H	Roosts in high rock outcrops, trees, buildings, and tunnels. Generally regarded as a higher altitude forager.	**High.** Trees and structures within the Study Area are suitable roosting habitat for this species.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Lasionycteris noctivagans Silver-haired bat	--	WBWG M	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. It forages in open wooded areas near water features.	**No Habitat Present.** The Study Area is outside the known range of the species.
Lasiurus frantzii (formerly *L. blossevillii*) Western red bat	--	CSC, WBWG H	Requires large leaf trees such as cottonwoods (*Populus* spp.), willows (*Salix* spp.), and fruit/nut trees for daytime roosts. Often associated with wooded habitats that are protected from above and open below. Often found in association with riparian corridors. Requires open space for foraging.	**Moderate.** Trees scattered throughout the Study Area are suitable roosting habitat for this species.
Lasiurus cinereus Hoary bat	--	WBWG M	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings.	**High.** Trees scattered throughout the Study Area are suitable roosting habitat for this species.
Lasiurus xanthinus Western yellow bat		CSC, WBWG H	Found in southern California in association with palms and other desert riparian habitats. Individuals commonly roost in dead palm fronds and cottonwood trees, hanging from the underside of a leaf. Feeds around natural and non-natural water features in open grassy areas and scrub, in canyon and riparian situations, and over swimming pools, lawns in residential areas, and orchards.	**No Habitat Present.** The Study Area is outside the known range of the species.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Macrotus californicus California leaf-nosed bat	--	CSC, WBWG H	Occurs in the lower Sonoran deserts of California.	**No Habitat Present.** The Study Area is outside the known range of the species.
Myotis ciliolabrum Western small-footed myotis	--	WBWG M	Associated with arid wooded or shrubby uplands near water. Roosts in caves, buildings, mines, and crevices.	**Low.** The onsite structures present marginally suitable roosting habitat; the Study Area is just outside the known range of the species
Myotis evotis Long-eared myotis	--	WBWG M	Occurs in semiarid shrublands, sage, chaparral, and agricultural areas, but is usually associated with coniferous forests. Individuals roost under exfoliating tree bark, and in hollow trees, caves, mines, cliff crevices, sinkholes, and rocky outcrops on the ground. They also sometimes roost in buildings and under bridges.	**Low.** The onsite trees and structures present marginally suitable roosting habitat; however, the Study Area is just outside the known range of the species.
Myotis thysanodes Fringed myotis	--	WBWG H	Roosts in crevices in buildings, underground mines, rocks, cliff faces, bridges, and in large decadent trees and snags.	**High.** Trees and structures within the Study Area are suitable roosting habitat for this species.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Myotis lucifugus Little brown bat	--	WBWG M	Occurs over a widespread region of California, mainly found in mountainous and riparian areas in a wide variety of forested habitats including tree-lined xeric-scrub to aspen meadows to Pacific Northwest rain forests. Roosts in tree cavities and crevices close to foraging grounds. Often associated with humans.	**No Habitat Present.** The Study Area is outside the known range of the species.
Myotis volans Long-legged myotis	--	WBWG H	Long-legged myotis occurs in coniferous forests, but also seasonally in riparian and desert habitats. Summer day roosts consist of abandoned buildings, cracks in the ground, cliff crevices, exfoliating tree bark, and hollows within snags.	**No Habitat Present.** Coniferous forests and desert habitat are not present within the Study Area.
Nyctinomops femorosaccus Pocketed free-tailed bat	--	CSC, WBWG M	Occurs in southern California deserts, roost in cervices of cliffs and rocky outgroups in groups numbering up to about 100.	**No Habitat Present.** The Study Area outside the known range of the species.
Nyctinomops macrotis Big free-tailed bat	--	CSC, WBWG M	Live in deserts and arid grasslands where rocky outcrops, canyons, or cliffs provide ideal roosts. Will occasionally roost in buildings.	**No Habitat Present.** The Study Area outside the known range of the species.

[1]*Status Codes:*

CC - CDFW Candidate for Listing *CE - CDFW Endangered* *CFP - CDFW Fully Protected* *CRPR - California Rare Plant Rank* *CR - California Rare*
CSC - CDFW Species of Concern *CT - CDFW Threatened* *FE - Federally Endangered* *FT - Federally Threatened* *FC - Federal Candidate for Listing*
WBWG H - Western Bat Working Group High Threat Rank *WBWG M - Western Bat Working Group Medium Threat Rank*

Figures 3 and **4** are exhibits displaying CNDDB occurrences and USFWS-defined critical habitats within five miles of the Study Area. Below is a discussion of all special-status plant and animal species with potential to occur within the Study Area.

5.1 Plants

While the Study Area presents suitable or marginally suitable habitat for a number of special-status plant species, no special-status plant species were observed during the 2023 protocol-level special-status plant surveys of the Study Area (Madrone 2023).

5.2 Invertebrates

The Study Area has low potential to support two special-status invertebrate species; Crotch's bumble bee and monarch butterfly.

5.2.1 Crotch's Bumble Bee

Crotch's bumble bee (*Bombus crotchii*) is not federally listed but is a candidate for listing under CESA. This species has a limited distribution in southwestern North America, occurring primarily in California, including the Mediterranean region, Pacific Coast, West Desert, Great Valley, and adjacent foothills through most of southwestern California. It also occurs in Mexico (Baja California and Baja California Sur) (Williams et al. 2014) and has been documented in southwest Nevada, near the California border. This species was historically common in the Central Valley of California but now appears to be absent from most of it, especially in the center of its historic range (Williams et al. 2014). In California, Crotch's bumble bees inhabit open grasslands and scrub habitats.

All bumble bees have three basic requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the entirety of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens. Nests are often located underground in abandoned holes made by California ground squirrels, mice, and rats or occasionally abandoned bird nests (Osborne et al. 2008). Some species nest on the surface of the ground (in tufts of grass) or in empty cavities. Bumble bees that nest aboveground may require undisturbed areas with nesting resources such as grass and hay to protect nests. Furthermore, areas with woody cover, or other sheltered areas provide bumble bees sites to build their nests (e.g., downed wood, rock walls, brush piles).

Bumble bees depend on the availability habitats with a rich supply of floral resources that bloom continuously during the entirety of the colony's life. The queen collects nectar and pollen from flowers to support the production of her eggs, which are fertilized by sperm she has stored from mating the previous fall. As generalist foragers, bumble bees do not depend on any one flower type. They generally prefer flowers that are purple, blue or yellow; they are essentially blind to the color red. The plant families most commonly associated with Crotch's bumble bee observations in California include Apocynaceae, Asteraceae, Boraginaceae, Fabaceae, and Lamiaceae (Xerces Society et al. 2025). Very little is known about

hibernacula, or overwintering sites utilized by most bumble bees. Generally, bumble bees overwinter in soft, disturbed soil (Goulson 2010), under leaf litter or other debris (Williams et al. 2014), in abandoned holes made by fossorial mammals or occasionally in abandoned bird nests (Osborne et al. 2008). Some species nest on the surface of the ground (in grassy tussocks) or in empty cavities (hollow logs, dead trees, under rocks, etc.). Queens most likely overwinter in small cavities just below or on the ground surface.

The annual brome grasslands within the Study Area present marginally suitable habitat for this species, with flowers providing nectar resources and small ground burrows made by fossorial mammals such as Botta's pocket gopher (*Thomomys bottae*) and California vole (*Microtus californicus*) offering suitable nesting and overwintering locations. There are no CNDDB occurrences of Crotch's bumble bee within 5 miles of the Study Area (CNDDB 2025). One observation of Crotch's bumble bee has been recorded in the Bumble Bee Watch database at the Town of Loomis Library and Placer County Master Gardner Demonstration Garden, located approximately 2.2 miles north of the Study Area (Xerces Society et al. 2025). This observation also appears in iNaturalist (possibly twice), with an identification rating of Research Grade (iNaturalist 2025).

5.2.2 Vernal Pool Fairy Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*) is listed as threatened pursuant to FESA. Historically, the range of vernal pool fairy shrimp extended throughout the Central Valley of California. Vernal pool fairy shrimp populations have been found in several locations throughout California, with habitat extending from Stillwater Plain in Shasta County through the Central Valley to Pixley in Tulare County, and along the Central Coast range from northern Solano County to Pinnacles National Monument in San Benito County (Eng et al. 1990, Fugate 1992). Additional populations occur in San Luis Obispo, Santa Barbara, and Riverside counties. The historic and current ranges of vernal pool fairy shrimp are very similar in extent; however, the remaining populations are more fragmented and isolated than during historical times (USFWS 2005). The life cycle of vernal pool fairy shrimp is adapted to seasonally inundated features such as vernal pools, seasonal wetlands, and seasonal wetland swales. Fairy shrimp embryos survive the dry season in cyst form. Cysts "hatch" soon after pools become inundated during the wet season. Fairy shrimp complete their life cycle quickly and feed on small particles of detritus, algae, and bacteria (Eriksen and Belk 1999).

One seasonal wetland (SW-1; located just north of the pond) within the Study Area present extremely marginally suitable habitat for vernal pool fairy shrimp. This one wetland appears to exhibit appropriate ponding depth and duration for this species, although its location under a mature blue oak tree results in significant leaf litter and vegetation community which is not the typical vegetation for features supporting vernal pool fairy shrimp. All other seasonally inundated features within the Study Area do not present suitable habitat due to flowing water/sloped topography, unsuitable vegetation (e.g., Himalayan blackberry, *Rubus armeniacus*), or incompatible hydrological influences (e.g., overflow ponding from the adjacent pond, unseasonal runoff from adjacent landscaping irrigation). Dry season sampling for federally listed large branchiopods (which includes vernal pool fairy shrimp) was conducted within the Study Area in 2010 and no branchiopod cysts were found (Helm 2010). There are four occurrences of vernal pool fairy shrimp within 5 miles of the Study Area (CNDDB 2025). The closest two occurrences are located in Roseville (Occurrence

229 and 230) and recent aerial imagery shows the locations have been developed (Google Earth 2025). The remaining two occurrences are both over 4 miles from the Study Area.

5.2.3 Monarch Butterfly

The monarch (*Danaus plexippus*) is a candidate for listing pursuant to FESA. It is a large conspicuous species of butterfly that occurs in North, Central, and South America; Australia; New Zealand; islands of the Pacific and Caribbean; and elsewhere (Malcolm and Zalucki 1993 in USFWS 2020). This species can occur in fields, roadside areas, open areas, wet areas or urban gardens and requires flowering plants as a food source and healthy and abundant milkweed (generally *Asclepius* spp.) for laying eggs on as larval host plants (USFWS 2022). During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (*Asclepias* spp.), and larvae emerge after two to five days (Zalucki 1982 in USFWS 2020). Larvae develop over a period of 9 to 18 days, feeding on the milkweed and then pupate into chrysalis before eclosing 6 to 14 days later as an adult butterfly (USFWS 2020). Multiple generations of monarchs are produced during the breeding season, with most adult butterflies living approximately two to five weeks (USFWS 2020).

In western and eastern North America, overwintering adults enter into reproductive diapause (suspended reproduction) and live 6 to 9 months (Cockrell et al. 1993 in USFWS 2020). In the fall, monarchs begin migrating to their overwintering sites. Migratory individuals in western North America generally fly south and west to overwintering groves along the California coast into northern Baja California (Solensky 2004 in USFWS 2020).

In California, monarchs both continue to occupy and breed in areas near their overwintering sites throughout the year, as well as dispersing over multiple generations to occupy and breed throughout the state in the spring through fall (USFWS 2020). Migrating monarchs in western North America tend to occur more frequently near water sources such as rivers, creeks, roadside ditches, and irrigated gardens (Morris et al. 2015 in USFWS 2020). In California's central valley, monarch butterflies breed between 15 March and 31 October (Xerces Society 2018).

Adult monarch butterflies require a diversity of blooming nectar resources during breeding and migration (spring through fall). Monarchs also need milkweed (for both oviposition and larval feeding) embedded within this diverse nectaring habitat.

While this species was not observed onsite during field surveys, one large patch of narrowleaf milkweed (*Asclepius fascicularis*), a larval host plant for monarch butterfly, was documented within the Study Area. Additionally, flowering plants within the Study Area may provide nectar for foraging adults. A query of the Western Monarch Milkweed Database yielded one observation of a foraging adult monarch in 2021 approximately 2.8 miles northeast of the Study Area, a second observation of a foraging adult in 1965 approximately 2.7 miles southeast of the Study Area, a third observation of a foraging adult in 2024 approximately 3.4 miles southeast of the Study Area, and one observation of breeding (larvae) in 2022 approximately 4.5 miles southwest of the Study Area (WMMM 2025). A query of iNaturalist (2025a) shows four Research Grade observations of monarch butterfly within 0.8 miles of the Study Area in 2022-2023.

5.3 Amphibians

The Study Area has a low potential to support one special-status amphibian species, western spadefoot.

5.3.1 Western Spadefoot

The western spadefoot (*Spea hammondii*) is a federally proposed threatened species and is considered a CDFW Species of Special Concern. This amphibian is a nocturnal animal that forages in open treeless grasslands, scrub, or mixed woodland and grassland where aquatic breeding habitat is in sufficiently close proximity (Stebbins and McGinnis 2012). Western spadefoot breeds from January through May in variety of temporary wetlands including creeks, pools in intermittent drainages, vernal pools, seasonal wetlands, and other predator-free water features with sufficient duration of inundation. The tadpoles develop in 3 to 11 weeks and must complete their metamorphosis before the temporary pools dry. Post-metamorphic juveniles feed and then immediately disperse into the surrounding uplands to seek underground refugia. Following metamorphosis, the adults are largely terrestrial in nature and will burrow into sandy or gravelly soils utilizing the "spades" on the hind feet. The soil must be relatively sandy and friable as these soil attributes facilitate both digging and water absorption (Ruibal et al. 1969 and Baumberger 2013 in USFWS 2023). Western spadefoots typically burrow approximately 3 feet below ground during estivation (Stebbins and McGinnis 2012 in USFWS 2023). The majority of an adult's life is spent in underground burrows (USFWS 2005). Western spadefoots are known to breed in relatively deep vernal pools, seasonal wetlands, man-made features, such as ponded areas adjacent to railroad tracks, and in intermittent drainage plunge pools or similar pools that hold water through late spring (Stebbins and McGinnis 2012). The species can breed in perennial aquatic features, but such habitats typically support a higher abundance of native and non-native predators that consume western spadefoot larvae (Jennings and Hayes 1994).

Western spadefoot dispersal distances into uplands have not been well researched, although they have been documented to vary in relation to annual precipitation. To date, this has only been studied on a population in Orange County. In this population, during a dry year, the mean distance individuals moved away from breeding pools was 131 feet, with the longest movement of an individual being 860 feet (Baumberger 2013 in USFWS 2023). In the same population during a wet year, the mean distance moved away from breeding pools was 450 feet, and the maximum distance a spadefoot dispersed was 1,985 feet (Baumberger et al. 2020 in USFWS 2023).

The seasonal wetlands and some of the seasonal wetland swales within the Study Area present marginally suitable breeding habitat for western spadefoot. There is one documented occurrence of western spadefoot within 5 miles of the Study Area (Occurrence # 72) (CNDDB 2025). This occurrence is located approximately 3.2 miles southeast of the Study Area along the railroad tracks that occur southeast of the intersection of Highway 65 and Interstate 80.

5.4 Reptiles

The Study Area has a high potential to support one special-status reptile species, northwestern pond turtle.

5.4.1 Northwestern Pond Turtle

The northwestern pond turtle (*Actinemys marmorata*) is a federally proposed threatened species and is considered a CDFW Species of Special Concern. The northwestern pond turtle occupies a wide variety of permanent and ephemeral aquatic habitats and originally inhabited many of the pacific drainage basins in California (Stebbins 2003). Its favored habitats include streams, large rivers and canals with slow-moving water, aquatic vegetation, and open basking sites (Jennings and Hayes 1994). Both flowing water habitats (e.g., rivers and streams) and isolated waters (e.g., ponds and reservoirs) are used by northwestern pond turtles, although this species is a relatively poor swimmer and tends to seek areas with slow, shallow, warmer water, often with emergent vegetation. Ponds that are near to streams are often the favored habitat. Although northwestern pond turtles must live near water, they can tolerate drought by burrowing into the muddy beds of dried drainages. It also may spend a significant amount of time in upland terrestrial habitats as well and can over-winter on land or in water or remain active in the winter, depending on environmental conditions (Rathbun et al. 1993, Jennings and Hayes 1994).

This species breeds from mid to late spring in adjacent open grasslands or sandy banks (Jennings and Hayes 1994). Females travel from aquatic sites into open, grassy areas to lay eggs in a shallow nest (Holland 1994, Rathbun et al. 1993). Nests have been reported from 6 to 1,315 feet or more away from water bodies (Jennings and Hayes 1994) and are typically 4 to 6 inches deep. Nesting sites are typically limited to south-facing slopes or sections of a water body (Geist et al. 2015, Rathbun et al. 1993).

The large pond within the Study Area presents suitable northwestern pond turtle breeding habitat, and numerous turtles, which were not identified to species, were observed basking on logs along the pond margins during site visits. Additionally, northwestern pond turtle has been seen by Madrone biologists within a pond on a property adjacent to the Study Area. There are two documented CNDDB occurrences of northwestern pond turtle within 5 miles of the Study Area (CNDDB 2025) (**Figure 4**). Both occurrences lie just under 5 miles from the Study Area, with one occurrence at the Baldwin Reservoir and the other at Folsom Lake (CNDDB 2025).

5.5 Birds

The Study Area provides habitat for a variety of special-status avian species. These are discussed further below.

5.5.1 Cooper's Hawk

Cooper's hawk (*Accipiter cooperi*) is not listed pursuant to either CESA or FESA; however, it is designated as a Species of Special Concern by the CDFW. This raptor is a forest and woodland bird that is often found in leafy suburbs, parks, residential neighborhoods, fields, and backyard bird feeders (Cornell University 2025a). Cooper's hawks hunt by stealth, approaching their prey through dense cover and then pouncing with a rapid, powerful fight, feeding mostly on birds and small mammals (Audubon 2025a). They have also been observed on occasion drowning captured prey in water (Cornell University 2025a). This species prefers

nesting in deciduous or coniferous trees typically 25 to 50 feet above ground level, often on flat ground rather than hillsides, and in dense woods (Audubon 2025a, Cornell University 2025a).

The Study Area presents highly suitable nesting and foraging habitat for Cooper's hawk. While there are no CNDDB documented occurrences of Cooper's hawk within five miles of the Study Area (CNDDB 2025), numerous recent sightings of this species have been recorded in eBird (2025) and iNaturalist (2025) within 5 miles of the Study Area, many with photographs supporting correct identification, and one record in 2020 with nesting with confirmed young approximately 3.6 mile west of the Study Area. Additionally, Madrone biologists have observed a nesting Cooper's hawk approximately 1.3 miles northwest of the Study Area in 2020, which successfully fledged two young.

5.5.2 Tricolored Blackbird

Tricolored blackbird (*Agelaius tricolor*) populations, which are currently in decline throughout the state, were listed as threatened under CESA by the California Fish and Game Commission on 19 April 2018. Historically, colonies were established in freshwater marshes dominated by cattails (*Typha* spp.) and bulrushes (*Scirpus* or *Schoenoplectus* spp.) (Shuford and Gardali 2008). More recently, they have utilized non-native mustards (*Brassica* spp.), blackberries (*Rubus* spp.), thistles (*Cirsium* spp.), and mallows (*Malva* spp.) as nesting substrate (Airola et al. 2016). Since the 1980s, the largest colonies have been observed in the San Joaquin Valley in cultivated fields of *Triticale*, which is a hybrid of wheat (*Triticum* sp.) and rye (*Secale* sp.) often grown as livestock fodder (Meese 2014). This current trend of nesting in active agricultural fields has further imperiled the species as nestlings typically are not fledged by the time the Triticale is harvested.

Small to medium-sized blackberry thickets and cattails patches around the pond margins provide marginally suitable nesting habitat for tricolored blackbird, and the annual brome grasslands provide marginally suitable foraging habitat. There is one documented occurrence of nesting tricolored blackbirds about 3.7 miles southwest of the Study Area (CNDDB 2025) (**Figure 4**). This "Wellington Way" occurrence documents a colony nesting in cattails in a freshwater marsh west of Granite Bay High School in 1997 and 1999. A query of eBird (2025) shows a record of approximately 200 individuals in this same location in 2017, vocalizing and displaying. About a dozen sightings of tricolored blackbirds have been reported within 5 miles of the Study Area, with some observations made as recently as 2024 (eBird 2025, iNaturalist).

5.5.3 Grasshopper Sparrow

Grasshopper sparrow (*Ammodramus savannarum*) is not listed pursuant to either the CESA or FESA; however, it is designated as a Species of Special Concern by the CDFW. Grasshopper sparrows breed across most coastal counties into the Central Valley foothills and coastal ranges. Along the coast, they are most widely distributed in the San Francisco Bay and central coast (Audubon California 2025). Grasshopper sparrows generally inhabit moderately open grasslands and prairies with patchy bare ground and scattered shrubs (Vickery 2020). They are more likely to occupy large tracts of habitat than small fragments (Vickery 2020). This species typically breeds from early May through August.

The annual brome grassland within the Study Area presents marginally suitable breeding and foraging habitat for grasshopper sparrow. There is 2023 observation of this species approximately 4.1 miles east of the Study Area which includes a photograph which supports a correct identification (eBird 2025). No CNDDB records or iNaturalist observations for grasshopper sparrow occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.5.4 Golden Eagle

Golden eagle (*Aquila chrysaetos*) is not listed pursuant to either CESA or FESA; however, it is categorized as a Species of Special Concern and a Fully Protected Species by the CDFW and is protected under the federal Bald and Golden Eagle Protection Act. This species is a very large solitary raptor that feeds on mammals, carrion, and reptiles. It typically nests in large trees or cliffsides in rolling to mountainous terrain, and forages in large, expansive open grasslands and savannahs (Shuford and Gardali 2008). Although its natural densities are generally believed to be low, it was once relatively common to the open areas of California. This species typically nests between February and August.

Moderately suitable nesting habitat for golden eagle is present in the Study Area in scattered large trees onsite and the annual brome grassland provides marginally suitable foraging habitat. Madrone biologists observed a golden eagle soaring approximately 4 miles north of the Study Area in 2024. Additionally, there is 2021 observation of this species approximately 1.1 miles east of the Study Area which notes the sighting was of an immature bird (eBird 2025). No CNDDB records or iNaturalist observations for golden eagle occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.5.5 Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed but is listed as threatened by the CDFW. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in grassland, irrigated pasture, and cropland with a high density of rodents (Shuford and Gardali 2008). Patches of foraging habitat must be of sufficient size to support this species; the CDFW (formerly CDFG) has determined that patches five acres or more in size are the minimum acreage required for viable foraging habitat (CDFG 1994). The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter (Shuford and Gardali 2008).

Moderately suitable nesting habitat for Swainson's hawk is present in scattered large trees within the Study Area and while annual brome grassland can be used for foraging, the 4.1 acres of annual brome grassland habitat within the Study Area is not of sufficient size to attract foraging Swainson’s hawks (CDFG 1994). There are more than a dozen observations of Swainson’s hawk within 5 miles of the Study Area as this Project is on the edge of the foothills and has more appropriate grasslands to the west. The closest Swainson’s hawk observation was made in 2024 approximately a half mile west of the Study Area near the intersection of Rocklin Road and Sierra College Blvd (eBird 2025). No CNDDB records for Swainson's hawk occur within 5 miles of the Study Area (CNDDB 2025).

5.5.6 Northern Harrier

Northern harrier (*Circus hudsonius*) is not listed pursuant to either CESA or CESA; however, it is categorized as a Species of Special Concern by the CDFW. This raptor is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California (Shuford and Gardali 2008). It is a ground nesting species, and typically utilizes emergent wetland/marsh, open grasslands, or savannah habitats. Foraging occurs within a variety of open habitats such as marshes, agricultural fields, and grasslands (Shuford and Gardali 2008).

The annual brome grassland and open areas along the pond provide marginally suitable nesting and foraging habitat for northern harrier. No CNDDB records for northern harrier occur within 5 miles of the Study Area (CNDDB 2025). More than 50 sightings of northern harrier have been reported within 5 miles of the Study Area, most within the last five years (eBird 2025, iNaturalist 2025), including sightings which include photographs to support correct identification.

5.5.7 White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not federally or state listed, but it is a CDFW Fully Protected Species. This raptor is a year-round resident in the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands (Shuford and Gardali 2008). White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range (Shuford and Gardali 2008).

The annual brome grassland within the Study Area represents suitable foraging habitat for white-tailed kite, and the larger trees within the Study Area provide suitable nesting habitat. There is one documented occurrence (Occurrence #74) of nesting white-tailed kite within 5 miles of the Study Area (CNDDB 2025) (**Figure 4**). This observation is located at Traylor Ranch Nature Preserve approximately 4 miles north of the Study Area. A couple dozen observations of this species have been made over the last five years within 5 miles of the Study Area (eBird 2025, iNaturalist 2025). Notable observations include a 2022 photograph taken Monte Verde Park located approximately 0.95 mile east of the Study Area, and a 2025 photograph taken at Traylor Ranch Nature Preserve (same location as CNDDB Occurrence #74).

5.5.8 Bald Eagle

Bald eagle (*Haliaeetus leucocephalus*) is not listed pursuant to CESA and is no longer federally listed, but it is a CDFW Fully Protected Species and protected under the federal Bald and Golden Eagle Protection Act. This species is a year-round resident within the approximate northern half of California, and present in winter in the rest of the state (Cornell University 2025f). This species typically nests in forested areas adjacent to large bodies of water away from heavily developed areas when possible and prefer tall sturdy conifers that protrude above the forest canopy (Cornell University 2025f). Bald eagles typically eat fish but their diet will vary depending on what is available to include birds, reptiles, amphibians, invertebrates, and mammals (live, fresh, or as carrion) (Cornell University 2025f). Bald eagles are tolerant of human activity

when feeding, and may congregate around fish processing plants, dumps, and below dams where fish concentrate (Cornell University 2025f).

The Study Area presents marginally suitable foraging and nesting habitat for bald eagle. There is one occurrence (Occurrence # 272) of nesting bald eagle within 5 miles of the Study Area (CNDDB 2025) (**Figure 4**). This record is from 2005 with updates of use in 2006 and annually from 2008-2014 and is located approximately 4.8 miles east of the Study Area on Anderson Island in Folsom Lake. There are perhaps more than 100 observations of bald eagle within 5 miles of the Study Area, many within the last five years and including photographs which support correct identification (eBird 2025).

5.5.9 Song Sparrow "Modesto" Population

The song sparrow "Modesto" population (*Melospiza melodia mailliardi*) is not listed pursuant to either CESA or FESA; however, it is designated as a Species of Special Concern by the CDFW. Identification of this subspecies is not clear and warrants additional research. While early studies of song sparrows initially considered the Modesto population of song sparrow a recognized subspecies (Grinnell and Miller 1944, AOU 1957), more recent studies indicate that it is not diagnosable from other song sparrow subspecies, and Patten and Pruett (2009) recommend *Melospiza melodia mailliardi* be considered part of the *Melospiza melodia heermanni* subspecies of song sparrow rather than treated as a unique subspecies. However, since it is possible that future research indicates that the song sparrow "Modesto" population is genetically distinctive, it remains designated by CDFW as Species of Special Concern.

The song sparrow "Modesto" population is endemic to the north-central portion of the Central Valley (Grinnell and Miller 1944, AOU 1957) and is generally associated with freshwater emergent marshes dominated by cattails, riparian willows, or bulrushes (Grinnell and Miller 1944). Nesting has also been observed within riparian forests of valley oak with sufficient understories of blackberries and recently planted valley oak restoration sites (DiGaudio and Geupel 1998 as cited in Shuford and Gardali 2008). This species usually forages on the ground or in leaf litter for a variety of food items including seeds and small invertebrates (Grinnell and Miller 1944).

The Study Area is near where the ranges of *Melospiza melodia heermanni* and *Melospiza melodia mailliardi* meet. There are no occurrences of the "Modesto" population of song sparrow within 5 miles of the Study Area (CNDDB 2025, eBird 2025, iNaturalist 2025). It is important to note that *Melospiza melodia mailliardi* is not recognized as a unique subspecies in either eBird or iNaturalist; however, *Melospiza melodia heermanni* is a recognized subspecies in eBird and iNaturalist, and a query of these databases for this subspecies of song sparrow also yielded no observations within 5 miles of the Study Area (eBird 2025, iNaturalist 2025). There are multiple observations of *Melospiza melodia* (no subspecies given) within 5 miles of the Study Area (eBird 2025, iNaturalist 2025), and Madrone biologists heard a song sparrow singing onsite during a site visit (**Attachment C**); however, an identification to subspecies was not made.

5.5.10 Common Raptor Species

Common raptors and their nests are protected by Section 3503.5 of the Fish and Game Code of California and by the Federal Migratory Bird Treaty Act. These raptor species include red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), and great horned owl (*Bubo virginianus*), among others. In general, raptor nesting occurs from late February/early March through late July/early August, depending upon the species and various environmental conditions.

The Study Area presents suitable nesting and foraging habitat for common raptor species, and red-tailed hawk and red-shouldered hawk were observed within the Study Area during field surveys (**Attachment C**).

5.5.11 Common Songbird Species

Common songbirds and their nests are protected by Section 3503.5 of the Fish and Game Code of California and by the Federal Migratory Bird Treaty Act. In general, songbird nesting occurs from late February/early March through late July/early August, depending upon the species and various environmental conditions. The Study Area presents suitable foraging and nesting habitat for a variety of common songbird species, and a number of songbird species were observed within the Study Area during field surveys (**Attachment C**).

5.6 Mammals

The Study Area may provide habitat for a number of bat species. These are discussed further below.

5.6.1 Pallid Bat

Pallid bat (*Antrozous pallidus*) is not federally or state listed, but is considered a CDFW Species of Special Concern, and is classified by the WBWG as a High priority species (WBWG 2025a). This species ranges throughout western North America from British Columba's southern interior, south to Queretaro and Jalisco, and east to Texas (CDFW 2021, WBWG 2025b). Day and night roots include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating ponderosa pine [*Pinus ponderosa*] and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings (WBWG 2025b). Roosts generally have unobstructed entrances/exits, and are high above the ground, warm, and inaccessible to terrestrial predators; however, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards (WBWG 2025b). Pallid bats roost alone, in small groups (2 to 20 bats), or gregariously (100s of individuals) (WBWG 2025b). Pallid bats are opportunistic generalist foragers that glean a variety of arthropod prey from surfaces but also capture insects on the wing (WBWG 2025b). They forage over open shrub-steppe grasslands, oak savannah grasslands, open Ponderosa pine forests, talus slopes, gravel roads, lava flows, fruit orchards, and vineyards (WBWG 2025b).

Suitable roosting habitat for pallid bat is present in tree hollows and under exfoliating bark on trees scattered throughout the Study Area and within the structures present in rural residence, and the adjacent open areas provide foraging habitat. No observations of this species occur within 5 miles of the Study Area in the CNDDB (CNDDB 2025) or iNaturalist (iNaturalist 2025).

5.6.2 Western Mastiff Bat

The western mastiff bat (*Eumops perotis californicus*) is not federally or state listed, but is considered a CDFW Species of Special Concern, and is classified by the WBWG as a High priority species (WBWG 2025a). The western mastiff bat ranges from central Mexico across the southwestern U.S. (parts of California, southern Nevada, Arizona, southern New Mexico and western Texas), and recent surveys have extended the previously known range to the north in both Arizona (several localities near the Utah border) and California (to within a few miles of the Oregon border) (CDFW 2021, WBWG 2025b). Western mastiff bat is primarily a cliff-dwelling species, where maternity colonies of 30 to several hundred (although typically fewer than 100) roost generally under exfoliating rock slabs (e.g., granite, sandstone, columnar basalt) as well as in similar crevices in large boulders and buildings (WBWG 2025b). Maternity roosting colonies of western mastiff bats contain adult males and females at all times of year, and this species may forage in flocks (WBWG 2025b). Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 10 feet below the entrance for flight (WBWG 2025b). Western mastiff bats have been estimated to forage as much as 2,000 feet above the ground; regularly forage at 100 to 200 feet over the substrate; and probably forage for considerable distances from roosting sites (WBWG 2025b). In California, it is most frequently encountered in broad open areas, with foraging habitats including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas (WBWG 2025b).

No suitable roosting habitat for western mastiff bat is present within the Study Area as no cliffs or large boulders or buildings are present; however, this species could forage within the Study Area. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.3 Western Red Bat

The western red bat (*Lasiurus frantzii*) is not federally or state listed, but is considered a CDFW Species of Special Concern, and is classified by the WBWG as a High priority species (WBWG 2025a). This species has a broad distribution reaching from southern British Columbia in Canada, through much of the western U.S, through Mexico and Central America, to Argentina and Chile in South America (CDFW 2021, WBWG 2025b). This species is typically solitary, roosting primarily in the foliage of trees or shrubs, and day roosts are commonly found in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas, with a possible association with intact riparian habitat (particularly willows [*Salix* spp.], cottonwoods [*Populus* spp.], and sycamores [*Platanus* spp.]) (WBWG 2025b). Western red bats generally begin to forage one to two hours after sunset and typically have an initial foraging period corresponding to the early period of nocturnal insect activity, and a minor secondary activity period corresponding to insects that become active several hours before sunrise, although some bats may forage all night (WBWG 2025b). Western red

bats have been observed feeding around streetlights and flood lights, with prey items include homopterans, coleopterans, hymenopterans, dipterans, and lepidopterans (WBWG 2025b).

The trees within the Study Area provide suitable roosting habitat for western red bat, and the adjacent open areas provide suitable foraging habitat. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.4 Hoary Bat

Hoary bat (*Lasiurus cinereus*) is not federally or state listed but is classified by the WBWG as a Medium priority species (WBWG 2025a). It is also considered to be one of the most widespread of all American bats with a range extending from Canada to central Chile and Argentina as well as Hawaii, and while uncommon throughout most of the eastern U.S. and the northern Rocky Mountains, they are more common in the prairie states and Pacific Northwest (CDFW 2021, WBWG 2025b). Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees 10 to 40 feet above the ground and usually at the edge of a clearing (WBWG 2025b). Although thought to be highly migratory (often found flying in waves of large groups during autumn migration, whereas spring migration is apparently less organized), wintering sites have not been well documented, and no specific migration routes have been discerned (WBWG 2025b). Hoary bats usually emerge late in the evening to forage, although they occasionally have been observed flying during late winter afternoons or just before sunset (WBWG 2025b). Hoary bats reportedly have a strong preference for moths, but are also known to eat beetles, flies, grasshoppers, termites, dragonflies, and wasps (WBWG 2025b).

The trees within the Study Area provide suitable roosting habitat for this species, and the adjacent open areas provide suitable foraging habitat. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.5 Western Small-Footed Myotis

The western small-footed myotis (*Myotis ciliolabrum*) is not federally or state listed but is classified by the WBWG as a Medium priority species (WBWG 2025a). This species ranges across the western half of North America from British Columbia, Alberta, and Saskatchewan in Canada, throughout most of the U.S. west of the 100th Meridian, and into central Mexico and is scattered throughout California (CDFW 2021, WBWG 2025b). The western small-footed myotis occurs in deserts, chaparral, riparian zones, and western coniferous forest; it is most common above piñon-juniper forest (WBWG 2025b). Individuals are known to roost singly or in small groups in cliff and rock crevices, buildings, concrete overpasses, caves, and mines, foraging in the early in the evening on various small insects (WBWG 2025b). Copulation takes place in the fall, with sperm being stored in females until spring when ovulation occurs and females produce one young per year in late spring or early summer (WBWG 2025b).

The onsite structures present marginally suitable roosting habitat, and the Study Area is just outside the known range of the species CDFW 2021). No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.6 Long-Eared Myotis

Long-eared myotis (*Myotis evotis*) is not federally or state listed but is classified by the WBWG as a Medium priority species (WBWG 2025a). This species ranges across western North America from southwestern Canada to Baja California and eastward in the U.S. to the western Great Plains (CDFW 2021, WBWG 2025b). Long-eared myotis occurs in semiarid shrublands, sage, chaparral, and agricultural areas, but is usually associated with coniferous forests (WBWG 2025b). Individuals roost under exfoliating tree bark, and in hollow trees, caves, mines, cliff crevices, sinkholes, and rocky outcrops on the ground, and also sometimes in buildings and under bridges (WBWG 2025b). During the summer, females form small maternity colonies, whereas males and non-reproductive females roost alone or in small groups nearby. Females give birth to one young in late spring to early summer (WBWB 2025b). Long-eared myotis is a slow flier and is often described as a hovering gleaner that feeds by eating prey off foliage, tree trunks, rocks, and from the ground, eating moths and small beetles, as well as flies, lacewings, wasps, and true bugs (WBWG 2025b).

The trees and buildings within the Study Area provide suitable roosting habitat for this species, and the adjacent open areas provide suitable foraging habitat. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.7 Fringed Myotis

Fridged myotis (*Myotis thysanodes*) is not federally or state listed but is classified by the WBWG as a High priority species (WBWG 2025a). This species ranges through much of western North America from southern British Columbia, Canada, south to Chiapas, Mexico and from Santa Cruz Island in California, east to the Black Hills of South Dakota (CDFW 2021, WBWG 2025b). Fringed myotis occurs most commonly in elevations between 3,937 and 6890 feet and appears to be most common in drier woodlands, although it is also found in habitats including desert scrub, mesic coniferous forest, and grassland. This species roosts in crevices in buildings, underground mines, rocks, cliff faces, and bridges, and roosting in large decadent trees and snags, is common throughout its range in western U.S. and Canada (WBWG 2025b). Fringed myotis roosts have been documented in a large variety of tree species and it is likely that structural characteristics (e.g., height, decay stage) rather than tree species play a greater role in selection of a snag or tree as a roost (WBWG 2025b). Maternity roosts are colonial with colonies ranging from 10-2,000 individuals, though large colonies are exceedingly rare (WBWG 2025b). Much less information is available on roosts of males, but it is thought that they roost singly or in small groups (WBWG 2025b). The information available on hibernation is largely limited to an accounting of the types of structures used which include caves, mines and buildings (WBWG 2025b). Fringed myotis is adapted for foraging within forest interiors and along forest edges and feeds on a variety of invertebrate taxa, including flying insects such as beetles and moths as well as flightless taxa such as harvestmen, spiders, and crickets, indicating that this species catches prey both aerially and via gleaning from vegetation (WBWG 2025b).

The trees and buildings within the Study Area provide moderately suitable roosting habitat for fringed myotis, and the adjacent open areas provide suitable foraging habitat. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

6.0 IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

This section details potential impacts to the biological resources discussed above associated with construction of the Project, as discussed in **Section 1.1** and shown in **Figure 7**.

6.1 Terrestrial Vegetation Communities

The Project supports 21.5 acres of mapped terrestrial vegetation communities. Of these, 1.4 acres are already developed as a rural residence and roads. Of the remaining 20.1 non-developed terrestrial vegetation communities, 18.5 acres will be developed by the Project and the remaining 1.9 acres are proposed to be avoided and incorporated into the individual lots (**Table 3** and **Figure 7**).

Table 3. Terrestrial Vegetation Community Impacts and Avoidance within the Study Area

Community Type	Impact Acreage[1]	Avoided Acreage[1]	Total Acreage
Rural Residential-Developed	1.4	--	1.4
Annual Brome Grassland	4.2	0.2	4.4
Mixed Oak Forest and Woodland	14.0	1.6	15.6
Total	**19.6**	**1.9**	**21.5**

[1] *Summation errors may occur due to rounding.*

6.2 Aquatic Resources

Of the approximately 5.06 acres of aquatic resources mapped within the Study Area, 0.38 acres are proposed to be directly impacted (filled) by the Project and 4.68 acres are proposed to be avoided and incorporated into the Project's onsite open space areas (**Table 4** and **Figure 7**).

Table 4. Aquatic Resources Impacts and Avoidance within the Study Area

Aquatic Resource Type	Impact Acreage[1]	Avoided Acreage[1]	Total
Wetlands			
Seasonal Wetland	0.03	--	0.03
Seasonal Wetland Swale	0.27	0.08	0.35
Seep	0.08	--	0.08
Subtotal	0.38	0.08	0.73
Other Waters			
Pond	--	4.60	4.60
Subtotal	--	4.60	4.60
Total	**0.38**	**4.68**	**5.06**

[1] *Summation errors may occur due to rounding.*

6.3 Special-Status Plant Species

The vegetation communities proposed for impact represent suitable habitat for a variety of special-status plant species, but protocol-level special-status plant surveys were conducted throughout the Study Area and no special-status plant species were found (Madrone 2023). Therefore, no impacts to special-status plant species are anticipated for the Project.

6.4 Invertebrates

The annual brome grassland and mixed oak forest and woodland habitat within the Study Area present potential habitat for three special-status invertebrate species, discussed further below.

6.4.1 Crotch's Bumble Bee

The annual brome grassland within the Study Area represents suitable foraging, nesting, and overwintering habitat for Crotch's bumble bee. The disturbance and/or removal of this habitat could adversely affect this species if construction activity results in the removal of active Crotch's bumble bee nests.

6.4.2 Vernal Pool Fairy Shrimp

One seasonal wetland within the Study Area which presents extremely marginally suitable vernal pool fairy shrimp habitat is proposed to be directly impacted by the Project (**Figure 7**). This seasonal wetland (SW-1) is approximately 0.007 acre in size. The removal of this habitat could adversely affect this species if this aquatic resource is occupied by this species.

6.4.3 Monarch Butterfly

The narrowleaf milkweed plants within the Study Area provide suitable breeding habitat for monarch butterfly eggs and larvae (i.e., caterpillars), and monarch butterfly pupae (i.e., chrysalis) could occur within the surrounding vegetation as chrysalises. If milkweed plants are removed during construction, and monarch eggs, larvae, and/or pupae are present, individuals of this species could be killed.

6.5 Western Spadefoot

Approximately 0.5 acre of marginally suitable western spadefoot breeding habitat (i.e., areas within the seasonal wetlands and seasonal wetland swales) and approximately 20 acres of upland habitat (i.e., non-developed terrestrial vegetation communities) are proposed to be directly impacted by the Project (**Figure 7**). The disturbance and/or removal of this habitat could adversely affect this species if construction activities result in the death of western spadefoot.

6.6 Northwestern Pond Turtle

The pond within the Study Area provides suitable foraging habitat for northwestern pond turtle and the adjacent annual brome grassland and mixed oak forest and woodland habitats provide suitable nesting habitat. Approximately 18.1 acres of annual brome grassland and mixed oak forest and woodland habitats within the Study Area are proposed for impact during Project construction (**Figure 7**). If northwestern pond turtles or their nests were present in those areas during construction, individual turtles could be injured or killed, or nests could be destroyed.

6.7 Nesting Raptors and Songbirds

Cooper's hawk (*Accipiter cooperii*), tricolored blackbird (*Agelaius tricolor*), grasshopper sparrow (*Ammodramus savannarum*), golden eagle (*Aquila chrysaetos*), Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), bald eagle (*Haliaeetus leucocephalus*), and song sparrow "Modesto" population (*Melospiza melodia mailliardi*) have the potential to nest within the Project area, as do other more common bird species protected by the Migratory Bird Treaty Act. Removal of bird nests which may occur as a result of Project implementation would impact those bird species. Furthermore, birds nesting in avoided areas adjacent to Project construction could be disturbed by construction activities, which could result in nest abandonment.

6.8 Foraging Raptors

Due to its small size (<5 acres), the annual brome grassland within the Study Area provides marginally suitable foraging habitat for Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chrysaetos*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), bald eagle (*Haliaeetus leucocephalus*), and other more common raptor species. The mixed oak forest and woodland habitat within the Study Area provides suitable foraging habitat for Cooper's hawk, white-tailed kite (*Elanus leucurus*), and other more common raptor species. Approximately 18.1 acres of annual brome grassland and mixed oak forest and woodland habitats within the Study Area are proposed for impact during Project construction (**Figure 7**). Removal of the annual brome grassland and mixed oak forest and woodland habitat by residential development could reduce reproductive success of raptors nesting in the area.

6.9 Roosting Bats

Seven special-status bat species have the potential to roost within the trees and structures within the Study Area; pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus frantzii*), hoary bat (*Lasiurus cinereus*), western small-footed myotis (*Myotis ciliolabrum*), long-eared myotis (*Myotis evotis*), and fringed myotis (*Myotis thysanodes*). If special-status bats were roosting in trees or buildings that are removed by Project construction, they could be injured or killed during the removal.

6.10 Native Oak Trees

The Study Area supports numerous interior live oak, valley oak, and blue oak trees which may be subject to the Town's Tree Ordinance (see **Section 3.2.1**). The Tree Ordinance requires a tree permit for the removal of a Protected Tree or any activity within the Critical Root Zone of a Protected Tree related to a discretionary project, unless otherwise exempted.

CalTLC inventoried 496 trees within the Study Area that are currently proposed to be impacted by the Project (CalTLC 2022) (**Attachment E**). Of these trees, four were below the size threshold and are not considered Protected Trees; the remaining 492 trees are considered Protected Trees and their removal or activities conducted within their Critical Root Zone requires a Tree Permit issued by the Town. Of the 492 Protected Trees, 297 were rated as dying or unhealthy (Tree Rating 0, 1, or 2); therefore, the removal of these trees does not require mitigation under the Tree Ordinance. Of the remaining Protected Trees that were rated in fair or better condition, 103 will be removed and removal of these trees requires mitigation under the Tree Ordinance. These 103 trees have a combined diameter at breast height (DBH) of 2,262 inches and as summarized below in **Table 5**.

Table 5. Protected Tree Impacts within the Study Area

Size of Trees DBH in Inches	Number of Trees (DBH)			Total Number of Trees	Cumulative DBH
	Interior Live Oak	Valley Oak	Blue Oak		
4-9.9	N/A	N/A	0 (0)	0	0
6-9.9	8 (64)	4 (35)	N/A	12	99
10-24.9	42 (707)	17 (300)	2 (26)	61	1,033
25-29.9	5 (131)	1 (25)	0 (0)	6	156
30-34.9	8 (252)	0 (0)	0 (0)	8	252
>35	16 (722)	0 (0)	0 (0)	16	722

7.0 MITIGATION FOR IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

The following sections describe mitigation measures that are often required by CEQA lead agencies for impacts to sensitive biological resources that may be associated with construction of a given project. The intent of these mitigation measures is to reduce Project-related impacts to biological resources to a less than significant level.

7.1 Aquatic Resources

- The Project applicant shall apply for a Section 404 permit from the USACE. Aquatic resources that will be impacted shall be replaced or rehabilitated on a "no-net-loss" basis. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods acceptable to the USACE. If the USACE responds with a no permit required letter, this measure shall be considered complied with.

- The Project applicant shall apply for a Section 401 water quality certification or the applicable Waste Discharge Requirements (WDR) from the RWQCB and adhere to the certification/WDR conditions.
- The Project applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from the CDFW. Impacts for each activity will be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts will be outlined per activity and then by temporary and permanent. Information regarding Project-specific drainage and hydrology changes resulting from Project implementation will be provided as well as a description of storm water treatment methods. Minimization and avoidance measures will be proposed as appropriate and may include pre-construction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific stormwater best management practices (BMPs). Mitigation may include restoration or enhancement of resources onsite or offsite, the purchase of habitat credits from an agency-approved offsite mitigation/conservation bank, working with a local land trust to preserve land, or any other method acceptable to the CDFW.

7.2 Special-Status Plant Species

Special-status plant surveys conducted throughout the Study Area in 2023 were negative, but given enough time, plants may become established in areas where suitable habitat exists. Therefore, if Project construction does not commence prior to 1 June 2026, another round of special-status plant surveys shall be conducted in areas proposed for impact no more than three years prior to commencement of construction. If construction commences prior to 1 June 2026, these surveys will not be required. Surveys shall be conducted in accordance with the *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000), the *Botanical Survey Guidelines of the California Native Plant Society* (CNPS 2001), and *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018) or more recent protocols at that time. If no special-status plant species are found, no further mitigation would be required.

If CESA or FESA listed plant species are found and will be impacted, the appropriate permit(s) shall be obtained (e.g., CDFW-issued Incidental Take Permit or USFWS-issued Biological Opinion). Mitigation for those impacts shall be determined through consultation with the Town, USFWS, and/or CDFW; however, at minimum, if the plant species found is a perennial such as Sanford's arrowhead or big-scale balsamroot, then mitigation will consist of digging up the plant and transplanting into a suitable avoided area prior to construction. If the plant species found is an annual such as dwarf downingia, then mitigation will consist of collecting seed and translocating it into a suitable wetland at an appropriate receiving property (e.g., local open space preserve, conservation/mitigation site, land trust property). If special-status plants only considered under CEQA will be impacted, a mitigation plan will be developed and approved by the Town. Mitigation for the transplantation/translocation of special-status plants will result in no net of a given population by acreage or individual plants, as appropriate, after a five year monitoring period.

7.3 Invertebrates

7.3.1 Crotch's Bumble Bee

Crotch's bumble bee was designated as a candidate for listing under CESA in 2019, but to date no decision on listing has been published. If, at the time of Project implementation, this species is not a CESA candidate or CESA listed species, and it does not fall into any of the other "special-status" categories defined in **Section 3.0**, then it would not qualify for protections under CEQA and no mitigation is necessary. Furthermore, as this is a CESA candidate species, appropriate mitigation measures are still being developed and refined. We have developed the following measure based on current literature and research. If at a later date, different mitigation measures are determined to be more appropriate, those may be submitted to the Town at that time for review and approval.

- Initial ground-disturbing work (e.g., grading, vegetation removal, staging) shall take place between 1 September and 31 March (i.e., outside the colony active period), if feasible, to avoid impacts on Crotch's bumble bee.
- If completing all initial ground-disturbing work between 1 September and 31 March is not feasible, then a senior biologist with 10 or more years of experience conducting biological resource surveys within California shall conduct a pre-construction survey for Crotch's bumble bee in the area proposed for impact no more than 14 days prior to the commencement of construction activities. The survey shall occur during the period from one hour after sunrise to two hours before sunset, with temperatures between 65° F and 90° F, with low wind and no rain. If the timing of the start of construction makes the survey infeasible due to the temperature requirements, the surveying biologist shall select the most appropriate days based on the National Weather Service seven-day forecast and shall survey at a time of day that is closest to the temperature range stated above. The survey duration shall be commensurate with the extent of suitable floral resources (which represent foraging habitat) present within the area proposed for impact and the level of effort shall be based on the metric of a minimum of one person-hour of searching per three acres of suitable floral resources/foraging habitat. A meandering pedestrian survey shall be conducted throughout the area proposed for impact in order to identify patches of suitable floral resources. Suitable floral resources for Crotch's bumble bee include species in the following families: Apocynaceae, Asteraceae, Boraginaceae, Fabaceae, and Lamiaceae.
- At a minimum, pre-construction survey methods shall include the following:
    - Search areas with floral resources for foraging bumble bees. Observed foraging activity may indicate a nest is nearby, and therefore, the survey duration shall be increased when foraging bumble bees are present.
    - If Crotch's bumble bees are observed, watch them and observe their flight patterns. Attempt to track their movements between foraging areas and the nest.
    - Visually look for nest entrances. Observe burrows, any other underground cavities, logs, or other possible nesting habitat.

    - If floral resources or other vegetation preclude observance of the nest, small areas of vegetation may be removed via hand removal, line trimming, or mowing to a height of no less than 4 inches to assist with locating the nest.
    - Look for concentrated Crotch's bumble bee activity.
    - Listen for the humming of a nest colony.
    - If bumble bees are observed, attempt to photograph the individual and identify it to species.
- The biologist conducting the survey shall record when the survey was conducted, a general description of any suitable foraging habitat/floral resources present, a description of observed bumble bee activity, a list of bumble bee species observed, a description of any vegetation removed to facilitate the survey, and their determination of if survey observations suggest a Crotch's bumble bee nest(s) may be present or if construction activities could result in take of Crotch's bumble bee. The report shall be submitted to the Town prior to the commencement of construction activities.
- If no bumble bees are located during the pre-construction survey or the bumble bees located are definitively identified to not be Crotch's bumble bee, then no further mitigation or coordination with the CDFW is required.
- If any sign(s) of a bumble bee nest is observed, and if it cannot be established the species present is not Crotch's bumble bee, then construction shall not commence until either 1) the bumble bees present are positively identified to not be Crotch's bumble bee by an experienced bumble bee taxonomist, or 2) the completion of coordination with the CDFW to identify appropriate mitigation measures, which may include but not be limited to: waiting until the colony active season ends, establishment of nest buffers, or obtaining an Incidental Take Permit (ITP) from the CDFW.
- It is recommended, but not required, that the Project applicant also survey the proposed impact areas the year before construction begins in order to avoid potential last-minute delays associated with identifying Crotch's bumble bee onsite immediately prior to construction activities. To be most effective, this optional survey should follow the protocol outlined above.
- If Crotch's bumble bee is located within the Project, and coordination with the CDFW determines that take of Crotch's bumble bee cannot be avoided, the Project applicant shall obtain an ITP from the CDFW prior to Town approval of permits authorizing construction, and the Project applicant shall implement all conditions identified in the ITP. Mitigation required by the ITP may include but will not be limited to, the Project applicant translocating nesting substrate in accordance with the latest scientific research to another suitable location (i.e., a location that supports similar or better floral resources as the impact area), enhancing floral resources on areas of the Project site that will remain appropriate habitat, worker awareness training, and/or other measures specified by the CDFW.

If Crotch's bumble bee is listed under CESA before Project construction begins and take of Crotch's bumble bee cannot be avoided, then the Project applicant shall coordinate with the CDFW to obtain take coverage of Crotch's bumble bee which may result from Project implementation.

7.3.2 Vernal Pool Fairy Shrimp

The Project may result in the loss of potential vernal pool fairy shrimp habitat. While 2010 dry season surveys for this species were negative (Helm 2010), the Project applicant may choose to retain a qualified biologist to conduct protocol-level surveys for this species in accordance with the *Survey Guidelines for the Listed Large Branchiopods* (USFWS 2017). If vernal pool fairy shrimp are not found during protocol-level surveys, no further mitigation will be required. If protocol-level surveys of these features are not conducted, or if vernal pool fairy shrimp are found during protocol-level surveys, then the Project applicant shall consider redesigning the Project to avoid all occupied vernal pool fairy shrimp habitat. If avoidance is not possible, then the Project applicant or the USACE (depending on the regulatory mechanism) shall consult with the USFWS under the FESA regarding impacts to vernal pool fairy shrimp associated with the Project. Regardless of the consultation method, it is expected that the USFWS will assign measures to avoid, minimize, and mitigate impacts to vernal pool fairy shrimp and will require compensatory mitigation. As such, we recommend the following measures if vernal pool fairy shrimp are located within the Study Area:

- The Project applicant shall prepare and submit to the USACE and/or USFWS a Biological Assessment which details potential impacts to and mitigation for impacts to vernal pool fairy shrimp.
- The Project applicant shall abide by mitigation measures developed during the course of the FESA consultation. At a minimum, the Project applicant shall preserve 2 acres of vernal pool branchiopod habitat for each acre of unsurveyed or documented occupied habitat impacted. Preservation methods could include preservation of habitat onsite, offsite at a permittee-responsible preservation site approved by the USFWS, purchase of habitat credits from a USFWS-approved mitigation/conservation bank, working with a local land trust to preserve land, or any other method acceptable to USFWS.

The Project applicant shall ensure that seasonal wetland occupied by vernal pool fairy shrimp that will not be filled during Project implementation is protected during construction by installation of exclusion fencing at the edge of the permitted impact area. No construction-related activity may take place in the exclusion area, and exclusion fencing shall be designed to prevent the discharge of storm water runoff from the impact area into the exclusion zone. Exclusion fencing shall be inspected by a qualified biologist or an onsite monitor trained by a qualified biologist at least weekly and immediately before and after storm events. Any breaches to the exclusion fencing shall be reported to the qualified biologist and repaired promptly. The exclusion fencing shall remain in place until all ground-disturbing construction activity is completed.

7.3.3 Monarch Butterfly

Monarch butterfly was designated as a candidate for listing under FESA in 2020, but no decision on listing has been published. If, at the time of Project implementation, this species is no longer a FESA candidate or FESA listed species, and it does not fall into any of the other "special-status" categories defined in **Section 3.0**, then it would not qualify for protections under CEQA and no mitigation is necessary. Furthermore, as this is a candidate species, appropriate mitigation measures are still being developed and refined. We have

developed the following measure based on current literature and research. If at a later date, a different mitigation measure is determined to be more appropriate, that can be submitted to the Town at that time for review and approval.

If construction occurs during the time when milkweed (*Asclepius* spp.) plants may host monarch butterfly eggs, larvae (i.e., caterpillars) or pupae (i.e., chrysalises) (currently believed to be 15 March through 31 October per Xerces Society 2018) and construction activity would require the removal of milkweed plants and/or 50 feet of surrounding vegetation, the plants and surrounding vegetation shall be surveyed by a qualified biologist no more than 14 days prior to plant removal for the presence of eggs, larvae , or pupae. If any monarch eggs, larvae, or pupae are found within the Study Area, they will be avoided with no work occurring within 50 feet of the monarchs until adults emerge and voluntarily leave the Study Area. If the eggs, larvae, or pupae are in the Study Area and cannot be avoided, eggs will be allowed to hatch, and all larvae and pupae will be translocated to a suitable alternative location (i.e., containing a suitable population of larval host plants) outside of the Study Area. If no eggs, larvae, or pupae are detected, no additional protection measures are necessary.

If monarch butterfly is listed under FESA before Project construction begins and take of monarch butterfly cannot be avoided, then the Project applicant shall coordinate with the USFWS to obtain take coverage of monarch butterfly that may result from Project implementation.

7.4 Western Spadefoot

Western spadefoot was designated as a candidate for listing under FESA in 2023, but no decision on listing has been published. If western spadefoot is listed under FESA before Project construction begins and take of western spadefoot cannot be avoided, the Project applicant shall coordinate with the USFWS to obtain take coverage of western spadefoot that may result from Project implementation. Furthermore, the Project applicant shall implement any additional mitigation measures required by the USFWS. If, at the time of Project implementation, this species is no longer a FESA candidate or a FESA listed species, and it does not fall into any of the other "special-status" categories defined in **Section 3.0**, then it would not qualify for protections under CEQA and no mitigation is necessary.

As this is a candidate species, appropriate mitigation measures are still being developed and refined. We have developed the following measure based on current literature and research. If at a later date, a different mitigation measure is determined to be more appropriate, that can be submitted to the Town at that time for review and approval.

The spring prior to the start of Project construction, the Project applicant shall retain a qualified biologist to survey all suitable aquatic habitat within the Project site (including features proposed for avoidance) by sampling the features thoroughly with dipnets during March or early April, when spadefoot tadpoles would be present. In addition, a qualified biologist shall conduct one nocturnal acoustic survey within the Project of all areas within 300 feet of seasonal wetlands and the pond. Acoustic surveys shall consist of walking through the area and listening for the distinctive snore-like call of this species. Timing and methodology

for the aquatic and acoustic surveys shall be based on those described in *Distribution of the Western Spadefoot* (*Spea hammondii*) *in the Northern Sacramento Valley of California, with Comments on Status and Survey Methodology* (Shedd 2017). The survey results shall be provided to the Town.

If both the aquatic survey and the nocturnal acoustic survey are negative, no further mitigation is necessary. If western spadefoot is observed within aquatic habitat proposed for impact, the following measures shall apply:

- Ground-disturbing activities within the delineated Project footprint will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.
- If ground-disturbing activities must be implemented after October 15 and before May 15 (dispersal season), exclusion fencing consisting of trenched in silt fencing will be installed around the Project impact area or as directed by a qualified biologist (i.e., experienced with western spadefoot identification and behavior) before October 15. Fencing will remain in place until all construction activities within the construction area are completed. No Project activities will occur outside the delineated Project footprint. The fence must be maintained in working order through the duration of the Project.
- A qualified biologist will monitor the Project site, including the integrity of any exclusion fencing.
- A qualified biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone.
- Within the delineated Project footprint, all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first.
- Only non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoot is not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.
- If a western spadefoot is encountered during construction activities, construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the work area of its own volition. If the animal does not leave the work area, a qualified biologist will coordinate with the Town to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Town. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the qualified biologist.

7.5 Northwestern Pond Turtle

Northwestern pond turtle was designated as a candidate for listing under FESA in 2023, but no decision on listing has been published. If northwestern pond turtle is listed under FESA before Project construction begins and take of northwestern pond turtle cannot be avoided, the Project applicant shall coordinate with the USFWS to obtain take coverage of northwestern pond turtle that may result from Project implementation. Furthermore, the Project applicant shall implement any additional mitigation measures required by the USFWS.

As northwestern pond turtle is a CDFW Species of Special Concern, it qualifies for protection under CEQA. Therefore, a northwestern pond turtle survey shall be conducted no more than 48 hours prior to construction where construction activities overlap with suitable aquatic habitat, and upland habitat within 150 feet of suitable aquatic habitat. If no northwestern pond turtles or their nests are found, no further mitigation is necessary. If a northwestern pond turtle is observed within the proposed impact area, a qualified biologist shall relocate the individual to the onsite pond (which lies outside of the proposed Project impact area) prior to construction. If a northwestern pond turtle nest is observed within the proposed impact area, the nest shall be fenced off and avoided until the eggs hatch. The exclusion fencing shall be placed no less than 25 feet from the nest. A qualified biologist shall monitor the nest daily during construction to ensure that hatchlings do not disperse into the construction area. Relocation of hatchlings will occur as stipulated above, if necessary.

7.6 Nesting Raptors and Other Birds

The following nest survey requirements apply if Project construction activities take place during the typical bird breeding/nesting season (typically 1 February through 1 September).

7.6.1 Golden Eagle

A targeted survey for golden eagle shall be conducted throughout the proposed Project construction area and all accessible areas within 1 mile of the proposed Project area within 14 days prior to the initiation of any Project-related construction activities. If there is a gap in construction activity of 14 days or more then subsequent surveys shall be conducted. If active golden eagle nests are found within 1 mile of a Project construction area, construction shall cease within 1 mile of the nest until a qualified biologist determines that the young have fledged and are independent of the site or it is determined that the nesting attempt has failed. If the Project applicant desires to work within 1 mile of an active golden eagle nest, the Project applicant shall consult with a qualified biologist and the Town to determine if the nest buffer can be reduced. The Project applicant, qualified biologist, and Town shall collectively determine an appropriately reduced nest avoidance buffer, and what (if any) nest monitoring is necessary. If an active golden eagle nest is found within the Project site prior to construction and is in a tree that is proposed for removal, then the Project applicant shall not complete tree removal until a qualified biologist determines that the young have fledged and are independent of the site or it is determined that the nesting attempt has failed, as there is no permitting process to allow the take of a CDFW Fully Protected Species.

7.6.2 Swainson's Hawk

A targeted Swainson's hawk nest survey shall be conducted throughout the proposed Project construction area and all accessible areas within ¼ mile of the proposed construction area no later than 14 days prior to construction activities. If there is a gap in construction activity of 14 days or more then subsequent surveys shall be conducted. If active Swainson's hawk nests are found within ¼ mile of a construction area, construction shall cease within ¼ mile of the nest until a qualified biologist determines that the young have fledged and are independent of the site or it is determined that the nesting attempt has failed. If the Project applicant desires to work within ¼ mile of the nest, the Project applicant shall consult with a qualified biologist and the Town to determine if the nest buffer can be reduced. The Project applicant, a qualified biologist and the Town, shall collectively determine the nest avoidance buffer, and what (if any) nest monitoring is necessary. If an active Swainson's hawk nest is found within the Project site prior to construction and is in a tree that is proposed for removal, then the Project applicant shall implement additional mitigation recommended by a qualified biologist based on CDFW guidelines and obtain any required permits from the CDFW.

7.6.3 Other Birds

A pre-construction nesting bird survey shall be conducted by a qualified biologist on the Project site and within a 500-foot radius of proposed construction areas, where access is available, no more than three days prior to the initiation of construction. If there is a gap in construction activity of 14 days or more then subsequent surveys shall be conducted.

If active raptor nests or a tricolored blackbird nesting colony are found, no construction activities shall take place within 500 feet of the nest until the young have fledged and are independent of the site. If active songbird nests are found, a 100-foot no-disturbance buffer will be established. These no-disturbance buffers may be reduced if a smaller buffer is proposed by a qualified biologist and approved by the Town after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (e.g., are there visual or acoustic barriers between the proposed activity and the nest). A qualified biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or it is determined that the nesting attempt has failed.

7.6.4 Survey Report

A report summarizing the survey(s), including those for golden eagle, Swainson's hawk, and nesting birds, shall be provided to the Town within 30 days of the completed survey and is valid for one construction season. The surveys shall be performed again if there is a gap in construction activity of 14 days or more. If no nests are found, no further mitigation is required.

7.6.5 Changes to Buffers and Completion of Nesting

Where birds are nesting within or adjacent to the Project and Project construction activities cause a nesting bird to exhibit agitated behavior (i.e., vocalize, make defensive flights at intruders, get up from a brooding position, and/or fly off the nest), then the no-disturbance buffer shall be increased such that activities are far enough from the nest to stop the observed agitated behavior. The no-disturbance buffer shall remain in place until a qualified biologist has determined that the young have fledged the nest and are independent of the site or it is determined that the nesting attempt has failed, or as otherwise determined by a qualified biologist in consultation with the Town.

Construction activities may only resume within the no-disturbance buffer zone after a follow-up survey by a qualified biologist has been conducted and a report has been provided to the Town indicating that the nest(s) is no longer active and no new nests have been identified.

7.7 Loss of Foraging Habitat

7.7.1 Swainson's Hawk

Approximately 4.1 acres of annual brome grassland within the Project will be impacted by construction of the proposed Project. While annual brome grassland habitat could be used by foraging Swainson's hawks, the CDFW has determined that patches five acres or more in size are the minimum acreage required for viable foraging habitat (CDFG 1994). Therefore, Project-related impacts to annual brome grassland habitat are not expected to have an appreciable effect on Swainson's hawks in the area and no mitigation is recommended.

7.7.2 Other Birds

Approximately 4.1 acres of annual brome grassland within the Project will be impacted by construction of the proposed Project; this acreage presents suitable foraging habitat for golden eagle, northern harrier, white-tailed kite, bald eagle, and other more common raptor species. Due to the small patch size (<5 acres), the conversion of annual grassland habitat associated with the Project is not considered significant.

7.8 Roosting Bats

- A qualified biologist shall conduct a bat habitat assessment of all potential roosting habitat features, including trees and structures within the proposed impact footprint. This habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to one year prior to the start of construction.
- If potential roosting habitat is identified (e.g., cavities in trees or potential roosts within structures) within the areas proposed for impact, the biologist shall survey the potential roosting habitat within 14 days prior to habitat removal. As roosting bats are seasonally active, it may be beneficial to conduct an additional survey well ahead of the pre-construction survey during the active season

(generally April through October or from January through March on days with temperatures in excess of 50 °F) to determine presence of roosting bats. These surveys are recommended to be conducted utilizing methods that are considered acceptable by the CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras or a combination thereof.

- If pre-construction surveys indicate that no roosts of special-status bats are present, or that roosts are inactive or potential habitat is unoccupied, no further mitigation is required.
- If roosting bats are identified within any of the trees planned for removal, or if presence is assumed, the trees shall be removed outside of pup season only on days with temperatures in excess of 50 °F. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of a qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree.
- Additionally, it is recommended that all other tree removal be conducted from January through March on days with temperatures in excess of 50 °F to avoid potential impacts to foliage-roosting bat species.
- If roosting bats are identified within any structures planned for removal, a bat exclusion plan shall be prepared by a qualified bat biologist describing the methods to be used to humanely exclude bats prior to disturbance. Each exclusion is specific to the structure and no two are the same. All exclusions involve the installation of one-way doors or flaps during the non-breeding season that allow the bats to leave and not re-enter the structure. This plan shall be approved by the Town and shall be implemented prior to the start of construction.

7.9 Protected Trees

7.9.1 Removal of and Adverse Effects to Trees, Mitigation and Replacement

The Project would cause loss and adverse effects to 103 Protected Trees in fair or better condition with a combined diameter at breast height (DBH) of 2,262 inches through tree removal or Project-related activities within the Critical Root Zone of trees not proposed for removal. To mitigate for the loss of Protected Trees and adverse effects caused by activities with Critical Root Zones, the Project applicant shall obtain a Tree Permit from the Town prior to approval of the Project's Improvement Plans. The Town shall review the Tree Permit application and associated tree plan and determine the precise mitigation requirement at that time. Mitigation for the loss and adverse effects of Protected Trees may include payment into the Town's Tree Preservation Fund or the planting of #5 or #15 container oak trees (**Table 6**). Oak trees could be planted on the Project site surrounding the avoided pond, as part of the Project's landscape design, or within other locations as approved by the Town Manager.

Table 6. Study Area Tree Mitigation

Species	Size Category of Trees (DBH)	Total Number Proposed for Adverse Effects (Total DBH)	Mitigation Requirement				
			#5 (T4/ T6/ T8/ 5 Gal.) Mitigation Trees to be Planted	Or	#15 (15 Gal.) Mitigation Trees to be Planted	Or	In-Lieu Fee Amount (Per Total DBH Removed)
Blue Oak	4-9.9	0 (0)	x 4 = 0 trees		x 2 = 0 trees		0 DBH x $100 = $0
	10-24.9	2 (26)	x 6 = 12 trees		x 3 = 6 trees		26 DBH x $110 = $2,860
	25-29.9	0 (0)	x 8 = 0 trees		x 4 = 0 trees		0 DBH x $120 = $0
	30-34.9	0 (0)	x 10 = 0 trees		x 5 = 0 trees		0 DBH x $130 = $0
	>35	0 (0)	x 12 = 0 trees		x 6 = 0 trees		0 DBH x $140 = $0
Total:		**2 (26)**	**13 #5 Trees**	**Or**	**6 #15 Trees**	**Or**	**$2,860**
Valley Oak	6-9.9	4 (35)	x 3 = 12 trees		x 1 = 4 trees		35 DBH x $90= $3,150
	10-24.9	17 (300)	x 4 = 68 trees		x 2 =34 trees		300 DBH x $100 = $30,000
	25-29.9	1 (25)	x 5 = 5 trees		x 3 = 3 trees		25 DBH x $110 = $2,750
	30-34.9	0 (0)	x 6 = 0 trees		x 4 = 0 trees		0 DBH x $120 = $0
	>35	0 (0)	x 8 = 0 trees		x 5 = 0 trees		0 DBH x $130 = $0
Total:		**22 (360)**	**85 #5 Trees**	**Or**	**41 #15 Trees**	**Or**	**$35,900**
Interior Live Oak	6-9.9	8 (64)	x 3 = 24 trees		x 1 = 8 trees		64 DBH x $80= $5,120
	10-24.9	42 (707)	x 4 = 168 trees		x 2 = 84 trees		707 DBH x $90 = $63,630
	25-29.9	5 (131)	x 5 = 25 trees		x 3 = 15 trees		131 DBH x $100 = $13,100
	30-34.9	8 (252)	x 6 = 48 trees		x 4 = 32 trees		252 DBH x $110 = $27,720
	>35	16 (722)	x 8 = 128 trees		x 5 = 80 trees		722 DBH x $120 = $86,640
Total:		**79 (1,876)**	**393 #5 Trees**	**Or**	**219 #15 Trees**	**Or**	**$196,210**

[1] *Note that trees rated 0-2 are dead, dying, or have major health or structural problems, and as such do not require mitigation under the Tree Ordinance.*

To mitigate the loss of and adverse effects to Protected Trees in fair or better condition, the Project applicant shall prepare and implement a tree plan as described in the Tree Ordinance. The tree plan shall include the following:

- Planting of 491 #5 container trees or 266 #15 container trees (or a mix thereof as approved by the Town Manager) of appropriate oak species on the Project site or other locations approved by the Town Manger to attain tree replacement ratios prescribed by the Town;
- Preparation of a planting plan describing species composition and spacing, and an exhibit indicating the specific location(s) of proposed tree plantings; and
- Schedules and methodologies for maintenance, monitoring, and annual reporting to ensure that the mitigation trees survive for at least 5 years after the initial planting.

As an alternative to planting oak trees for mitigation, the Project applicant can pay into the Town's Tree Preservation Fund.

7.9.2 Avoidance of Trees, Protection Measures

Efforts should be made to save Protected Trees where feasible and incorporate them into the Project's avoided areas and landscaping. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. To document how avoided Protected Trees will be protected during Project implementation, the Project applicant shall prepare and implement a tree plan as described in the Tree Ordinance. The tree plan shall include the following:

- A description of measures to be followed to ensure survival of protected trees during construction; and
- A program for the preservation of Protected Trees and other trees not proposed for removal during and after completion of the Project, which shall include the following:
    1. Each tree or group of trees to be preserved shall be enclosed with a fence prior to any grading, movement of heavy equipment, approval of improvement plans or the issuance of any permits and such fence shall be removed following construction, but prior to installation of landscaping material;
    2. Fencing shall be located at the Critical Root Zone of the tree or trees and shall be a minimum of four feet in height;
    3. Signs shall be posted on all sides of fences surrounding each tree stating that each tree is to be preserved; and
    4. Any and all exposed roots shall be covered with a protective material during construction.

7.10 Worker Environmental Awareness Training

Prior to any ground-disturbing or vegetation-removal activities, a Worker Environmental Awareness Training (WEAT) shall be prepared and administered to the construction crews. The WEAT will include the following: discussion of CESA and FESA, the Clean Water Act, the Project's permits and CEQA documentation, and associated mitigation measures; consequences and penalties for violation or noncompliance with these laws and regulations; identification of special-status wildlife; location of any avoided Waters of the U.S; hazardous substance spill prevention and containment measures; and the contact person in the event of the discovery of a special-status wildlife species. The WEAT will also discuss the different habitats used by the species' different life stages and the annual timing of these life stages. A handout summarizing the WEAT information shall be provided to workers to keep on-site for future reference. Upon completion of the WEAT, workers will sign a form stating that they have attended the training, understand the information presented and will comply with the regulations discussed. Workers will be shown designated "avoidance areas" during the WEAT; worker access should be restricted to outside of those areas to minimize the potential for inadvertent environmental impacts. Fencing and signage around the boundary of avoidance areas may be helpful.

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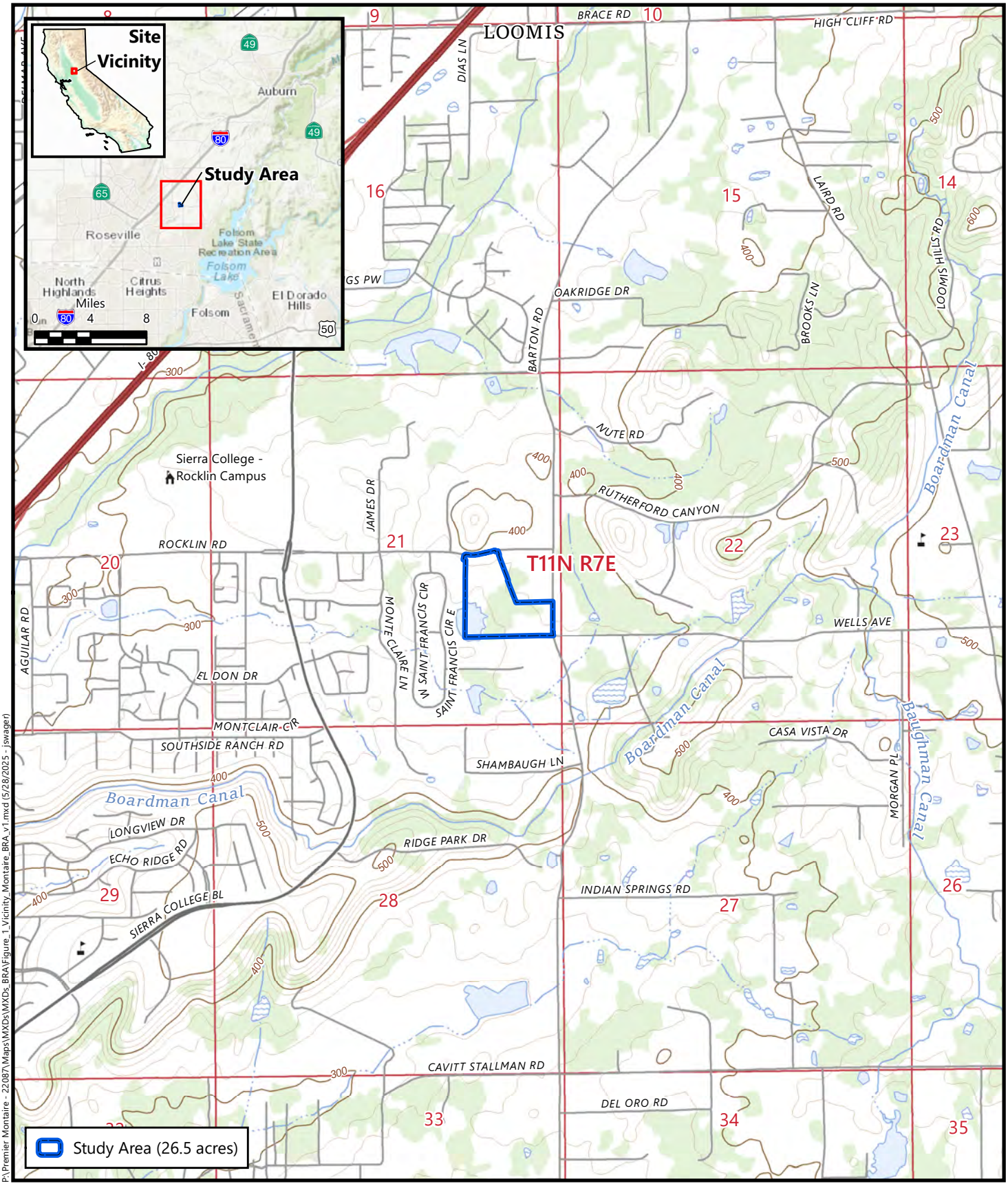
Figures



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N

Feet
0 1,000 2,000

Source: United States Geologic Survey, 2021
"Rocklin, California" 7.5-Minute Topographic Quadrangle
Section 21, Township11 North, Range 7 East, MDBM
Latitude (NAD83): 38.786425°, Longitude (NAD83): -121.194851°

Figure 1
Site and Vicinity

The Reserve
Loomis, Placer County, California

MADRONE ECOLOGICAL CONSULTING

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N

Feet
0 100 200

Figure 2
Project Detail

Design Source: TSD Engineering
Aerial Source: City of Rocklin (NearMap), 2021

The Reserve
Loomis, Placer County, California

MADRONE ECOLOGICAL CONSULTING

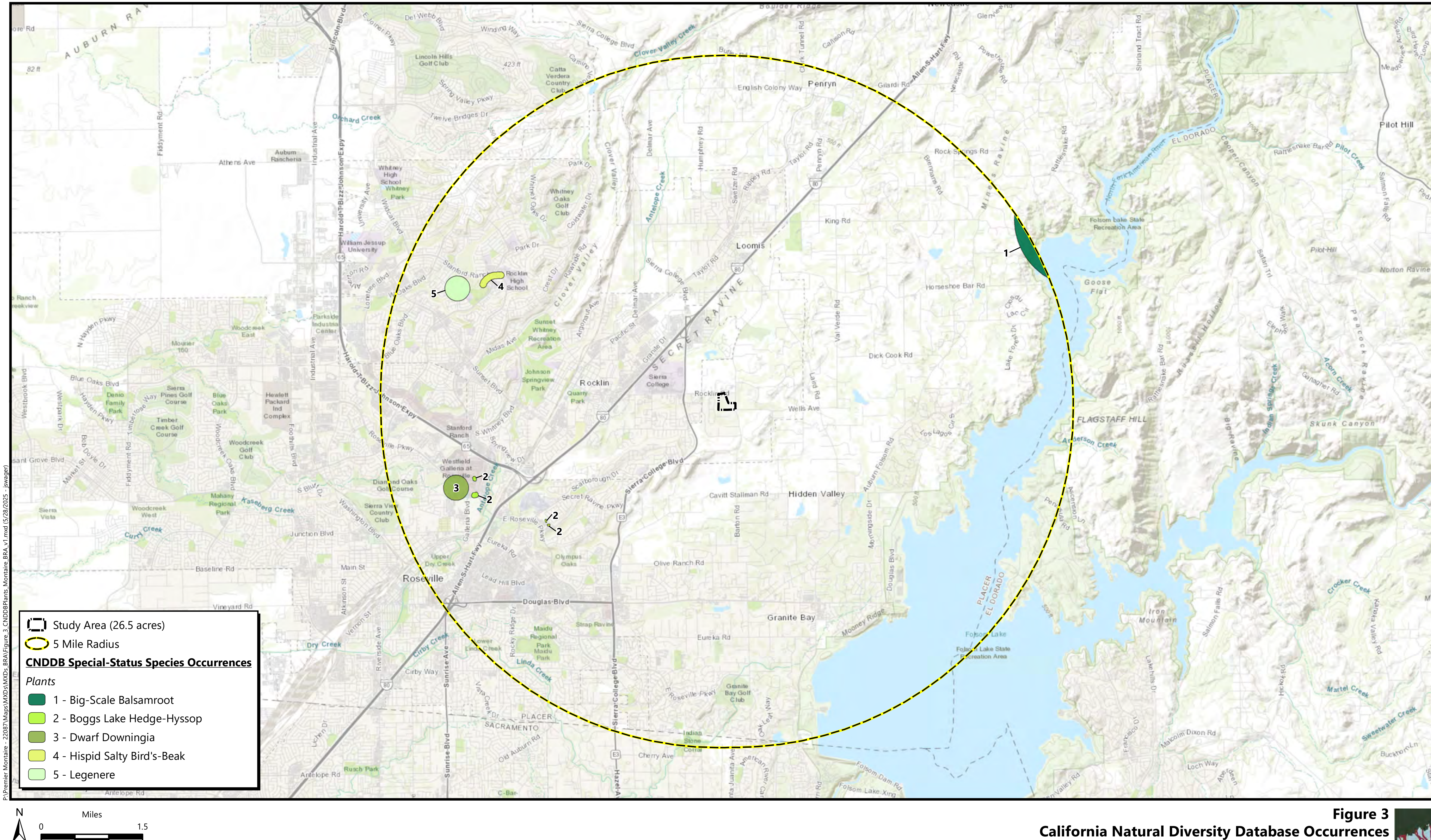

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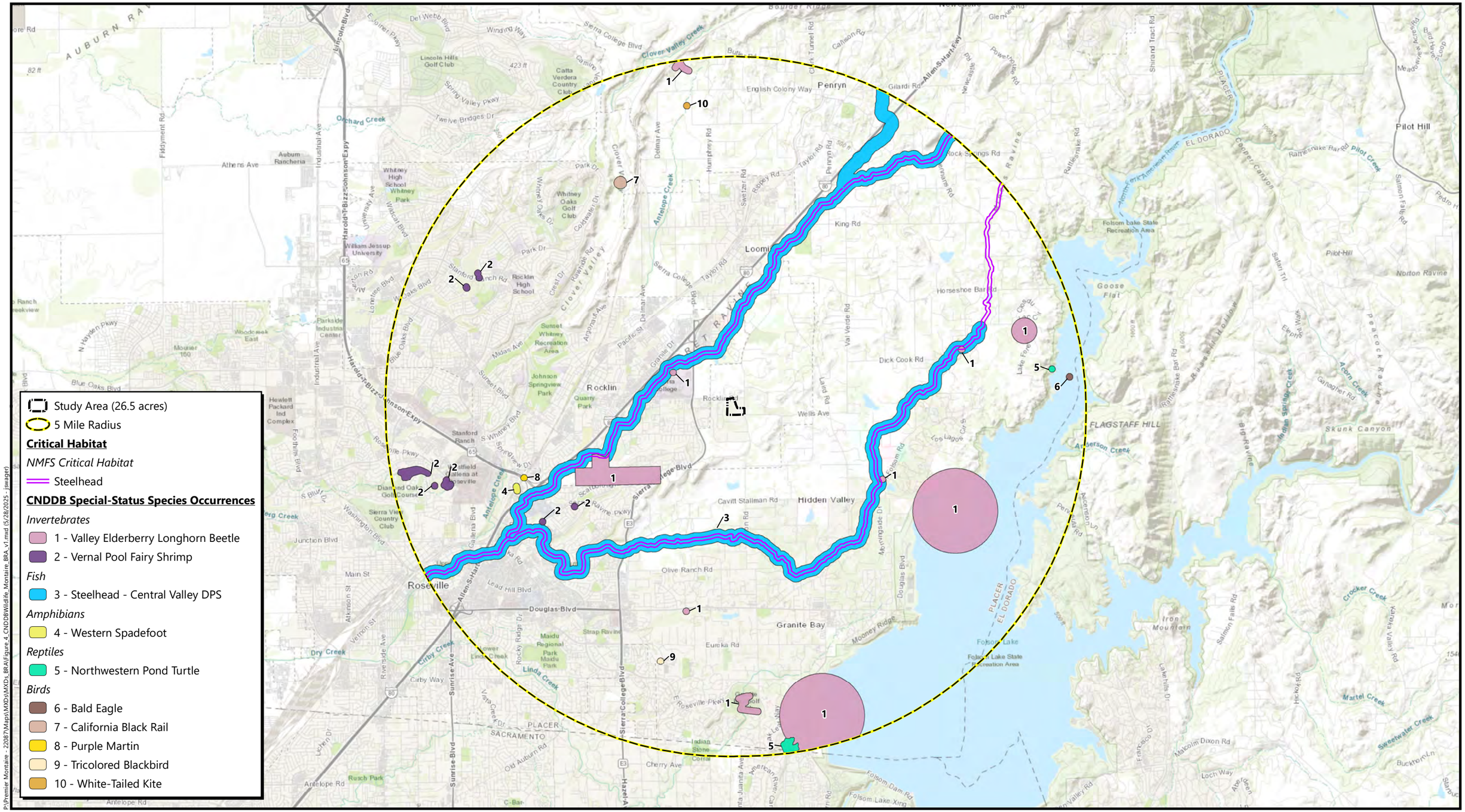
Figure 3
California Natural Diversity Database Occurrences of Plant Species

The Reserve
Loomis, Placer County, California

Source: California Department of Fish and Wildlife, April 2025
Basemap Source: ESRI World Topographic Map



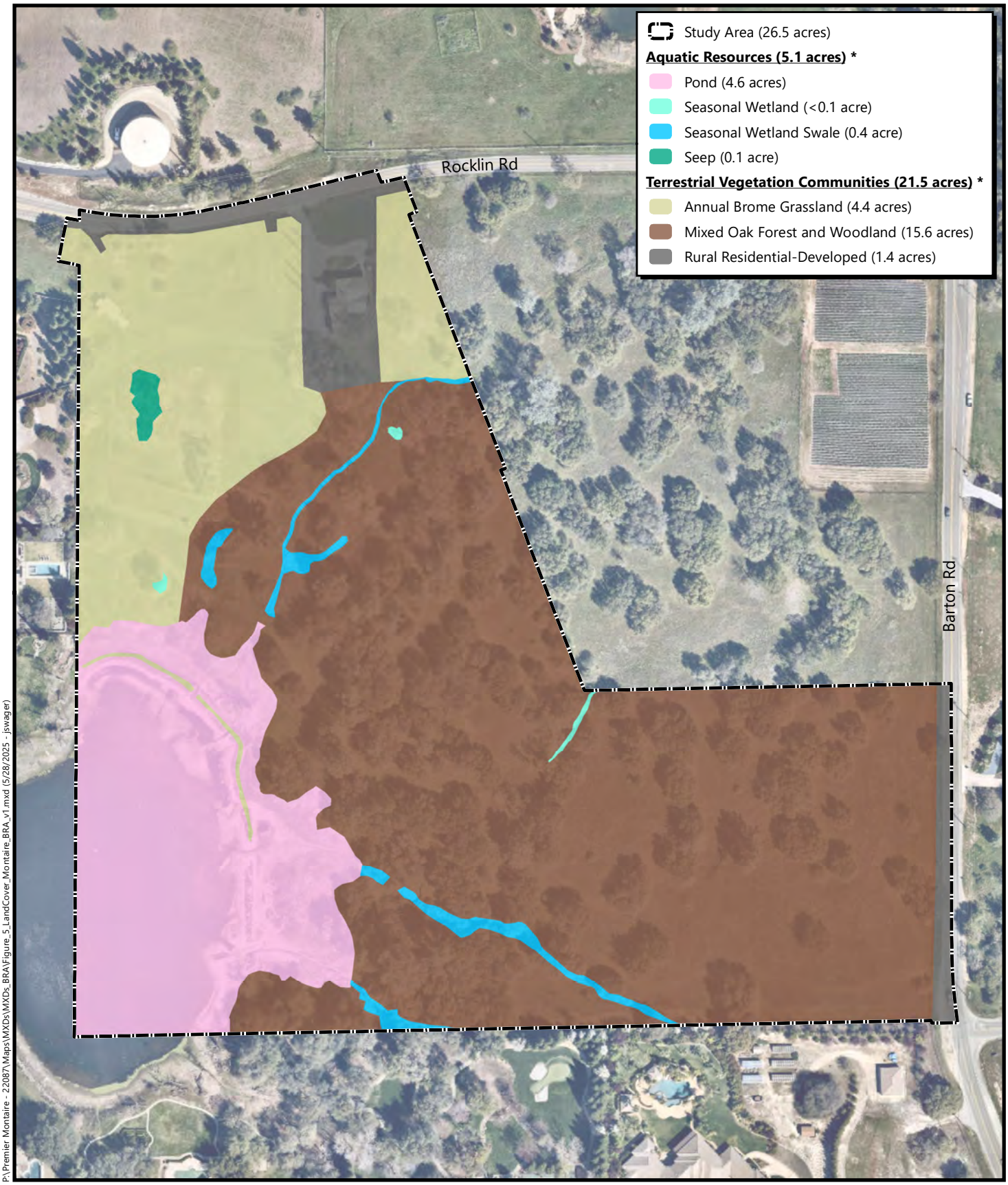
P:\Premier Montaire - 22087\Maps\MXDs\MXDs_BRA\Figure_4_CNDDBWildlife_Montaire_BRA_v1.mxd (5/28/2025 - jswager)

Source: California Department of Fish and Wildlife, April 2025
Basemap Source: ESRI World Topographic Map

Figure 4
California Natural Diversity Database Occurrences of Wildlife Species and Critical Habitat

The Reserve
Loomis, Placer County, California

MADRONE ECOLOGICAL CONSULTING



P:\Premier Montaire - 22087\Maps\MXDs\MXDs_BRA\Figure_5_LandCover_Montaire_BRA_v1.mxd (5/28/2025 - jswager)

N

Feet
0 100 200

Figure 5
Terrestrial Vegetation Communities and Aquatic Resources

The Reserve
Loomis, Placer County, California

MADRONE ECOLOGICAL CONSULTING

* *Small summation errors may occur due to rounding*
Design Source: TSD Engineering
Aerial Source: City of Rocklin (NearMap), 2021

P:\Premier Montaire - 22087\Maps\MXDs\MXDs_BRA\Figure_6_Soils_Montaire_BRA_v1.mxd (5/28/2025 - jswager)

N

Feet
0 100 200

Soil Survey Source: *USDA, Natural Resources Conservation Service Soil Survey Geographic (SSURGO) database for Placer County, California*
Aerial Source: City of Rocklin (NearMap), 2021

Figure 6
Natural Resources Conservation Service Soils

The Reserve
Loomis, Placer County, California

MADRONE ECOLOGICAL CONSULTING

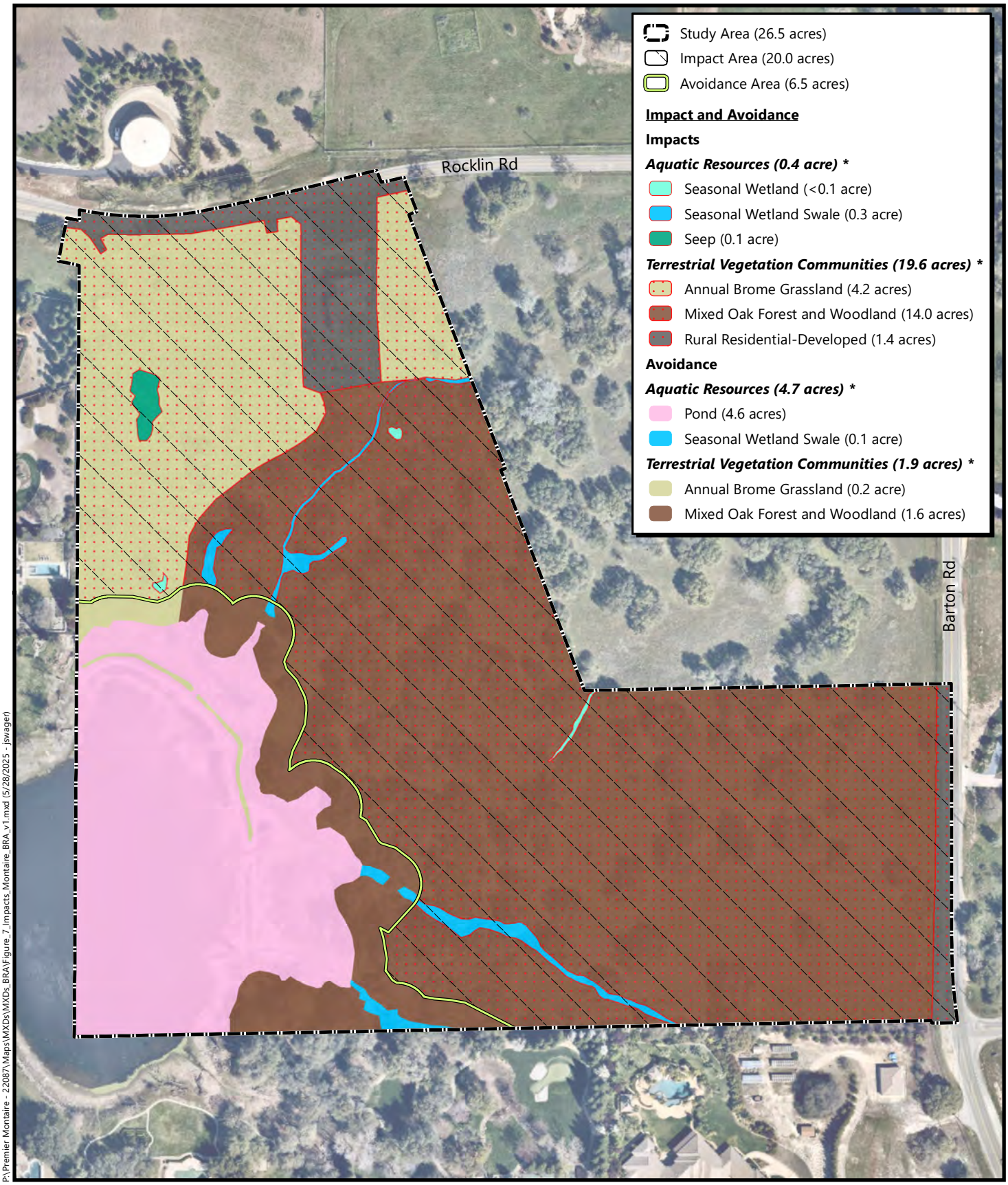


Figure 7
Impacts to Terrestrial Vegetation Communities and Aquatic Resources

The Reserve
Loomis, Placer County, California

MADRONE ECOLOGICAL CONSULTING

* *Small summation errors may occur due to rounding*
Design Source: TSD Engineering
Aerial Source: City of Rocklin (NearMap), 2021

Attachments

Attachment A. IPaC Trust Resource Report for the Study Area

Attachment B. CNPS Inventory of Rare and Endangered Plants Query for the "Rocklin, California" USGS Quadrangle and Eight Surrounding Quadrangles

Attachment C. The Reserve Wildlife List

Attachment D. Approved Jurisdictional Determination for The Reserve

Attachment E. Tree Inventory Map

Attachment A

IPaC Trust Resource Report for the Study Area

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

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Location

Placer County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. 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.

NOT FOR CONSULTATION

The following species are potentially affected by activities in this location:

Reptiles

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

Amphibians

NAME	STATUS
Western Spadefoot Spea hammondii Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

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Vernal Pool Tadpole Shrimp Lepidurus packardi Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2246

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts

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For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

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Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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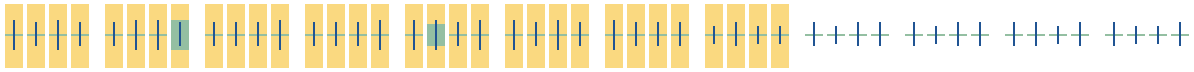
■ probability of presence ■ breeding season | survey effort – no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Bald Eagle
Non-BCC
Vulnerable



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability

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of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31

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California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Nuttall's Woodpecker Dryobates nuttallii — Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Santa Barbara Song Sparrow Melospiza melodia graminea — Breeds Mar 1 to Sep 5

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5513

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Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Western Screech-owl Megascops kennicottii cardonensis This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jun 30
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the

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maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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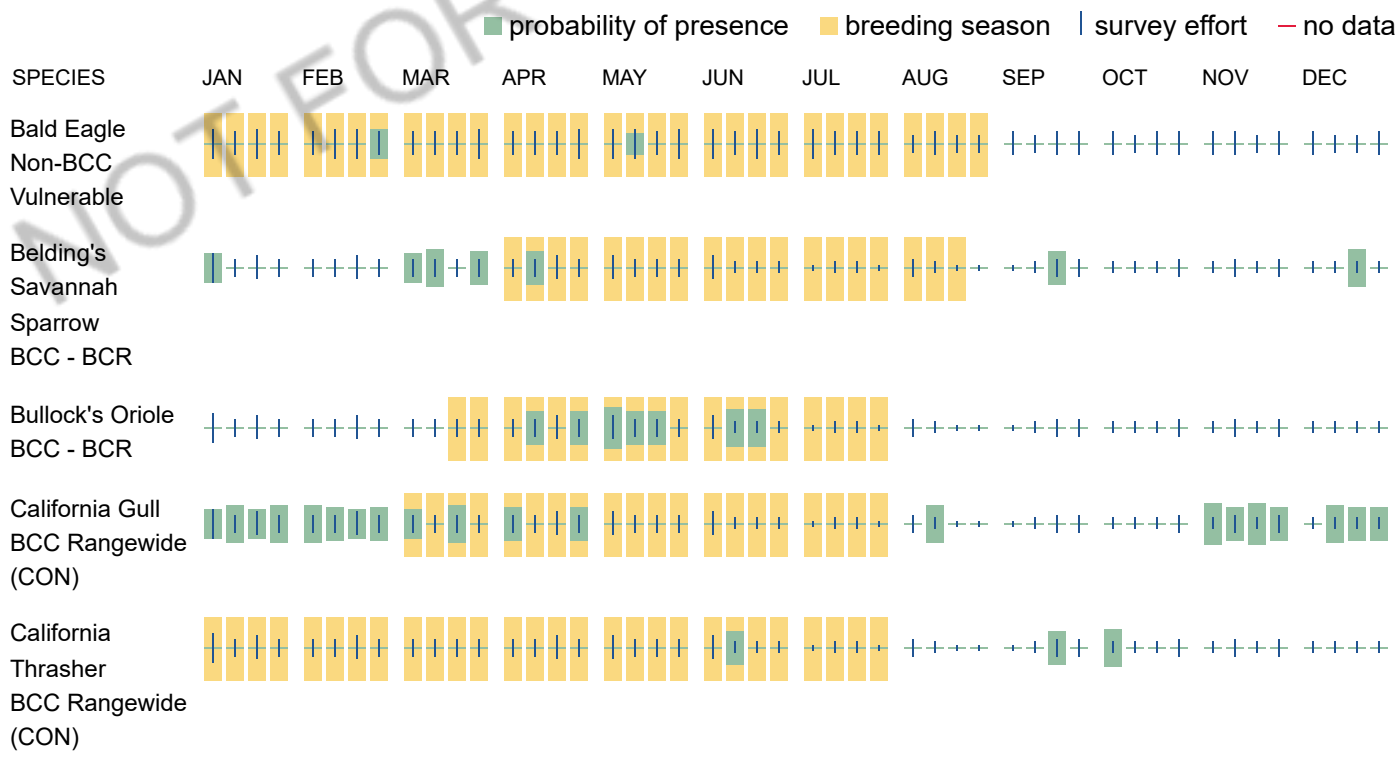

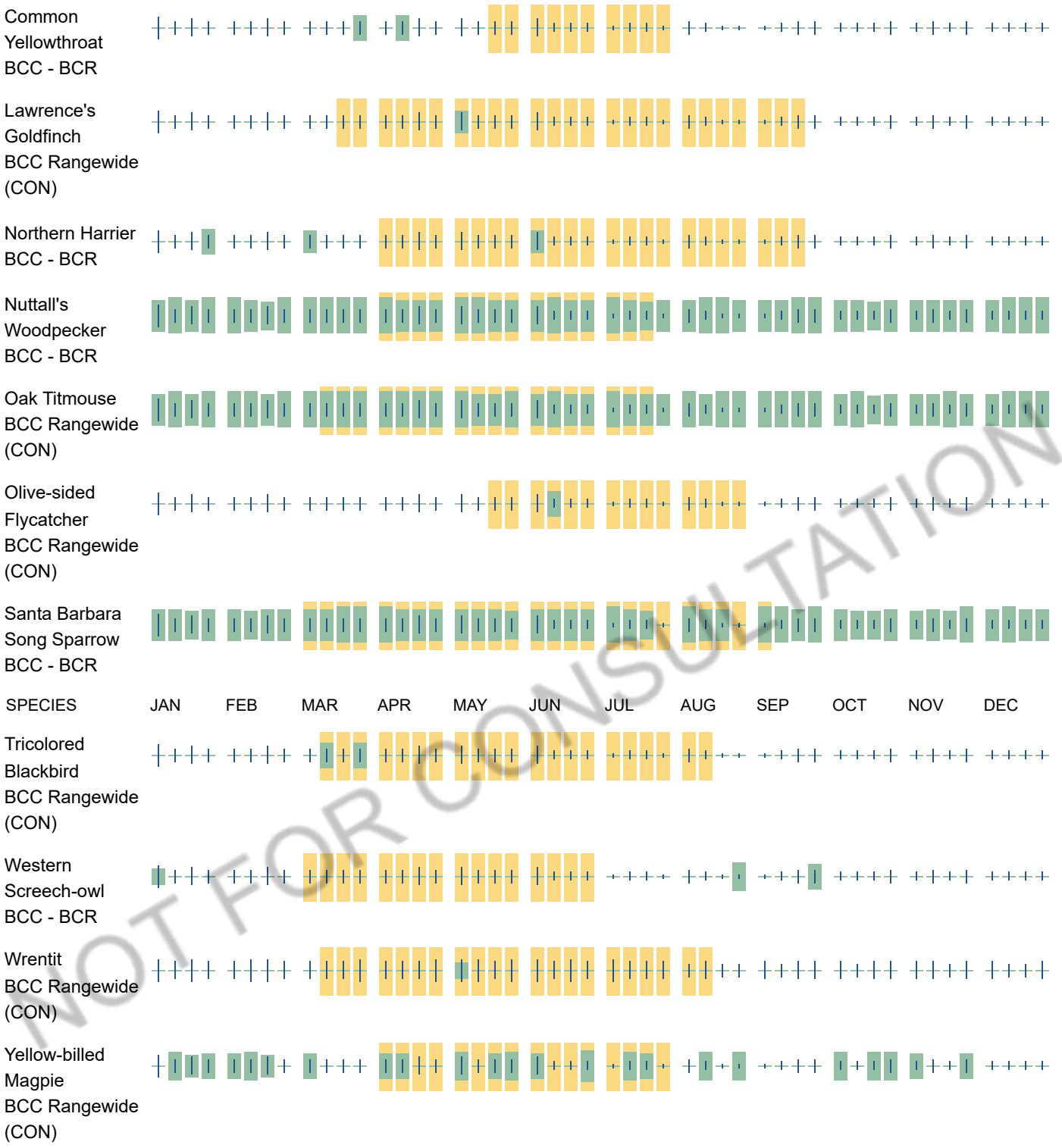

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Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see

when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in

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your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

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Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

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Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters.

Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Attachment B

CNPS Inventory of Rare and Endangered Plants Query for the "Rocklin, California" USGS Quadrangle and Eight Surrounding Quadrangles

CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

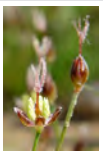
Search Results

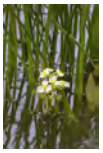
35 matches found. Click on scientific name for details

Search Criteria: , Quad is one of [**3812172:3812173:3812183:3812182:3812181:3812171:3812161:3812162:3812163**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2019 Steven Perry
Allium sanbornii var. *sanbornii*	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	None	None	G3T4?	S3S4	4.2		1994-01-01	 ©2018 Steven Perry
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	 ©1998 Dean Wm. Taylor
Brodiaea rosea ssp. *vallicola*	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr-May(Jun)	None	None	G4G5T3	S3	4.2	Yes	2019-01-07	 © 2011 Steven Perry
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Calycadenia spicata	spicate calycadenia	Asteraceae	annual herb	May-Sep	None	None	G3?	S3	1B.3		2023-04-05	 © 2023 Christopher Bronny

Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	FE	CE	G1	S1	1B.1	Yes	1980-01-01	 Steven Perry
Carex xerophila	chaparral sedge	Cyperaceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	2016-06-06	 © 2023 Steven Perry
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	FE	CR	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G3	S3	1B.2	Yes	1974-01-01	No Photo Available
Chloropyron molle ssp. *hispidum*	hispid salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	None	None	G2T1	S1	1B.1	Yes	1974-01-01	No Photo Available
Clarkia biloba ssp. *brandegeeae*	Brandegee's clarkia	Onagraceae	annual herb	(Mar)May-Jul	None	None	G4G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
Claytonia parviflora ssp. *grandiflora*	streambank spring beauty	Montiaceae	annual herb	Feb-May	None	None	G5T3	S3	4.2	Yes	2006-09-29	No Photo Available
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	Apr-Aug	None	None	G2?Q	S2?	3.2	Yes	1974-01-01	No Photo Available
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2		1980-01-01	 © 2013 Aaron Arthur
Eriophyllum jepsonii	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	Apr-Jul	FE	CR	G1	S1	1B.2	Yes	1974-01-01	 Steven Perry

Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980-01-01	 © 2016 Aaron Schusteff
Fritillaria eastwoodiae	Butte County fritillary	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3Q	S3	3.2		1974-01-01	 ©2009 Sierra Pacific Industries
Galium californicum ssp. *sierrae*	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	FE	CR	G5T1	S1	1B.2	Yes	1974-01-01	 © 2019 John Doyen
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2		1974-01-01	 ©2004 Carol W. Witham
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May(Jun)	None	None	G3	S3	4.2	Yes	2006-10-12	 © 2014 Aaron Schusteff
Juncus leiospermus var. *ahartii*	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	None	None	G2T1	S1	1B.2	Yes	1984-01-01	 © 2004 Carol W. Witham
Juncus leiospermus var. *leiospermus*	Red Bluff dwarf rush	Juncaceae	annual herb	Mar-Jun	None	None	G2T2	S2	1B.1	Yes	1974-01-01	 ©2016 Dylan Neubauer

Lathyrus sulphureus var. *argillaceus*	dubious pea	Fabaceae	perennial herb	Apr-May	None	None	G5T1T2Q	S1S2	3	Yes	1994-01-01	No Photo Available
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	Yes	1974-01-01	 ©2000 John Game
Leptosiphon ambiguus	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2010 Aaron Schusteff
Leptosiphon aureus	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994-01-01	 © 2007 Len Blumin
Lilium humboldtii ssp. *humboldtii*	Humboldt lily	Liliaceae	perennial bulbiferous herb	May-Jul(Aug)	None	None	G4T3	S3	4.2	Yes	1994-01-01	 © 2008 Sierra Pacific Industries
Navarretia myersii ssp. *myersii*	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	None	None	G2T2	S2	1B.1	Yes	1994-01-01	 © 2020 Leigh Johnson
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	Apr-Jul(Sep)	FE	CE	G1	S1	1B.1	Yes	1974-01-01	 © Rick York and CNPS
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	FT	CR	G2	S2	1B.2	Yes	1974-01-01	 Steve Tyron
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook

Viburnum ellipticum	oval-leaved viburnum	Viburnaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3	2B.3		1974-01-01	 © 2006 Tom Engstrom
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	Apr-Aug	None	None	G2	S2	1B.2	Yes	1974-01-01	 Steven Perry

Showing 1 to 35 of 35 entries

Go to top

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 18 March 2025].

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Attachment C

The Reserve Wildlife List

Wildlife Species Observed within The Reserve
1 May 2023 and 18 March 2025

Species Name	Common Name
Birds	
Branta canadensis	Canada Goose
Anas platyrhynchos	Mallard
Bucephala albeola	Bufflehead
Meleagris gallopavo	Wild Turkey
Phalacrocorax auritus	Double-crested Cormorant
Cathartes aura	Turkey Vulture
Buteo lineatus	Red-shouldered Hawk
Buteo jamaicensis	Red-tailed Hawk
Zenaida macroura	Mourning Dove
Calypte anna	Anna's Hummingbird
Megaceryle alcyon	Belted Kingfisher
Melanerpes formicivorus	Acorn Woodpecker
Picoides nuttallii	Nuttall's Woodpecker
Colaptes auratus	Northern Flicker
Sayornis nigricans	Black Phoebe
Aphelocoma californica	California Scrub-Jay
Corvus brachyrhynchos	American Crow
Corvus corax	Common Raven
Tachycineta bicolor	Tree Swallow
Stelgidopteryx serripennis	Northern Rough-winged Swallow
Baeolophus inornatus	Oak Titmouse
Psaltriparus minimus	Bushtit
Sitta carolinensis	White-breasted Nuthatch
Thryomanes bewickii	Bewick's Wren
Regulus calendula	Ruby-crowned Kinglet
Sialia mexicana	Western Bluebird
Turdus migratorius	American Robin
Mimus polyglottos	Northern Mockingbird
Sturnus vulgaris	European Starling
Setophaga coronata	Yellow-rumped Warbler
Pipilo maculatus	Spotted Towhee
Melozone crissalis	California Towhee
Melospiza melodia	Song Sparrow
Zonotrichia leucophrys	White-crowned Sparrow
Junco hyemalis	Dark-eyed Junco

Wildlife Species Observed within The Reserve
1 May 2023 and 18 March 2025

Species Name	Common Name
Birds, Continued	
Agelaius phoeniceus	Red-winged Blackbird
Euphagus cyanocephalus	Brewer's Blackbird
Carpodacus mexicanus	House Finch
Spinus psaltria	Lesser Goldfinch
Reptiles	
Unidentified Species	Turtle
Mammals	
Castor canadensis	Beaver
Sciurus griseus	Western Gray Squirrel
Odocoileus hemionus	Black-tailed Deer
Invertebrates	
Bombus species	Bumble Bee

Attachment D

Approved Jurisdictional Determination for The Reserve

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

February 28, 2023

Regulatory Division (SPK-2022-00714)

Premier Homes, LLC.
Attn: Mr. Stefan Horstschraer
8483 Douglas Plaza Dr.
Granite Bay, California 95746-6820
stefan@premierhomesca.com

Dear Mr. Horstschraer:

We are responding to your December 13, 2022, request for a preliminary jurisdictional determination (JD) for the Premier Montaire site. The approximately 29-acre project site is located south of Rocklin Road and West of Barton Road, Latitude 38.786521°, Longitude -121.194838°, Loomis, Placer County, California.

Based on available information, we concur with your aquatic resources delineation for the site as depicted on the enclosed May 1, 2022, *Aquatic Resources* drawing prepared by Madrone Ecological Consulting (enclosure 1). The approximately 0.03 acre of seasonal wetland, 0.36 acre of seasonal wetland swale, 0.08 acre of seep, and 4.68 acres of pond present within the survey area are potential jurisdictional aquatic resources ("waters of the United States") regulated under Section 404 of the Clean Water Act. This letter verifies that the location and boundaries of wetlands were delineated consistent with the wetland definition at 33 CFR §328.3(c)(16), the 1987 *Corps of Engineers Wetlands Delineation Manual* (Wetlands Research Program Technical Report Y-87-1) and the applicable regional supplements; and the location and boundaries of non-tidal waters conform with the ordinary high water mark definition at 33 CFR §328.3(c)(7), Regulatory Guidance Letter 05-05, and any applicable regional guide.

At your request, we have completed a preliminary JD for the site. Enclosed find a copy of the *Preliminary Jurisdictional Determination Form* (enclosure 2). Please sign and return the completed form to the address listed below within 30 days of the date of this letter. If you do not return the signed form within 30 days, we will presume concurrence and finalize the preliminary jurisdictional determination.

We recommend you provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

You may request an approved JD for this site at any time prior to starting work within waters, including after a permit decision is made. To request an approved JD for this site, complete the attached *Request for Aquatic Resources Delineation or Jurisdictional Determination Form* (enclosure 3) and return it to this office at the address listed below. A *Notification of Appeal Process and Request for Appeal Form* is enclosed to notify you of your options with this determination (enclosure 4).

We appreciate feedback, especially about interactions with our staff and processes.

Please refer to identification number SPK-2022-00714 in any correspondence concerning this project. If you have any questions, please contact Kyler Walsh by email at kyler.j.walsh@usace.army.mil, or telephone at (916) 577-6704. For program information or to complete our Customer Survey, visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

Kaitlyn A. Ames
Senior Project Manager
Special Projects Branch

Enclosures

cc:
Sarah VonderOhe, Madrone Ecological Consulting, LLC.,
SVonderOhe@madroneeco.com

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Premier Homes, LLC., Attn: Mr. Stefan Horstschraer	File No.: SPK-2022-00714	Date: February 28, 2023

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
→	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at *http://www.usace.army.mil/cecw/pages/reg_materials.aspx* or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

U.S. Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, CA 95814

Phone: (916) 577-6704, FAX 916-557-7803
Email: kyler.j.walsh@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Travis Morse
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division
Phillip Burton Federal Building, Post Office Box 36023
450 Golden Gate Avenue
San Francisco, California 94102
Phone: 970-243-1199x1014, FAX: 971-241-2358
Email: W.Travis.Morse@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 2023-02-23

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Stefan Horstschraer, Premier Homes, LLC., 8483 Douglas Plaza Drive, Granite Bay, CA 95746-6820

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Premier Montaire, SPK-2022-00714

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: CA County/parish/borough: Placer County City: Loomis

Center coordinates of site (lat/long in degree decimal format):

Lat.: 38.786521 Long.: -121.194838

Universal Transverse Mercator: 656786.41, 4294634.48

Name of nearest waterbody: Antelope Creek

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: February 23,2023

☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
SW-1	38.786899	-121.19623	0.007	Wetland	Section 404
SW-2	38.78752	-121.19497	0.007	Wetland	Section 404
SW-3	38.786310	-121.19402	0.017	Wetland	Section 404
SWS-1	38.78701	-121.19595	0.036	Wetland	Section 404

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
SWS-2	38.78509	-121.19502	0.055	Wetland	Section 404
SWS-3	38.787212	-121.19530	0.105	Wetland	Section 404
SWS-4	38.785411	-121.19441	0.16	Wetland	Section 404
S-1	38.787662	-121.19630	0.078	Wetland	Section 404
P-1	38.785829	-121.19609	4.678	Wetland	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: Map: October 2022, Aquatic Resources Delineation Report, prepared by Madrone Ecological Consulting, Inc..

☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.

☒ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report. Rationale: .

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☒ U.S. Geological Survey Hydrologic Atlas: 1802011101 Dry Creek Watershed.

☐ USGS NHD data.

☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Rocklin.

☒ Natural Resources Conservation Service Soil Survey. Citation: Soil Survey Source: USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part. Arial Source: Maxar, 09 September 2021.

☒ National wetlands inventory map(s). Cite name: National Wetlands Inventory Map, Dated August 17, 2022, retreived at https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

☐ State/local wetland inventory map(s): .

☒ FEMA/FIRM maps: 06061C0962H effective on 11/02/2018.

☐ 100-year Floodplain Elevation is: . (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Digital Globe Version 2021.Q1.R1.2853 Located at -121.194838, 38.786521

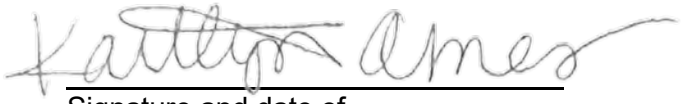
Or ☐ Other (Name & Date):

☐ Previous determination(s). File no. and date of response letter: .

☒ Other information (please specify): USGS Topo Map NGA REF NO. USGSX24K3822.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

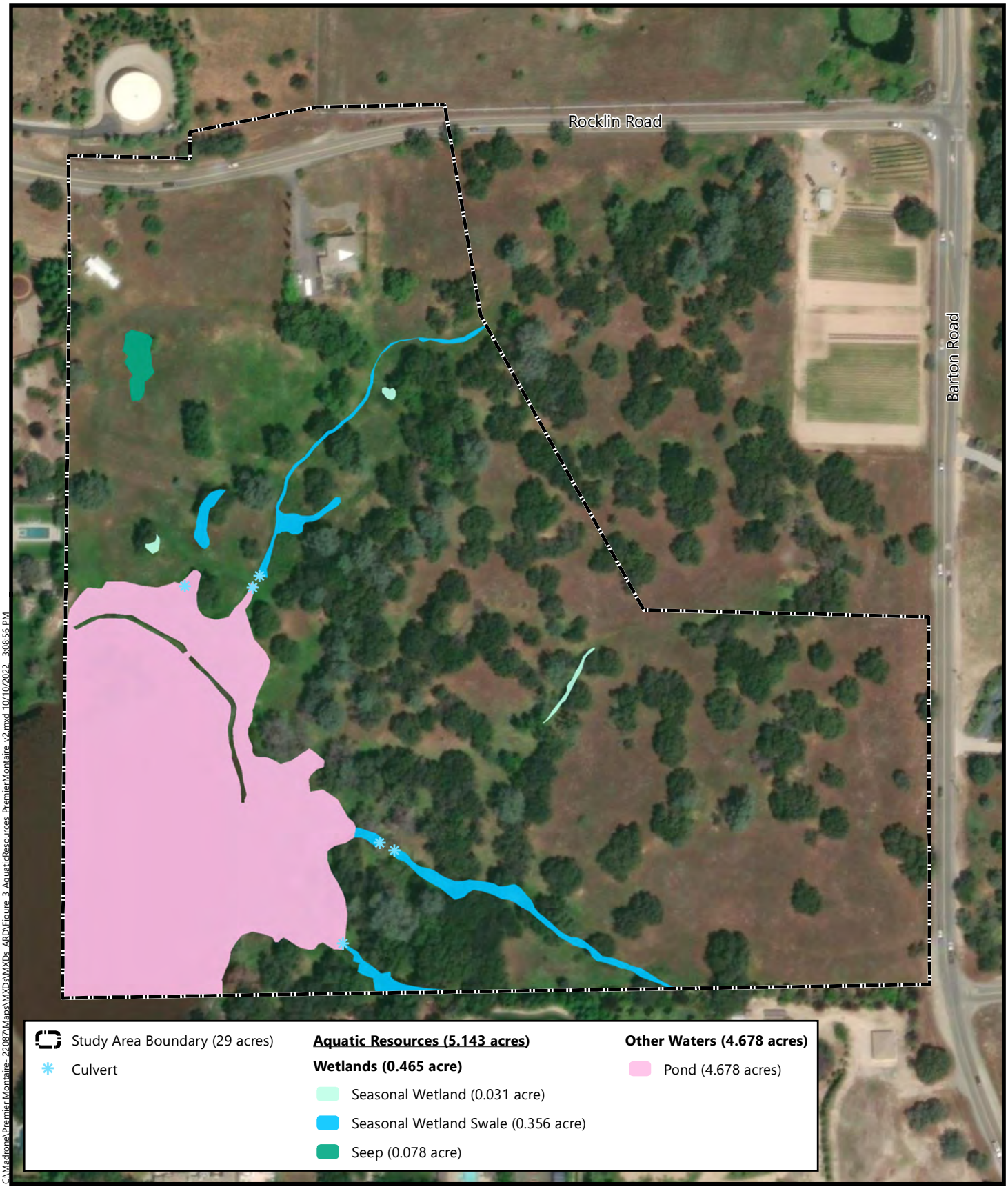
February 28, 2023



Signature and date of
Regulatory staff member
completing PJD

Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



C:\Madrone\Premier Montaire - 22087\Maps\MXDs\MXDs ARD\Figure 3 AquaticResources PremierMontaire v2.mxd 10/10/2022 3:08:56 PM

Figure 3
Aquatic Resources

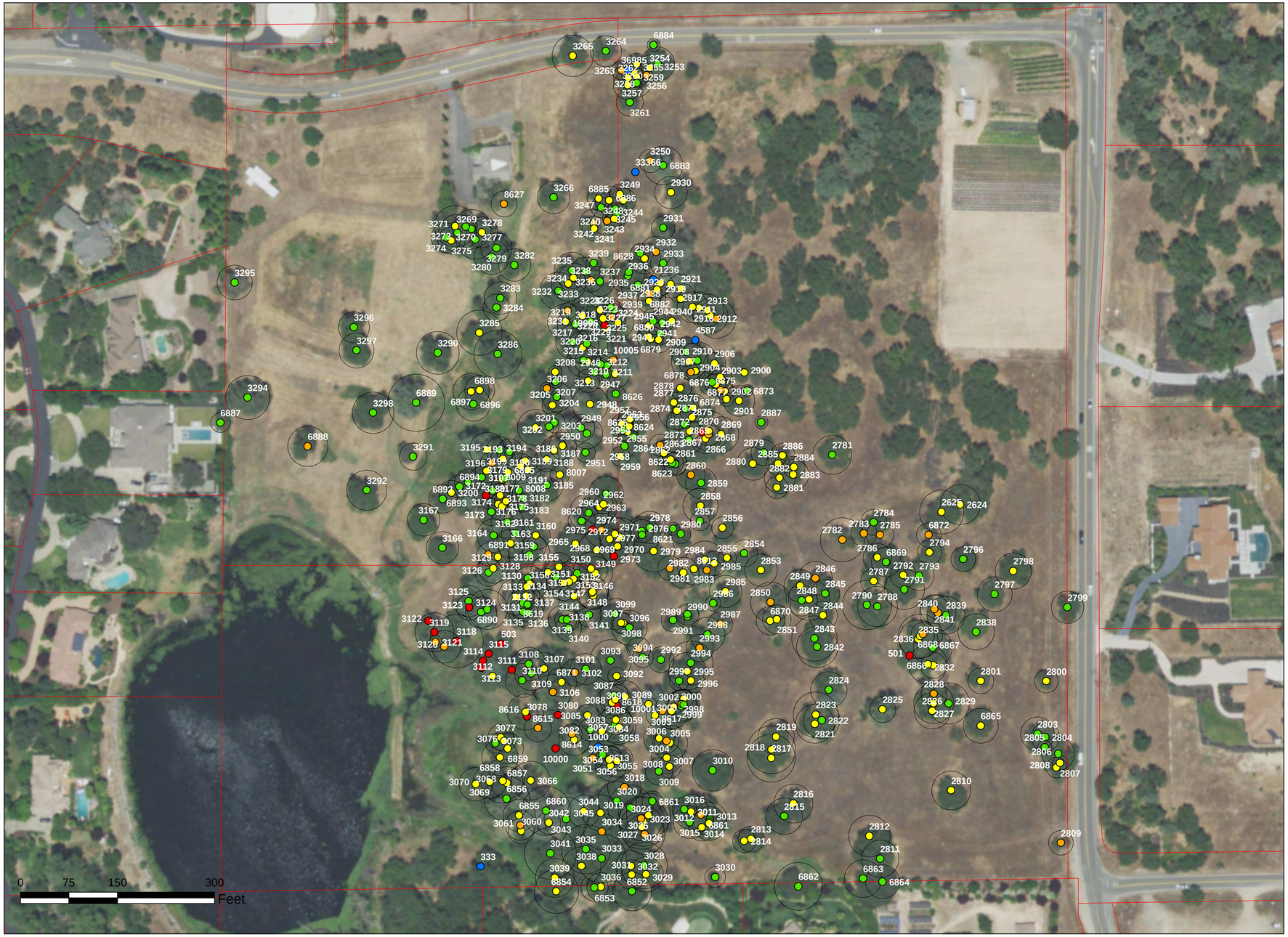
Premier Montaire
Town of Loomis, Placer County, California

Aerial Source: Maxar, 1 May 2022

Enclosure 1

Attachment E

Tree Inventory Map



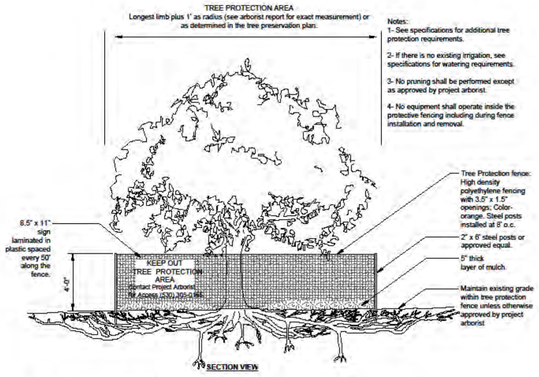
Document Path: C:\Users\User\Desktop\Personal- net\CalTLC\Maps 2022\Barton Rd, Loomis\Barton Template Complete.mxd

California Tree & Landscape Consulting, Inc.

359 Nevada Street, Suite 201
Auburn, CA 95603

TREE PROTECTION GENERAL REQUIREMENTS

1. The project arborist for this project is California Tree & Landscape Consulting. The primary contact information is Nicole Harrison (530) 305-0165. The project arborist may continue to provide expertise and make additional recommendations during the construction process if and when additional impacts occur or tree response is poor. Monitoring and construction oversight by the project arborist is recommended for all projects and required when a final letter of assessment is required by the jurisdiction.
2. The project arborist should inspect the exclusionary root protection fencing installed by the contractors prior to any grading and/or grubbing for compliance with the recommended protection zones. Additionally, the project arborist shall inspect the fencing at the onset of each phase of construction. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.
3. The project arborist should directly supervise any clearance pruning, irrigation, fertilization, placement of mulch and/or chemical treatments. If clearance pruning is required, the Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist. Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site.
4. No trunk within the root protection zone of any trees shall be removed using a backhoe or other piece of grading equipment.
5. Clearly designate an area on the site that is outside of the protection area of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the protection zones of any trees on or off the site.
6. Any and all work to be performed inside the protected root zone fencing, including all grading and utility trenching, shall be approved and/or supervised by the project arborist.
7. Trenching, if required, inside the protected root zone shall be approved and/or supervised by the project arborist and may be required to be performed by hand, by a hydraulic or air spade, or other method which will place pipes underneath the roots without damage to the roots.
8. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.



S-X TREE PROTECTION

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

TREE INVENTORY MAP

>Tree locations are approximate and were collected using apple iOS products.
>Property line information was downloaded from Placer County on 05/15/2020.
>Development plans provided by SGI Companies dated 09/17/2020.

Property Line
Measured Tree Canopy

Arborist Rating
- 0 Dead
- 1 Extreme Structure or Health Problems
- 2 Major Structure or Health Problems
- 3 Fair - Minor Problems
- 4 Good - No Apparent Problems
- 5 Excellent

Sheet No.
TPP 1.0

PREMIER MONTAIRE

ADDRESS 5500 Barton Road, Loomis, CA

ADDRESS 5780 Rocklin Road, Loomis, CA

Date: 9/7/2022