
APPENDIX D: BIOLOGICAL RESOURCE REPORT



Biological Resources Assessment for the Plumas Lake Middle School Project

Yuba County, California

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November 2025

CONTENTS

1.0	INTRODUCTION	1
1.1	Project Location and Description.....	1
1.2	Biological Study Area.....	1
1.3	Purpose of This Biological Resources Assessment	1
2.0	REGULATORY SETTING	3
2.1	Federal Regulations.....	3
2.1.1	Federal Endangered Species Act.....	3
2.1.2	Migratory Bird Treaty Act.....	4
2.1.3	Bald and Golden Eagle Protection Act.....	4
2.1.4	Federal Clean Water Act	4
2.2	State or Local Regulations.....	5
2.2.1	California Fish and Game Code	5
2.2.2	California Oak Woodlands Conservation Act.....	6
2.2.3	Porter-Cologne Water Quality Act	7
2.2.4	California Environmental Quality Act.....	7
2.2.5	Yuba County 2030 Countywide General Plan – Biological Resources Element.....	11
2.2.6	Plumas Lake Specific Plan – Design Guidelines.....	11
3.0	METHODS	11
3.1	Literature Review.....	11
3.2	Site Reconnaissance.....	12
4.0	RESULTS.....	12
4.1	Site Characteristics and Land Use.....	12
4.2	Soils and Geology	13
4.3	Vegetation Communities and Land Cover Types	13
4.3.1	Agriculture.....	13
4.3.2	Urban/Landscaped.....	16
4.4	Aquatic Resources	16
4.5	Special-Status Species.....	16
4.5.1	Plants.....	35
4.5.2	Invertebrates	37
4.5.3	Fish	38
4.5.4	Amphibians.....	38
4.5.5	Reptiles	38
4.5.6	Birds.....	39

4.5.7	Mammals	43
4.6	Critical Habitat or Essential Fish Habitat.....	43
4.7	Wildlife Movement Corridors and Nursery Sites.....	44
4.8	Protected Trees/Oak Woodlands.....	44
5.0	IMPACT ASSESSMENT AND RECOMMENDATIONS	44
5.1	CEQA Checklist Criteria IV(a) – Special-Status Species	44
5.1.1	Special-Status Plants	45
5.1.2	Special-Status Wildlife Species	47
5.2	CEQA Checklist Criteria IV(b) – Sensitive Natural Communities.....	50
5.3	CEQA Checklist Criteria IV(c) – Aquatic Resources	50
5.4	CEQA Checklist Criteria IV(d) – Movement Corridors and Nursery Sites.....	51
5.5	CEQA Checklist Criteria IV(e) – Conflicts with Local Policies or Ordinances.....	51
5.6	CEQA Checklist Criteria IV(f) – Conflicts with Conservation Plans.....	51
6.0	REFERENCES.....	52

LIST OF FIGURES

Figure 1. Biological Study Area Location and Vicinity	2
Figure 2. Natural Resources Conservation Service Soils Map.....	14
Figure 3. Vegetation Communities and Land Cover Types.....	15
Figure 4. California Aquatic Resources Inventory.....	17
Figure 5. Location of Parry’s Rough Tarplant.....	36

LIST OF TABLES

Table 1. Soil Map Units within the Biological Study Area	13
Table 2. Potentially Occurring Special–Status Species	18

LIST OF APPENDICES

Appendix A – Overall Site Plan
Appendix B – Results of Database Queries
Appendix C – Representative Photographs
Appendix D – Plant Species Observed (May 13, 2025)
Appendix E – Wildlife Species Observed (May 13, 2025)

LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
°F	degrees Fahrenheit
BCC	Bird of Conservation Concern
BRA	Biological Resources Assessment
BSA	Biological Study Area
CARI	California Aquatic Resource Inventory
CBB	Crotch bumble bee
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	Yuba County
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DPS	Distinct Population Segment
ECORP	ECORP Consulting, Inc.
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
General Plan	Yuba County 2030 Countywide General Plan
HCP	Habitat Conservation Plan
LSAA	Lake or Streambed Alteration Agreement
MBTA	Migratory Bird Treaty Act
MCV	Manual of California Vegetation
MSL	Mean Sea Level
N/A	Not Applicable
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act

Term	Definition
NRCS	Natural Resources Conservation Service
Project	Plumas Lake Middle School Project
RWQCB	Regional Water Quality Control Board
Specific Plan	Plumas Lake Specific Plan
SR	State Route
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group

1.0 INTRODUCTION

ECORP Consulting, Inc. (ECORP) has conducted a Biological Resources Assessment (BRA) at the request of PlaceWorks, Inc. for the proposed Plumas Lake Middle School Project (Project) located in Plumas Lake, Yuba County, California. Plumas Lake is a master-planned, census-designated place accessed via California State Route (SR) 70 between Sacramento and Marysville. The results of this BRA would support the environmental review of the Project in accordance with the California Environmental Quality Act (CEQA) and provide the basis for identifying appropriate measures to minimize or avoid significant impacts to biological resources.

1.1 Project Location and Description

The Project Area is in an open, agricultural field that is currently tilled and plowed. It also includes a small portion of the asphalt and planted median of River Oaks Boulevard. Agriculture uses continue to the south of the Project Area. Single-family homes are under construction north of the Project Area. River Oaks Boulevard and single-family homes are located to the east. A gravel reclamation district access road comprises the western boundary of the Project Area; adjacent to the gravel road is a riparian area and more agricultural land.

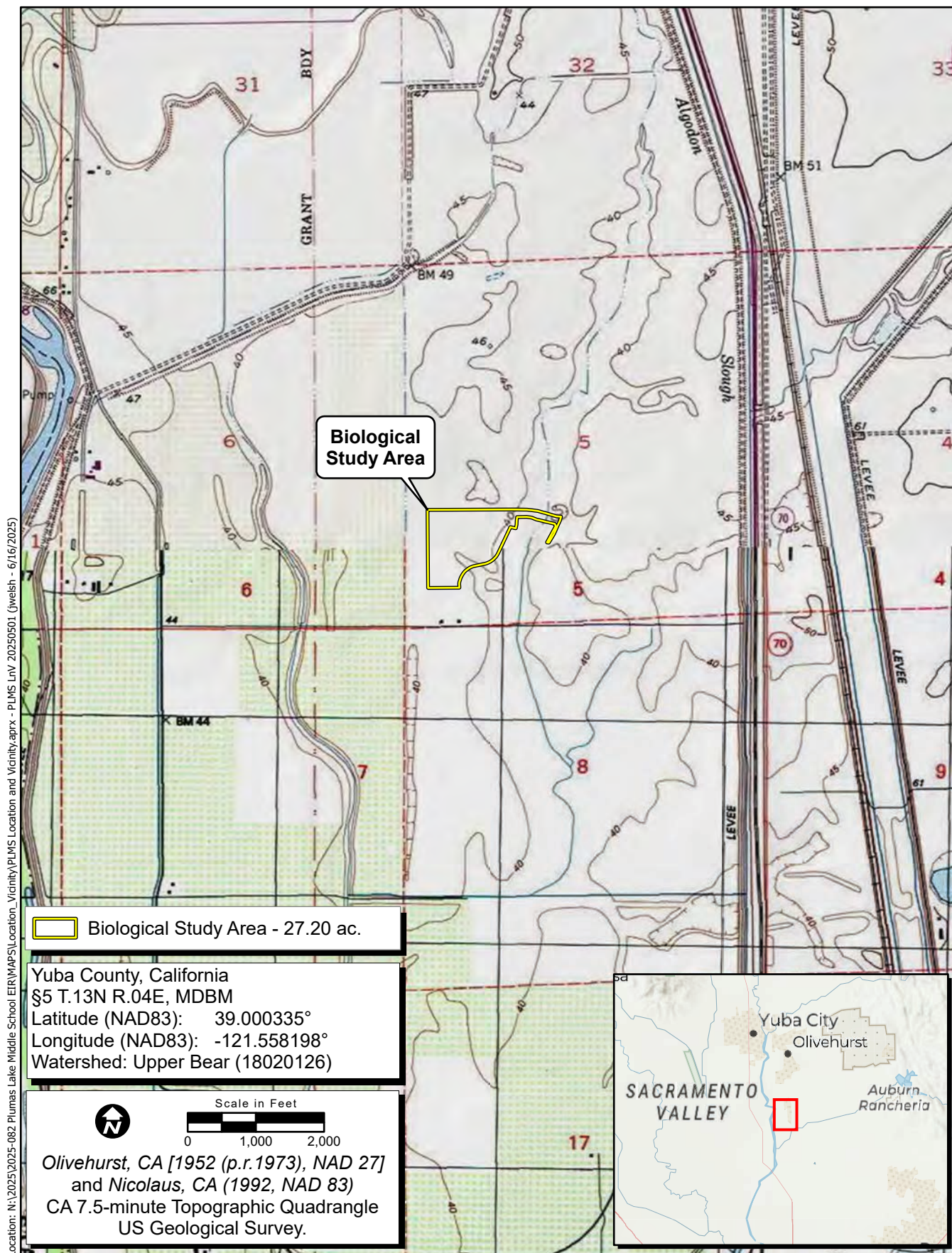
The Project Area is the proposed site of a new middle school on a Wheatland Unified High School parcel (Assessor's Parcel Number 016-650-023-000). The Project would include classrooms, administrative buildings, a parking area, and athletic facilities. Appendix A provides the Proposed Project site plan.

1.2 Biological Study Area

The Biological Study Area (BSA) includes all areas where Project-related activities may result in impacts to sensitive biological resources; for this Project, the BSA is the same as the Project Area. The 27.20-acre BSA corresponds to a portion of Section 5, Township 13 North, Range 4 East, Mount Diablo Base and Meridian, as depicted on the *Olivehurst, California* and *Nicolaus, California* 7.5-minute topographic quadrangles (Figure 1) (U.S. Geological Survey [USGS] 2016). The approximate center of the BSA is located at 39.000335° North and -121.558198° West within the Upper Bear watershed (Hydrological Unit Code 18020126) (Natural Resources Conservation Service [NRCS] et al. 2024).

1.3 Purpose of This Biological Resources Assessment

The purpose of this BRA is to assess the potential for occurrence of special-status plant and animal species or their habitats and other sensitive or protected resources such as migratory birds, sensitive natural communities, riparian habitat, oak woodlands, and potential Waters of the U.S. or State, including wetlands, within the BSA. This assessment does not include determinate field surveys conducted according to agency-promulgated protocols. The conclusions and recommendations presented in this report are based upon a review of available literature and the results of site reconnaissance field surveys.



Map Date: 6/16/2025
 Sources: ESRI, USGS



Figure 1. Biological Study Area Location and Vicinity

2025-082 Plumas Lake Middle School Project

For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (ESA);
- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under Section 15380 of the CEQA Guidelines;
- are identified as a Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- are birds identified as Birds of Conservation Concern (BCC) by the U.S. Fish and Wildlife Service (USFWS);
- are plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California" (California Rare Plant Ranks [CRPRs] 1 and 2), plants listed by CNPS as species about which more information is needed to determine their status (CRPR 3), and plants of limited distribution (CRPR 4);
- are plants listed as rare under the California Native Plant Protection Act (NPPA) (California Fish and Game Code, Section 1900 et seq.); or
- are fully protected in California in accordance with the California Fish and Game Code, Sections 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles), and 5515 (fishes).

2.0 REGULATORY SETTING

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The federal ESA protects plants and animals that are listed as endangered or threatened by USFWS or the National Marine Fisheries Service (NMFS). Section 9 of the ESA prohibits the taking of listed wildlife, where take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, the ESA prohibits removing or possessing any listed plant on federal land, maliciously damaging or destroying any listed plant in any area, or removing, cutting, digging up, damaging, or destroying any such species in knowing violation of state law (16 U.S. Code [USC] 1538). Under Section 7 of ESA, federal agencies are required to consult with USFWS and/or NMFS if their actions, including permit approvals or funding, may affect a listed species (including plants) or its designated critical habitat. Through consultation and the issuance of a Biological Opinion (formal consultation), USFWS and/or NMFS may authorize take of a listed species that is incidental to an otherwise legal activity provided the activity will not jeopardize the continued existence of the species. The USFWS and/or NMFS may issue a letter of concurrence through an informal consultation process if the federal agency demonstrates that the action is not likely to adversely affect a listed species. Section 10 of the ESA provides for issuance of incidental take permits where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The protections of the MBTA have been interpreted to extend to disturbances that result in abandonment of a nest with eggs or young. The USFWS may issue permits to qualified applicants as authorized by the MBTA for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits.

2.1.3 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 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).

2.1.4 Federal Clean Water Act

The purpose of the federal Clean Water Act (CWA) is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas:

...that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b).

The U.S. Environmental Protection Agency also has authority over wetlands and may override a USACE permit.

Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. Section 404 permit actions require a Water Quality Certification or waiver pursuant to Section 401 of the CWA; the Regional Water Quality Control Board (RWQCB) issues this certification or waiver.

2.2 State or Local Regulations

2.2.1 California Fish and Game Code

2.2.1.1 California Endangered Species Act

The California ESA (California Fish and Game Code Sections 2050-2116) generally parallels the main provisions of the federal ESA, but unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called *candidates* by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. *Take* is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Section 2081 allows CDFW to authorize incidental take permits if species-specific minimization and avoidance measures are incorporated to fully mitigate the impacts of a project.

2.2.1.2 Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal and California ESAs. 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 the state and/or federal ESAs. Previously, the regulations that implement the Fully Protected Species Statute (California Fish and Game Code Sections 4700 for mammals, 3511 for birds, 5050 for reptiles and amphibians, and 5515 for fish) provided that fully protected species may not be taken or possessed at any time. However, on July 10, 2023, Senate Bill 147 was signed into law, authorizing CDFW to issue take permits under the California ESA for fully protected species for qualifying projects through 2033. Qualifying projects include:

- a maintenance, repair, or improvement project to the State Water Project, including existing infrastructure, undertaken by the Department of Water Resources;
- a maintenance, repair, or improvement project to critical regional or local water agency infrastructure;
- a transportation project, including any associated habitat connectivity and wildlife crossing project, undertaken by a state, regional, or local agency, that does not increase highway or street capacity for automobile or truck travel;
- a wind project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the State to a point of junction with any California based balancing authority; or

- a solar photovoltaic project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the State to a point of junction with any California-based balancing authority.

CDFW may also issue licenses or permits for take of these species for necessary scientific research or live capture and relocation, and may allow incidental take for lawful activities carried out under an approved Natural Community Conservation Plan within which such species are covered.

2.2.1.3 Native Plant Protection Act

The NPPA of 1977 was created with the intent to “preserve, protect and enhance rare and endangered plants in this State.” The NPPA is administered by CDFW and provided in California Fish and Game Code Sections 1900-1913. The Fish and Wildlife Commission has the authority to designate native plants as *endangered* or *rare* and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code Sections 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.1.4 Special Protections for Birds

Sections 3503, 3513, and 3800 of the California Fish and Game Code specifically protect birds. Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird. Subsection 3503.5 prohibits the take, possession, or destruction of any birds in the orders Strigiformes (owls) or Falconiformes (hawks and eagles), as well as their nests and eggs. Section 3513 prohibits the take or possession of any migratory nongame bird as designated in the MBTA. Section 3800 states that, with limited exceptions, it is unlawful to take any nongame bird, defined as all birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds. These provisions, along with the federal MBTA, serve to protect all nongame birds and their nests and eggs, except as otherwise provided in the code.

2.2.1.5 Lake or Streambed Alteration Agreements

Section 1602 of the California Fish and Game Code requires an entity to notify CDFW of activities that may: “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 materials containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.” The statute has been interpreted by CDFW to include modification of adjacent wetland and riparian habitat. If CDFW determines the activity may “substantially adversely affect a fish or wildlife resource,” the entity may not commence the activity without a Lake or Streambed Alteration Agreement (LSAA). The LSAA establishes measures necessary to protect the resource and is mutually agreed upon by CDFW and the applicant.

2.2.2 California Oak Woodlands Conservation Act

The California Oak Woodlands Conservation Act was passed in 2001 to address loss of oak woodland habitats throughout the State. As a result of the Act, the Oak Woodland Conservation Program was

established to provide funding for conservation and protection of California oak woodlands. Public Resources Code Section 21083.4 went into effect as of January 1, 2005, and requires lead agencies to analyze potential effects to oak woodlands during the CEQA process. The lead agency must implement one of several mitigation alternatives, including conservation of oak woodlands through conservation easements, planting or restoration of oak woodlands, contribution of funds to the Oak Woodlands Conservation Fund, or other appropriate mitigation measures if it is determined that a project may have a significant effect on oak woodlands.

2.2.3 Porter-Cologne Water Quality Act

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of storm water runoff associated with construction activities. General Construction Permits for projects that disturb 1 or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB also regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the state” (Water Code 13260[a]). Waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code 13050[e]). The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by the USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of Waste Discharge Requirements for these activities.

2.2.4 California Environmental Quality Act

CEQA requires state and local agencies to disclose and evaluate the significant environmental impacts of proposed projects. Where significant impacts are identified, the agency must adopt all feasible mitigation measures to reduce or eliminate those impacts.

2.2.4.1 CEQA Significance Criteria

Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to state or federally listed (i.e., rare, threatened, or endangered) species are considered significant. Per CEQA Guidelines Section 15380, a species not protected on a federal or state list may be considered rare or endangered if it meets certain criteria. A species is considered “endangered” if its survival and reproduction in the wild are in immediate jeopardy; a species is considered “rare” when it is present in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens.

Assessment of *impact significance* to populations of non-listed species (e.g., SSC) usually considers the proportion of the species’ range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Pursuant to Appendix G, impacts to biological resources would normally be considered significant if a project would:

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

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA because although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

2.2.4.2 *Species of Special Concern*

SSC are defined by CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under the ESA, the California ESA or the California Fish and Game Code, but currently satisfy 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 and meets the state definition of threatened or endangered but has not formally been listed.

- The species has or is experiencing serious (nonscyclical) 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.

Projects that result in substantial impacts to SSC may be considered significant under CEQA.

2.2.4.3 U.S. Fish and Wildlife Service Bird of Conservation Concern

The 1988 amendment to the Fish and Wildlife Conservation Act mandates USFWS to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under ESA.” To meet this requirement, USFWS published a list of BCC (USFWS 2021) for the U.S. The list identifies the migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS’ highest conservation priorities. Projects that result in substantial impacts to BCC may be considered significant under CEQA.

2.2.4.4 Watch List Species

The CDFW maintains a list consisting of taxa that were previously designated as “Species of Special Concern” but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

Depending on the policy of the lead agency, projects that result in substantial impacts to species on the CDFW Watch List may be considered significant under CEQA.

2.2.4.5 California Rare Plant Ranks

The CNPS maintains the *Rare Plant Inventory* (CNPS 2025a), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, or low populations. Plant species meeting one of these criteria are assigned to one of six CRPRs. The rank system was developed in collaboration with government, academic, non-governmental organizations, and private sector botanists, and is jointly managed by CDFW and the CNPS. The CRPRs are currently recognized within the California Natural Diversity Database (CNDDDB). The following are definitions of the CNPS CRPRs:

- Rare Plant Rank 1A – presumed extirpated in California and either rare or extinct elsewhere
- Rare Plant Rank 1B – rare, threatened, or endangered in California and elsewhere
- Rare Plant Rank 2A – presumed extirpated in California, but more common elsewhere
- Rare Plant Rank 2B – rare, threatened, or endangered in California but more common elsewhere
- Rare Plant Rank 3 – a review list of plants about which more information is needed

- Rare Plant Rank 4 – a watch list of plants of limited distribution

Additionally, the CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 0.1 through 0.3, with 0.1 being the most threatened and 0.3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (greater than 80 percent of occurrences threatened/high degree and immediacy of threat)
- Threat Rank 0.2 – Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
- Threat Rank 0.3 – Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Rank; and differences in Threat Ranks do not constitute additional or different protection (CNPS 2025a). Substantial impacts to plants ranked 1A, 1B, 2A, or 2B are typically considered significant under CEQA Guidelines Section 15380. Significance under CEQA is typically evaluated on a case-by-case basis for plants ranked 3 or 4.

2.2.4.6 Sensitive Natural Communities

Sensitive natural communities are vegetation communities that are imperiled or vulnerable to environmental effects of projects. CDFW maintains the California Natural Community List (CDFW 2023a), which provides a list of vegetation alliances, associations, and special stands as defined in *A Manual of California Vegetation*, Online Edition (MCV) (CNPS 2025b), along with their respective state and global rarity ranks, if applicable. Natural communities with a state rarity rank of S1, S2, or S3 are considered sensitive natural communities. Substantial impacts to sensitive natural communities may be considered significant under CEQA.

2.2.4.7 Wildlife Movement Corridors and Nursery Sites

Impacts on wildlife movement corridors or nursery sites may be considered significant under CEQA. As part of the California Essential Habitat Connectivity Project, CDFW and California Department of Transportation maintain data on Essential Habitat Connectivity areas. This data is available within the CNDDDB. The goal of this Project is to map large intact habitat or natural landscapes and potential linkages that could provide corridors for wildlife. In urban settings, riparian vegetated stream corridors can also serve as wildlife movement corridors. Nursery sites include but are not limited to concentrations of nest or den sites such as heron rookeries, bat maternity roosts, and mule deer critical fawning areas. These data are available through CDFW's Biogeographic Information and Observation System database or as occurrence records within the CNDDDB and are supplemented with the results of the field reconnaissance.

2.2.5 Yuba County 2030 Countywide General Plan – Biological Resources Element

The Yuba County 2030 Countywide General Plan (General Plan) is a statement of the community's land use values that guides land use decisions in Yuba County; zoning, specific plans, area plans, subdivisions, capital improvements, development agreements, and many other land-use actions must be consistent with the adopted General Plan. The General Plan is a comprehensive plan for development and conservation in the unincorporated areas of Yuba County. The General Plan fulfills the requirements of state law and guidelines adopted by the California Office of Planning and Research. State law requires that the General Plan provides the framework for Yuba County to exercise its land-use entitlement authority in unincorporated areas. Policy number NR5.1 of the Biological Resources Section within the General Plan dictates that new development projects will avoid impacts to the habitat of special-status species, will flow guidance from regulatory agencies regarding appropriate pre-construction procedures, and will provide mitigation if necessary.

2.2.6 Plumas Lake Specific Plan – Design Guidelines

The BSA is located within an area covered by the Plumas Lake Specific Plan (Specific Plan). The area covered by the Specific Plan includes unincorporated Yuba County south of McGown Parkway, to the west of SR-70, to the North of Bear River, and to the east of Feather River Boulevard. The Design Guidelines of Appendix 1 of the Plumas Lake Specific Plan provide a general blueprint for development decisions affecting the siting of buildings, landscaping, parking and other design details. The Native Oaks Section A-1.8 provides guidelines for native oaks in the area governed by the Plumas Lake Specific Plan. Because native oaks are a scarce resource within the Specific Plan Area, no development or improvement shall take place within the dripline of any native oak tree that is greater than six inches in diameter, measured four feet above the existing grade. Alteration to the ground surface in the area around a protected oak shall not result in an increase to the surface runoff over the existing dripline of that tree.

3.0 METHODS

3.1 Literature Review

ECORP biologists reviewed existing available information for the BSA. Literature sources included current and historical aerial imagery, topographic mapping, soil survey mapping available from the NRCS *Web Soil Survey*, California Aquatic Resource Inventory (CARI) mapping, USFWS Critical Habitat Mapper, NMFS Essential Fish Habitat Mapper, and other relevant literature as cited throughout this document. ECORP reviewed the following resources to identify special-status plant and wildlife species that have been documented within or near the BSA:

- CDFW's CNDDDB data for the *Olivehurst, California* and *Nicolaus, California* 7.5-minute topographic quadrangles and the surrounding 10 quadrangles (CDFW 2025a)
- CNPS Rare Plant Inventory data for the *Olivehurst, California* and *Nicolaus, California* 7.5-minute topographic quadrangles and the surrounding 10 quadrangles (CNPS 2025a)
- USFWS Information for Planning and Consultation Resource Report List for the BSA (USFWS 2025)

- NMFS resources data for the *Olivehurst, California* and *Nicolaus, California* 7.5-minute topographic quadrangles (National Oceanic and Atmospheric Administration [NOAA] 2022)

Appendix B provides the results of the database queries. Section 4 evaluates each special-status species identified in the literature review for its potential to occur within the BSA based on available information concerning species habitat requirements and distribution, occurrence data, and the findings of the site reconnaissance.

3.2 Site Reconnaissance

ECORP Senior Biologist Sandra Namoff, PhD conducted the site reconnaissance visit on May 13, 2025. The biologist visually assessed the BSA while walking meandering transects through all portions of the BSA, paying special attention to identifying those portions of the BSA with the potential to support special-status species or sensitive habitats. The biologist collected the following biological resource information:

- Characteristics and approximate boundaries of vegetation communities and other land cover types
- Plant and animal species or their sign directly observed
- Characteristics and approximate extents of potential aquatic resources observed
- Incidental observations of special habitat features such as burrows, active raptor nests, potential bat roost sites

The biologist qualitatively assessed and mapped vegetation communities based on dominant plant composition. ECORP based vegetation community classification on the classification systems presented in the MCV. The biologist recorded data features on a global positioning system unit, field notebooks, and/or maps and took photographs during the survey to provide a visual representation of the conditions within the BSA.

4.0 RESULTS

4.1 Site Characteristics and Land Use

The BSA is located on level terrain in an urban-agricultural interface area and is situated at an elevational range of approximately 40 to 50 feet above Mean Sea Level (MSL) in the Great Central Valley region of the California floristic province (Jepson Flora Project [eds.] 2025). At the Marysville Yuba Co AP, CA station (NOAA 2025a), which is located approximately 6.7 miles southeast of the BSA, the average winter low temperature is 48.1 degrees Fahrenheit (°F), the average summer high temperature is 76.5°F and the average annual precipitation is approximately 20.1 inches (NOAA 2021a).

The BSA currently includes an agricultural field and a small portion of the asphalt and planted median of River Oaks Boulevard; these landcover types are classified as Agriculture and Urban, respectively. Section 4.3 describes the plant species that occur in these landcover types in further detail. Appendix C provides representative photographs of the BSA.

4.2 Soils and Geology

ECORP staff obtained soil survey mapping for the BSA from the NRCS *Web Soil Survey* (Figure 2; NRCS 2025). Table 1 provides an overview of the soil map units within the BSA, including the presence of hydric soils, parent materials, or other key features that may influence the potential for sensitive biological resources to occur within the BSA.

Table 1. Soil Map Units within the Biological Study Area			
Map Unit Symbol	Map Unit Name	Parent Material or Key Features	Hydric Soils Rating
131	Hollenbeck silty clay loam, 0 to 1 percent slopes	Clayey alluvium	Minor Components - Capay Linear Hydric soil
183	Kilaga clay loam, hardpan substratum, 0 to 1 percent slopes	Mixed alluvium	None
214	San Joaquin loam, 0 to 1 percent slopes	Mixed alluvium	Minor Component - Unnamed Hydric soil

Notes: Natural Resources Conservation Service 2025

The soils that occur within the BSA include silty clay loam and clay loam with pH ranging from 7 to 7.5. No soil units derived from serpentinite or gabbroic parent materials are known to occur within the BSA or its immediate vicinity (Horton 2017; Jennings et al. 1977).

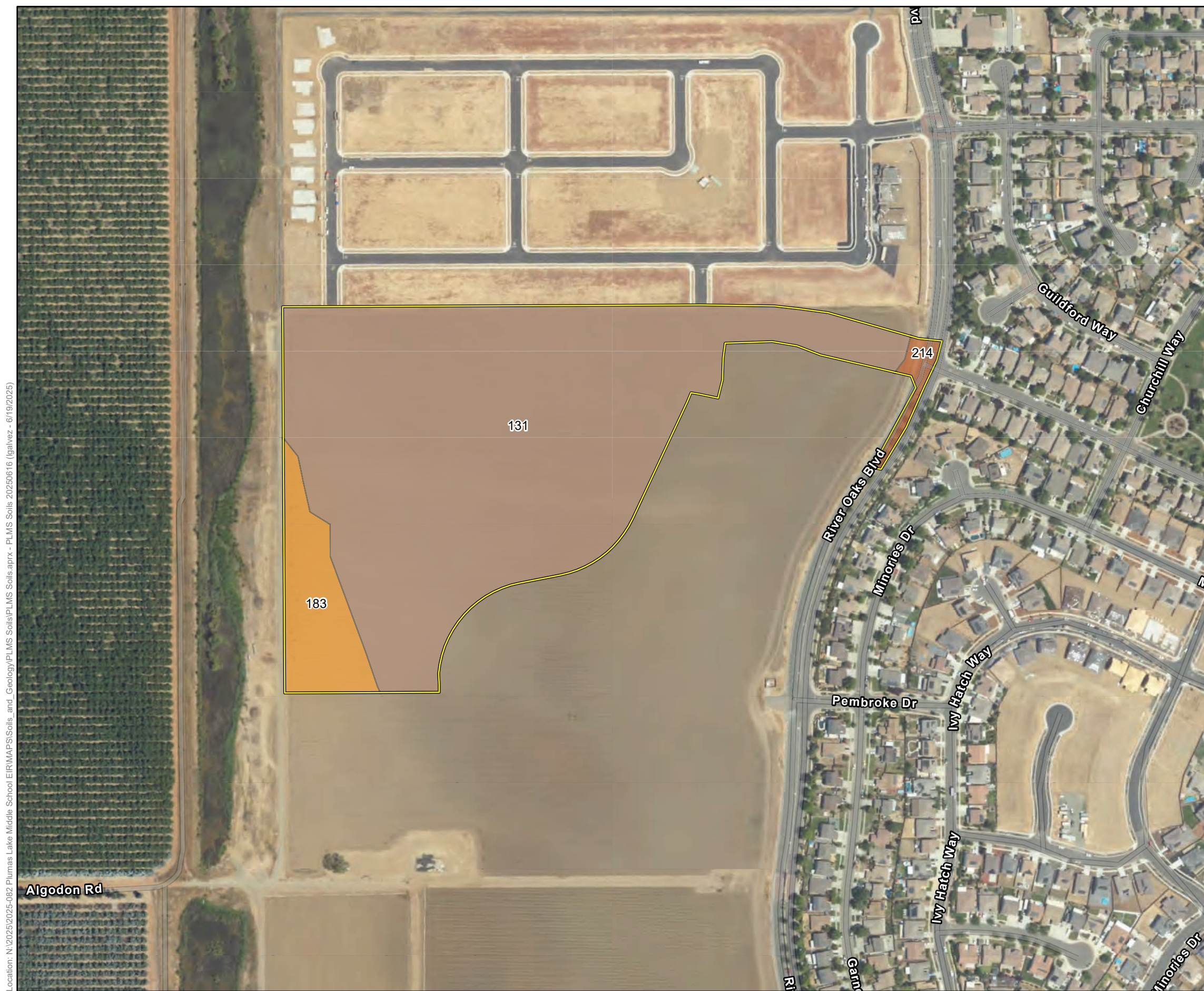
4.3 Vegetation Communities and Land Cover Types

The following sections describe vegetation communities and land cover types within the BSA as observed during the site reconnaissance. Appendix D provides a list of plants incidentally observed within the BSA during the site reconnaissance. Figure 3 depicts the approximate extent of vegetation communities and land cover types within the BSA.

4.3.1 Agriculture

The majority of the BSA is an agricultural field that is dominated by non-native plants and crop species. This field has been tilled and plowed and appeared to be fallow at the time of the site reconnaissance. Bare ground in this land cover type within the BSA ranges from 20 percent in densely weedy areas to 100 percent in a freshly tilled areas at the southern end of the BSA. Dominant ruderal herbaceous species in this land cover type within the BSA include velvet leaf (*Abutilon theophrasti*), cultivated cucumber (*Cucurbita* sp.), black mustard (*Brassica nigra*), yellow wild radish (*Raphanus raphanistrum*), and yellow star-thistle (*Centaurea solstitialis*).

Location: N:\2025\2025-082 Plumas Lake Middle School EIR\WAPS\Soils_and_Geology\PLMS Soils\PLMS Soils aprx - PLMS Soils 20250616 (galvez - 6/19/2025)



Map Contents

Biological Study Area - 27.20 ac.

Series Number - Series Name

131 - Hollenbeck silty clay loam, 0 to 1 percent slopes

183 - Kilaga clay loam, hardpan substratum, 0 to 1 percent slopes

214 - San Joaquin loam, 0 to 1 percent slopes

Natural Resources Conservation Service (NRCS)
Soil Survey Geographic (SSURGO) Database for
Yuba County, CA

Sources: NAIP 2024

Location: N:\2025\2025-082 Plumas Lake Middle School EIR\WAPS\Vegetation_and_LandCover\PLMS Vegetation.aprx - PLMS Vegetation Communities and Land Cover Types 20250616 (jgalvez - 6/19/2025)



Map Contents

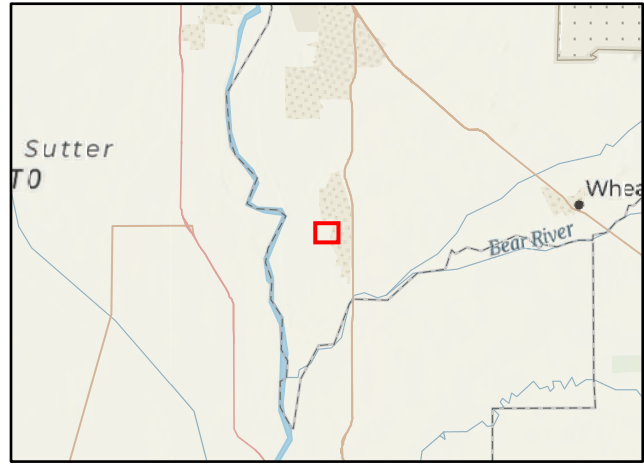
 Biological Study Area - 27.20 ac.

Vegetation - Great Valley Ecoregion

 AGR - Agriculture

 URB - Urban

Sources: Esri, NAIP 2024, VegCAMP CDFW
Other Related Info if Needed



4.3.2 Urban/Landscaped

The northeast section of the BSA is an urban/landscaped area that includes asphalt and a planted median of River Oaks Boulevard. The asphalt is devoid of vegetation and the median is landscaped, mulched, and irrigated. The median of River Oaks Boulevard is landscaped with trees and shrubs including London plane tree (*Platanus × hispanica*), Aleppo pin (*Pinus halepensis*), and Indian hawthorn (*Rhaphiolepis indica*).

4.4 Aquatic Resources

Review of the CARI shows one mapped aquatic feature within the BSA (Figure 4). The CARI mapping designation “WRU” indicates the presence of a wetland type that is seasonally flooded within the BSA (San Francisco Estuary Institute 2025). The CARI mapping is a statewide geographic information systems dataset of surface waters and riparian areas compiled from multiple data sources and standardized to a common classification system. It is intended to provide information at a landscape scale sufficient to inform local land use planning; however, the use of this information requires on-the-ground inspection to confirm wetland boundaries and classifications.

During the site visit, ECORP made a preliminary assessment of aquatic resources within the BSA. The biologist did not observe evidence of the CARI-mapped ephemeral drainage feature. No other aquatic features were observed within the BSA during the site visit.

4.5 Special-Status Species

Table 2 presents the full list of special-status plant and animal species identified through the literature review. For each species, the Table 2 provides the listing status, a brief description of habitat requirements and/or species ecology, a determination of the potential to occur within the BSA, and the rationale for that determination. ECORP assessed the potential for each species to occur within the BSA using the following criteria:

- *Present* – Species was observed during the site visit or is known to occur within the BSA based on recent documented occurrences within the CNDDDB or other literature.
- *Moderate to High Potential to Occur* – Suitable habitat (including soils and elevation requirements) occurs within the BSA and the species is known to occur in the vicinity of the BSA based on available data sources.
- *Low Potential to Occur* – Marginal or limited amounts of habitat occurs within the BSA or the species is not known to occur in the vicinity of the BSA based on available data sources.
- *Presumed Absent* – No suitable habitat (including soils and elevation requirements) occurs within the BSA, or the BSA is outside of the current known geographical range for the species.

Following Table 2 is a brief description and discussion of each special-status species that the literature review determined to have potential to occur within the BSA.



Map Contents

Biological Study Area - 27.20 ac.

California Aquatic Resources Inventory

Ephemeral Drainage (WRU)*

Wetland

* The ephemeral drainage was not found during the site visit.

Sources: Esri, NAIP 2024, CARI 2023
Other Related Info if Needed



Location: N:\2025\2025-082 Plumas Lake Middle School EIR\WAPs\Aquatic_Resources\PLMS Aquatic.aprx - PLMS CARI 20250617 (lgalvez - 6/25/2025)

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Plants*					
Ferris' milk-vetch (<i>Astragalus tener</i> var. <i>ferrisiae</i>)	–	–	1B.1	Vernally mesic meadows and seeps and in sub-alkaline flats within valley and foothill grasslands. Elevation: 5 –245 feet Bloom Period: April–May	<i>Presumed Absent.</i> No suitable vernal pools or mesic habitats occur within the BSA.
Valley brodiaea (<i>Brodiaea rosea</i> subsp. <i>vallicola</i>)	–	–	4.2	Occurs in old alluvial terraces and silt, sandy, or gravelly soils in vernal pools and swales within valley and foothill grassland. Elevation: 35–1,100 feet Bloom Period: April–May	<i>Presumed Absent.</i> No suitable vernal areas or grasslands occur within the BSA.
Parry's rough tarplant (<i>Centromadia parryi</i> subsp. <i>rudis</i>)	–	–	4.2	Alkaline, vernaly mesic areas, seeps in valley and foothill grassland and vernal pools, sometimes found on roadsides, also in disturbed sites (Baldwin 2012) Elevation: 0–330 feet Bloom Period: May–October	<i>Present.</i> One individual was found in a disturbed area along the northeastern boundary of the BSA.
Red-stemmed cryptantha (<i>Cryptantha rostellata</i>)	–	–	4.2	Often gravelly volcanic openings and roadsides of cismontane woodland and valley and foothill grassland. Elevation: 130–2,625 feet Bloom Period: April–June	<i>Low Potential to Occur.</i> The disturbed roadside adjacent to the agricultural field provides marginally suitable habitat.
California pitcher plant (<i>Darlingtonia californica</i>)	–	–	4.2	Mesic areas in generally serpentine seeps of bogs and ferns, and meadows and seeps. Elevation: 0–8,480 feet Bloom Period: April–August	<i>Presumed Absent.</i> No suitable mesic habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Recurved larkspur (<i>Delphinium recurvatum</i>)	–	–	1B.2	Alkaline habitats within chenopod scrub, cismontane woodland, and valley and foothill grasslands. Elevation: 10–2,590 feet Bloom Period: March–June	<i>Presumed Absent.</i> No alkaline soil occurs within the BSA.
Dwarf downingia (<i>Downingia pusilla</i>)	–	–	2B.2	Mesic areas in valley and foothill grassland, and vernal pools. Species has also been found in disturbed areas such as tire ruts and scraped depressions (CDFW 2025a). Elevation: 5–1,460 feet Bloom Period: March–May	<i>Presumed Absent.</i> No suitable mesic habitat occurs within the BSA.
Stinkbells (<i>Fritillaria agrestis</i>)	–	–	4.2	Clay and sometimes serpentine soils in chaparral, cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland. Elevation: 35–5,100 feet Bloom Period: March–June	<i>Presumed Absent.</i> Suitable habitats were not observed within the BSA.
Boggs Lake hedge-hyssop (<i>Gratiola heterosepala</i>)	–	CE	1B.2	Clay substrates of marshes and swamps (lake margins) and vernal pools. Elevation: 35–7,790 feet Bloom Period: April–August	<i>Presumed Absent.</i> No suitable habitat occurs within the BSA.
Hogwallow starfish (<i>Hesperex caulescens</i>)	–	–	4.2	Mesic areas with clay soil within valley and foothill grassland, shallow vernal pools, and sometimes alkaline areas. Elevation: 0–1,655 feet Bloom Period: March–June	<i>Presumed Absent.</i> Suitable mesic microhabitats were not observed within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Woolly rose-mallow (<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>)	–	–	1B.2	Marshes and freshwater swamps (riverbanks and low peat islands in sloughs), and riprap on sides of levees. Elevation: 0–395 feet Bloom Period: June–September	<i>Presumed Absent.</i> There is no suitable habitat within the BSA.
Legenere (<i>Legenere limosa</i>)	–	–	1B.1	Various seasonally inundated areas including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005). Elevation: 5–2,885 feet Bloom Period: April–June	<i>Presumed Absent.</i> There were no suitable mesic habitats observed within the BSA.
Veiny monardella (<i>Monardella venosa</i>)	–	–	1B.1	Heavy clay soils in cismontane woodland and valley and foothill grasslands. Elevation: 195–1,345 feet Bloom Period: May–July	<i>Presumed Absent.</i> Suitable grassland and woodland habitats were not observed within the BSA.
Baker's navarretia (<i>Navarretia leucocephala</i> subsp. <i>bakeri</i>)	–	–	1B.1	Vernal pools and swales with adobe or alkaline soils in cismontane woodlands, lower montane coniferous forests, meadows and seeps, and valley and foothill grasslands. Elevation: 15–5,710 feet Bloom Period: April–July	<i>Presumed Absent.</i> There are no suitable mesic habitats within the BSA.
Hartweg's Golden Sunburst (<i>Pseudobahia bahiifolia</i>)	FE	CE	1B.1	Clay, often acidic soils in cismontane woodland, valley and foothill grasslands. Elevation: 50–490 feet Bloom Period: March–April	<i>Presumed Absent.</i> Suitable grassland and woodland habitats were not observed within the BSA.
Sanford's arrowhead (<i>Sagittaria sanfordii</i>)	–	–	1B.2	Shallow marshes and freshwater swamps. Elevation: 0–2,135 feet Bloom Period: May–October	<i>Presumed Absent.</i> No suitable habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Suisun Marsh aster (<i>Symphyotrichum lentum</i>)	–	–	1B.2	Brackish and freshwater marshes and swamps. Elevation: 0–10 feet Bloom Period: May–November	<i>Presumed Absent.</i> No suitable habitat occurs within the BSA.
Invertebrates					
Crotch bumble bee (<i>Bombus crotchii</i>)	–	CC	–	Primarily nests underground, found in variety of habitats including open grasslands, shrublands, chaparral, desert margins, and semi-urban settings, from the California coast east to the Sierra Cascade and from Redding south to Mexico. Survey Period: February–October (Preferably April–August)	<i>Low Potential to Occur.</i> Disturbed semi-urban areas observed within the BSA provide marginally suitable habitat.
Conservancy fairy shrimp (<i>Branchinecta conservatio</i>)	FE	–	–	Vernal pools/wetlands. Survey Period: November–April	<i>Presumed Absent.</i> Vernal pools and wetlands within the BSA.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	–	–	Vernal pools/wetlands. Survey Period: November–April	<i>Presumed Absent.</i> Vernal pools and wetlands were not observed within the BSA.
Monarch butterfly (<i>Danaus plexippus</i>)	FPT	–	–	Adult monarchs west of the Rocky Mountains typically overwinter in sheltered wooded groves of Monterey pine, Monterey cypress, and gum eucalyptus along coastal California, then disperse in spring throughout California, Nevada, Arizona, and parts of Oregon and Washington. Adults require milkweed and additional nectar sources during the breeding season. Larval caterpillars feed exclusively on milkweed. Survey Period: Any season	<i>Low Potential to Occur.</i> The BSA is not within the range of overwintering sites. The disturbed edges of the BSA provide marginally suitable foraging and breeding habitat. No milkweed plants were observed in the BSA but the site visit occurred before the typically blooming period for the species.

Table 2. Potentially Occurring Special-Status Species					
Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	FT	–	–	Elderberry shrubs. Survey Period: Any season	<i>Presumed Absent.</i> Elderberry shrubs were not observed on the BSA.
Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	FE	–	–	Vernal pools/wetlands. Survey Period: November-April	<i>Presumed Absent.</i> Vernal pools and wetlands were not observed within the BSA.
Fish^a					
Green sturgeon (<i>Acipenser medirostris</i>)	FT	–	SSC	Anadromous; undammed cold- water rivers having relatively deep pools with large substrates. Survey Period: N/A	<i>Presumed Absent.</i> The BSA is not accessible by anadromous fish and does not provide suitable habitat.
Steelhead (CA Central Valley DPS) (<i>Oncorhynchus mykiss irideus</i>)	FT	–	SSC	Fast-flowing, well-oxygenated rivers and streams below dams in the Sacramento and San Joaquin River systems. Survey Period: N/A	<i>Presumed Absent.</i> The BSA is not accessible by anadromous fish and does not provide suitable habitat.
Chinook salmon (Central Valley spring- run ESU) (<i>Oncorhynchus tshawytscha</i>)	FT	CT	–	Undammed rivers, streams, creeks in the Sacramento and San Joaquin River systems. Survey Period: N/A	<i>Presumed Absent.</i> The BSA is not accessible by anadromous fish and does not provide suitable habitat.
Chinook salmon (Sacramento River winter-run ESU) (<i>Oncorhynchus tshawytscha</i>)	FE	CE	–	Undammed reaches of the mainstem and tributaries to the Sacramento River downstream of Shasta Reservoir. Survey Period: N/A	<i>Presumed Absent.</i> The BSA is not accessible by anadromous fish and does not provide suitable habitat.
Longfin smelt – San Francisco Bay-Delta DPS (<i>Spirinchus thaleichthys</i>)	FE	CT	SSC	Occurs primarily in the brackish zones of the San Francisco Bay- Delta region of California. Survey Period: N/A	<i>Presumed Absent.</i> The BSA is outside the known range of the species and does not provide suitable habitat.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Pacific eulachon - southern DPS <i>Thaleichthys pacificus</i>	FT	–	–	Undammed rivers, streams, creeks, including the Klamath River, Mad River, Redwood Creek, and Smith River. Survey Period: N/A	<i>Presumed Absent.</i> The BSA is outside the known range of the species and does not provide suitable habitat.
Amphibians					
Western spadefoot (Northern DPS) <i>(Spea hammondi)</i>	FPT	–	SSC	California endemic species of vernal pools, swales, and seasonal wetlands in grassland, scrub and woodland habitats throughout the Central Valley and South Coast Ranges. Prefers open areas with sandy or gravelly soils. Survey Period: Winter-Spring.	<i>Presumed Absent.</i> Suitable aquatic habitat was not observed on within the BSA and adjacent parcels are developed or agricultural.
Reptiles					
Northwestern pond turtle <i>(Actinemys marmorata)</i>	FPT	–	SSC	Requires basking sites and upland habitats up to 0.5 kilometers from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches. Survey Period: April-September	<i>Low Potential to Occur.</i> The wetland to the west of the BSA and the adjacent upland within the BSA provide marginally suitable habitat.
Giant garter snake <i>(Thamnophis gigas)</i>	FT	CT	–	Freshwater ditches, sloughs, and marshes in the Central Valley. Almost extirpated from the southern parts of its range. Survey Period: April-October	<i>Presumed Absent.</i> No suitable aquatic habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Birds					
Aleutian cackling goose (<i>Branta hutchinsii leucopareia</i>)	De- listed	–	CDFW WL	Overwintering habitat includes mudflats, shallow tidal waters, salt marsh, wet grasslands, freshwater marsh, lakes, reservoirs and rivers (breeds in Alaska on various Aleutian Islands; winters in California’s Central Valley, with a small wintering population in southwestern Oregon, and migration staging areas around Humboldt Bay and Crescent City in California and New River bottoms in Oregon. Wintering: October-March	<i>Presumed absent.</i> No suitable wintering habitat occurs within the BSA.
Western grebe (<i>Aechmophorus occidentalis</i>)	–	–	BCC	Winters on salt or brackish bays, estuaries, sheltered sea coasts, freshwater lakes, and rivers. Nests on freshwater lakes and marshes with open water bordered by emergent vegetation. Nesting: June-August	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	FT	CE	–	Breeding habitat is generally open woodland with clearings and low, dense, scrubby vegetation associated with watercourses, and includes desert riparian woodlands with willow, Fremont's cottonwood, alder, walnut, box-elder, and dense mesquite. Nests are generally found in deciduous hardwoods with thick bushes, vines, or hedgerows providing dense foliage within 10 meters (33 feet) of ground; prefer riparian patches of at least 81 hectares (200 acres) (Hughes 2020). Winters in South America. Nesting: June 15-August 15	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.
California black rail (<i>Laterallus jamaicensis coturniculus</i>)	–	CT	CFP	Salt marsh, shallow freshwater marsh, wet meadows, and flooded grassy vegetation. In California, primarily found in coastal and Bay-Delta communities, but also in Sierran foothills (Butte, Yuba, Nevada, Placer, El Dorado counties). Nesting: March-September	<i>Low Potential to Occur.</i> No suitable nesting or foraging habitat occurs within the BSA, but adjacent freshwater ponds may be occupied by this species.
Mountain plover (<i>Anarhynchus montanus</i>)	–	–	BCC, SSC	Breeds in the Great Plains/Midwestern U.S.; winters in California, Arizona, Texas, and Mexico; wintering habitat in California includes tilled fields, heavily grazed open grassland, burned fields, and alfalfa fields. Wintering: September-March	<i>Low Potential to Occur.</i> No suitable nesting habitat occurs within the BSA, but potential wintering habitat occurs within the BSA

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
California gull (nesting colony) (<i>Larus californicus</i>)	–	–	BCC, CDFW WL	Nesting occurs in the Great Basin, Great Plains, Mono Lake, and south San Francisco Bay. Breeding colonies located on islands on natural lakes, rivers, or reservoirs. Winters along Pacific Coast from southern British Columbia south to Baja California and Mexico. In California, winters along coast and inland (Central Valley, Salton Sea). Nesting: April-August	<i>Presumed Absent.</i> No suitable habitat to support a rookery occurs within or in the vicinity of the BSA.
Black tern (<i>Chlidonias niger</i>)	–	–	BCC, SSC	Breeding range includes northeastern California, Central Valley, Great Plains of U.S. and Canada; winters in Central and South America; nesting habitat includes shallow freshwater marsh with emergent vegetation, prairie sloughs, lake margins, river islands, and cultivated rice fields. Nesting: May-August	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.
White-tailed kite (<i>Elanus leucurus</i>)	–	–	CFP	Nesting occurs within trees in low elevation grassland, agricultural, wetland, oak woodland, riparian, savannah, and urban habitats. Hunting habitats include agricultural fields (e.g., pasture, alfalfa, sugarbeet, row crops), ruderal vegetation and grasslands. Communal roosts are found in a vegetation within a variety of urban, agricultural and natural habitats Nesting: March-August	<i>Low Potential to Occur.</i> No suitable nesting habitat occurs within the BSA, but foraging habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Golden eagle (<i>Aquila chrysaetos</i>)	–	–	CFP, CDFW WL	Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/savannah, and chaparral. Nesting occurs on cliff ledges, river banks, trees, and human-made structures (e.g., windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during Winter. Nesting: February-August Wintering in Central Valley: October-February	<i>Low Potential to Occur.</i> No suitable nesting habitat occurs within the BSA, but foraging habitat occurs within the BSA.
Northern harrier (<i>Circus hudsonius</i>)	–	–	BCC, SSC	Nests on the ground in open wetlands, marshy meadows, wet/lightly grazed pastures, (rarely) freshwater/brackish marshes, tundra, grasslands, prairies, croplands, desert, and shrub-steppe. Hunts in agricultural, grassland and natural grasslands and also roost communally in these cover types. Nesting: April-September	<i>Low Potential to Occur.</i> No suitable nesting habitat occurs within the BSA, but foraging habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Bald eagle (<i>Haliaeetus leucocephalus</i>)	De-listed	CE	CFP	Typically nests in forested areas near large bodies of water in the northern half of California; nest in trees and rarely on cliffs; wintering habitat includes forest and woodland communities near water bodies (e.g., rivers, lakes), wetlands, flooded agricultural fields, open grasslands. Nesting: February-September	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.
Swainson's hawk (<i>Buteo swainsoni</i>)	–	CT	–	Nesting occurs in trees in agricultural, riparian, oak woodland, scrub, and urban landscapes. Forages over grassland, agricultural lands, particularly during disking/harvesting, irrigated pastures. Nesting: March-August	<i>Low Potential to Occur.</i> No suitable nesting habitat occurs within the BSA, but foraging habitat occurs within the BSA.
Burrowing owl (<i>Athene cunicularia</i>)	–	CC	BCC, SSC	Nests in burrows or burrow surrogates in open, treeless, areas within grassland, steppe, and desert biomes. Often with other burrowing mammals (e.g., prairie dogs, California ground squirrels). May also use human-landscapes such as agricultural fields, golf courses, cemeteries, roadside, airports, vacant urban lots, and fairgrounds. Nesting: February-August	<i>Low Potential to Occur.</i> The agricultural field within the BSA provides marginally suitable foraging habitat; however. No potentially suitable nest burrows or features were observed within or around the edges of the BSA.
Nuttall's woodpecker (<i>Dryobates nuttallii</i>)	–	–	BCC	Resident from northern California south to Baja California. Nests in tree cavities in oak woodlands and riparian woodlands. Nesting: April-July	<i>Presumed Absent.</i> No suitable habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Prairie falcon (<i>Falco mexicanus</i>)	–	–	CDFW WL	Found in open habitat at all elevations up to 3,350 meters (Steenhof 2024). Nests on cliffs and bluffs in arid plains and steppes; In California, nesting throughout state except northwest corner, along immediate coast, and the Central Valley floor. Winters throughout California, in open habitats, such as grasslands in Central Valley. Nesting: March-July Wintering in Central Valley: September-February	<i>Low Potential to Occur.</i> Potentially suitable wintering habitat occurs within the BSA.
Olive-sided flycatcher (<i>Contopus cooperi</i>)	–	–	SSC, BCC	Nests in montane and northern coniferous forests, in forest openings, forest edges, semi open forest stands. In California, nests in coastal forests, Cascade and Sierra Nevada region. Winters in Central to South America. Nesting: May-August	<i>Presumed Absent.</i> No suitable habitat occurs within the BSA.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE	CE	–	In California, breeding range includes Ventura, Los Angeles, Riverside, Orange, San Diego, and San Bernardino counties, and rarely Stanislaus and Santa Clara counties. Nesting habitat includes dense, low shrubby vegetation in riparian areas, brushy fields, young second-growth woodland, scrub oak, coastal chaparral and mesquite brushland. Winters in southern Baja California Sur. Nesting: April 1-July 31	<i>Presumed Absent.</i> No suitable habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Yellow-billed magpie (<i>Pica nuttalli</i>)	–	–	BCC	Endemic to California; found in the Central Valley and coast range south of San Francisco Bay and north of Los Angeles County; nesting habitat includes oak savannah with large expanses of open ground; also found in urban parklike settings. Nesting: April-June	<i>Low Potential to Occur.</i> Suitable oak woodland habitat does not occur within the BSA; however, the open ground and agricultural field within the BSA is marginally suitable foraging habitat.
Oak titmouse (<i>Baeolophus inornatus</i>)	–	–	BCC	Nests in tree cavities within dry oak or oak-pine woodland and riparian; where oaks are absent, they nest in juniper woodland, open forests (gray, Jeffrey, Coulter, pinyon pines and Joshua tree). Nesting: March-July	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.
California horned lark (<i>Eremophila alpestris actia</i>)	–	–	CDFW WL	San Joaquin Valley, coast range from Sonoma County south to Baja California; grassland, agricultural. Nesting: March-July	<i>Low Potential to Occur.</i> The agricultural area observed within the BSA provides marginally suitable habitat.
Bank swallow (<i>Riparia riparia</i>)	–	CT	–	Nests colonially along coasts, rivers, streams, lakes, reservoirs, and wetlands in vertical banks, cliffs, and bluffs in alluvial, friable soils. May also nest in sand, gravel quarries and road cuts. In California, breeding range includes northern and central California. Nesting: May-July	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Wrentit (<i>Chamaea fasciata</i>)	–	–	BCC	Coastal sage scrub, northern coastal scrub, chaparral, dense understory of riparian woodlands, riparian scrub, coyote brush and blackberry thickets, and dense thickets in suburban parks and gardens. Nesting: March-August	<i>Presumed Absent.</i> No suitable dense shrub habitat for nesting or foraging occurs within the BSA.
California thrasher (<i>Toxostoma redivivum</i>)	–	–	BCC	Resident and endemic to coastal and Sierra Nevada-Cascade foothill areas of California. Nests are usually well hidden in dense shrubs, including scrub oak, California lilac, and chamise. Nesting: February-July	<i>Presumed Absent.</i> No suitable dense shrub habitat for nesting or foraging occurs within the BSA.
Lawrence's goldfinch (<i>Spinus lawrencei</i>)	–	–	BCC	Breeds in Sierra Nevada and inner Coast Range foothills surrounding the Central Valley and the southern Coast Range to Santa Barbara County east through southern California to the Mojave Desert and Colorado Desert into the Peninsular Range. Nests in arid and open woodlands with chaparral or other brushy areas, tall annual weed fields, and a water source (e.g., small stream, pond, lake), and to a lesser extent riparian woodland, coastal scrub, evergreen forests, pinyon-juniper woodland, planted conifers, and ranches or rural residences near weedy fields and water. Nesting: March-September	<i>Presumed Absent.</i> This species occurs at higher elevations, and no suitable nesting habitats occur within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Belding's savannah sparrow (<i>Passerculus sandwichensis beldingi</i>)	–	CE	BCC	Resident coastally from Point Conception south into Baja California; coastal salt marsh. Year-round resident; nests March-August	<i>Presumed Absent.</i> The range of this species does not overlap with the BSA.
Song sparrow "Modesto" (<i>Melospiza melodia heermanni</i>)	–	–	SSC	Resident in central and southwest California, including Central Valley; nests in marsh, scrub habitat. Nesting: April-June	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.
Bullock's oriole (<i>Icterus bullockii</i>)	–	–	BCC	Breeding habitat includes riparian and oak woodlands. Nesting: March-July	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.
Tricolored blackbird (<i>Agelaius tricolor</i>)	–	CT	BCC, SSC	Breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta counties south to San Bernardino, Riverside and San Diego counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields (Beedy et al 2023). Nesting: March-August	<i>Presumed Absent.</i> No suitable nesting habitat occurs within the BSA, but potentially suitable foraging habitat occurs within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Saltmarsh common yellowthroat (<i>Geothlypis trichas sinuosa</i>)	–	–	BCC, SSC	Breeds in salt marshes of San Francisco Bay; winters San Francisco south along coast to San Diego County. Nesting: March-July	<i>Presumed Absent.</i> No suitable nesting or foraging habitat occurs within the BSA.
Mammals					
Pallid bat (<i>Antrozous pallidus</i>)	–	–	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of redwoods, cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and human occupied as well as vacant buildings (WBWG 2025). Survey Period: April-September	<i>Presumed Absent.</i> Suitable roosting or nesting structures were not observed within the BSA.

Table 2. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description/ Species Ecology	Potential to Occur within the BSA
	ESA	CESA/ NPPA	Other		
Western red bat (<i>Lasiurus frantzii</i>)	–	–	SSC	Roosts in foliage of trees or shrubs; Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores) (WBWG 2025). Survey Period: April-September	<i>Presumed Absent.</i> Suitable roosting or nesting structures were not observed within the BSA.

Notes: BSA = Biological Study Area; CDFW = California Department of Fish and Wildlife;
 CESA = California Endangered Species Act; CNPS = California Native Plant Society;
 DPS = Distinct Population Segment; ESA = federal Endangered Species Act;
 ESU = Evolutionarily Significant Unit; N/A = Not Applicable; NPPA = Native Plant Protection Act;
 USFWS = U.S. Fish and Wildlife Service; WBWG = Western Bat Working Group

Status Codes:

1A	CRPR/Presumed extinct
1B	CRPR/Rare or Endangered in California and elsewhere
2A	CRPR/Plants presumed extirpated in California but common elsewhere
2B	CRPR/Plants rare, threatened, or endangered in California but more common elsewhere
3	CRPR/Plants About Which More Information is Needed – A Review List
4	CRPR/Plants of Limited Distribution – A Watch List
.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2	Threat Rank/Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
.3	Threat Rank/Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
BCC	Bird of Conservation Concern
CC	Candidate for CESA listing as Endangered or Threatened
CDFW WL	CDFW Watch List
CE	CESA- or NPPA listed, Endangered
CFP	California Fish and Game Code Fully Protected Species (§ 3511-birds, § 4700-mammals, §5050-reptiles/amphibians)
CT	CESA- or NPPA-listed, Threatened
Delisted	Formally delisted
FE	ESA listed, Endangered
FPT	Formally Proposed for ESA listing as Threatened
FT	ESA listed, Threatened
SSC	CDFW Species of Special Concern

Sources: Baldwin 2012; Beedy et al. 2023; CDFW 2025a; Hughes 2020; Steenhof 2024; USFWS 2005, 2021; WBWG 2025

*Plant species information is from the CNPS Rare Plant Inventory (CNPS 2025a), unless otherwise cited.

■Fish species information is from Moyle et al. 2015 and NOAA 2021b, unless otherwise cited.

4.5.1 Plants

The literature review identified 17 special-status plant species as having the potential to occur in the vicinity of the BSA (Table 2). During the site visit Parry's rough tarplant (*Centromadia parryi* subsp. *rudis*, CRPR 4.2) was found at the northern edge of the project boundary. Habitat for one of the other plant species, red-stemmed cryptantha (*Cryptantha rostellata*) was found on the edge of the BSA. The remaining 15 special status plants are considered absent from the BSA due to the lack of suitable habitat or because the BSA is outside the known geographical or elevational range for the species. No further discussion of those species is provided in this assessment. Brief descriptions of Parry's rough tarplant and red-stemmed cryptantha are provided below.

4.5.1.1 Parry's Rough Tarplant

Parry's rough tarplant (*Centromadia parryi* subsp. *rudis*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 4.2 species. This species is an herbaceous annual that occurs in vernal pools and valley and foothill grassland with alkaline and vernal mesic soils, seeps, and sometimes roadsides. Parry's rough tarplant blooms from May through October and is known to occur at elevations ranging from 0 to 330 feet above MSL. Parry's rough tarplant is endemic to California; its current range includes Butte, Colusa, Glenn, Lake, Merced, Modoc, Sacramento, San Joaquin, Solano, Stanislaus, and Yolo counties (CNPS 2025a).

A single individual of Parry's rough tarplant was found growing in the disturbed area between the agricultural field of the BSA and the construction area to the north of the BSA (Figure 5). Parry's rough tarplant occurs within 50 feet of the BSA.

4.5.1.2 Red-Stemmed Cryptantha

Red-stemmed cryptantha (*Cryptantha rostellata*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 4.2 species. This species is an herbaceous annual that occurs on gravelly, volcanic openings as well as roadsides in cismontane woodland and valley and foothill grassland. Red-stemmed cryptantha blooms from April through June and is known to occur at elevations ranging from 130 to 2,625 feet above MSL. The current range of the species includes Butte, Colusa, Napa, and Sutter counties (CNPS 2025a).

No documented CNDDDB occurrences of red-stemmed cryptantha are located within 5 miles of the BSA (CDFW 2025a). One collection location occurs approximately 15 miles to the northwest of the BSA in the Sutter Buttes, documented via an herbarium collection (L. Ahart 5263 - CHSC). The disturbed roadside adjacent to the agricultural field approximates roadside grassland and provides marginally suitable habitat within the BSA. Red-stemmed cryptantha has a low potential to occur within the BSA.

Location: N:\2025\2025-082 Plumas Lake Middle School EIR\WAPS\Vegetation_and_LandCover\PLMS Vegetation.aprx - PLMS Vegetation Communities and Land Cover Types 20250616 (jgalvez - 6/19/2025)



Map Contents

Biological Study Area - 27.20 ac.

Vegetation - Great Valley Ecoregion

AGR - Agriculture

URB - Urban

Plant point

Sources: Esri, NAIP 2024, VegCAMP CDFW
Other Related Info if Needed

4.5.2 Invertebrates

The literature review identified six special-status invertebrate species as having the potential to occur in the vicinity of the BSA (Table 2). Upon further analysis and after the site visit, ECORP considers four of those species to be absent from the BSA due to lack of suitable habitat or because the BSA is outside of the geographic range for the species; therefore, this assessment does not further discuss those species. The following sections briefly describe the remaining two species that have the potential to occur within the BSA.

4.5.2.1 Crotch Bumble Bee

The Crotch bumble bee (*Bombus crotchii*) is a candidate for listing as Endangered under the California ESA. The historic range of the Crotch bumble bee extends from coastal areas east to the edges of the desert in central California south to Baja California del Norte, Mexico, excluding mountainous areas (Thorp et al. 1983; Williams et al. 2014). This species was historically common throughout the southern two-thirds of its range but is now largely absent from much of that area and is nearly extirpated from the center of its historic range, the Central Valley (Hatfield et al. 2014).

The Crotch bumble bee inhabits open grassland and scrub habitats (Williams et al. 2014). The species visits a wide variety of flowering plants, although its very short tongue makes it best suited to forage at open flowers with short corollas (Xerces Society 2018). Plant families most commonly associated with Crotch bumble bee include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae (Xerces Society 2018). The species primarily nests underground (Williams et al. 2014). Little is known about overwintering sites for the species, but bumble bees generally overwinter in soft, disturbed soils or under leaf litter or other debris (Goulson 2010; Williams et al. 2014). The flight period for Crotch bumble bee queens in California is from late February to late October, peaking in early April with a second pulse in July (Thorp et al. 1983). The flight period for workers and males in California is from late March through September with peak abundance in early July (Thorp et al. 1983).

No documented CNDDDB occurrences of Crotch bumble bee are located within 5 miles of the BSA (CDFW 2025a). The disturbed, urban, and agricultural areas within the BSA may provide marginally suitable habitat for this species. Flowering plants occurring within the BSA provide appropriate flower resources for Crotch bumble bee; these include multiple species in the legume family (Fabaceae) and Henbit (*Lamium amplexicaule*). Crotch bumble bee has a low potential to occur within the BSA.

4.5.2.2 Monarch

The monarch (*Danaus plexippus*) is formally proposed for listing as Threatened under the federal ESA. This butterfly occurs throughout a variety of habitats and requires blooming nectar resources for adults to feed on during breeding and migration and milkweed (*Asclepias* spp.) for oviposition and larval feeding. During the breeding season, monarchs lay their eggs on their obligatory milkweed host plant (primarily *Asclepias* spp.). Larvae emerge after 2 to 5 days and then develop through five larval instars over a period of 9 to 18 days, feeding on milkweed and sequestering toxic cardenolides as a defense against predators. The larvae then pupate into chrysalis before emerging 6 to 14 days later as an adult butterfly. Multiple

generations of monarchs are produced during the breeding season, with most adult butterflies living approximately 2 to 5 weeks. Overwintering adults enter reproductive diapause and live 6 to 9 months (USFWS 2020).

Individual monarchs in temperate climates including western North America, undergo long-distance migration. Migratory individuals of eastern and western North America require a specific microclimate at overwintering sites that provide protection from the elements and moderate temperatures. Migratory monarchs in the western population primarily overwinter in groves of a variety of tree species along the coast of California and Baja California. Summer breeding habitats for the western population of monarchs occur throughout California where milkweed is present (USFWS 2020).

No documented CNDDDB occurrences of monarch butterfly are located within 5 miles of the BSA (CDFW 2025a). Flowering plants occurring within the BSA can provide suitable foraging resources for monarchs. The BSA may provide suitable breeding habitat for monarchs. No milkweed species were observed within the BSA, but the site visit did not happen within the appropriate flowering window. The BSA is not within the coastal zone that has suitable overwintering conditions for monarchs. Monarch butterfly has a low potential to occur within the BSA.

4.5.3 Fish

The literature review identified six special-status fish species or management units as having the potential to occur in the vicinity of the BSA (Table 2); however, the BSA lacks the stream features necessary to provide habitat for fish. All the special-status fish are considered absent from the BSA; therefore, this assessment does not further discuss these species.

4.5.4 Amphibians

The literature review identified one special-status amphibian species as having the potential to occur in the vicinity of the BSA: western spadefoot Northern Distinct Population Segment (*Spea hammondi*). Based on the site visit and further analysis, western spadefoot is considered absent from the site due to lack of appropriate habitat; therefore, this assessment does further discuss this species.

4.5.5 Reptiles

The literature review identified two special-status reptile species as having the potential to occur in the vicinity of the BSA (Table 2). Upon further analysis and after the site visit, one of those species is considered absent from the BSA due to the lack of suitable habitat; therefore, this assessment does not further discuss that species. The following section briefly describes the remaining species—northwestern pond turtle (*Actinemys marmorata*)—and its potential to occur within the BSA.

4.5.5.1 Northwestern Pond Turtle

The northwestern pond turtle (*Actinemys marmorata*) is proposed for listing as Threatened pursuant to the federal ESA and is considered an SSC by CDFW. The range of the northwestern pond turtle in California extends from the Coast Ranges on the Oregon border southward to Marin County, throughout the lower elevations and foothills of the southern Cascades and Sierra Nevada Mountains, and within the

Sacramento and San Joaquin valleys (Thomson et al. 2016). The elevation range for the species extends from near MSL to 4,690 feet above MSL (Jennings and Hayes 1994).

This species can occur in a variety of waters, including ponds, lakes, streams, reservoirs, rivers, settling ponds of wastewater treatment plants, and other permanent and ephemeral wetlands (Bury et al. 2012). However, in streams and other lotic features, this species generally requires slack- or slow-water aquatic microhabitats (Jennings and Hayes 1994). Northwestern pond turtle also requires basking areas such as logs, rocks, banks, and brush piles for thermoregulation (Bury et al. 2012). Nesting sites for this species are typically located in annual grasslands adjacent to a watercourse with little slope and hard, dry soil (Ashton et al. 1997). Nesting habitat soils typically display high clay or silt fraction, with few nests located in sandy soils. Nests are usually within 400 meters of a watercourse, with the majority being within 50 meters of the water's edge (Holland 1994).

Two CNDDDB occurrences of northwestern pond turtle are located within 5 miles of the BSA (CDFW 2025a). The wetland area that occurs to the west of the BSA provides marginally suitable habitat for northwestern pond turtle. Northwestern pond turtle has a low potential to occur within or near the BSA.

4.5.6 Birds

The literature review identified 29 special-status bird species as having potential to occur in the vicinity of the BSA (Table 2). Upon further analysis and after the site visit, 19 of those species are considered absent from the BSA due to the lack of suitable habitat or because the BSA is outside of the geographic range for the species; therefore, this assessment does not further discuss those species. The following sections briefly describe each of the remaining 10 species that have the potential to occur within the BSA.

4.5.6.1 California Black Rail

California black rail (*Laterallus jamaicensis coturniculus*) is listed as a Threatened pursuant to the California ESA and as Fully Protected pursuant to California Fish and Game Code Section 3511. Typical habitat for California black rail includes coastal saltmarsh, shallow freshwater marsh, wet meadows, and flooded, grassy vegetation (Eddleman et al. 2020). This species occurs in marshes and meadows where the water depth is less than three centimeters, and the difficulty of maintaining these shallow depths may limit distribution (Eddleman et al. 2020). California black rails are a year-round resident in the San Francisco Bay region and a discontinuous resident breeding population in the Sierra Nevada foothills (elevation range of 300 feet to 1,000 feet above MSL) within Placer, Yuba, Butte, and Nevada counties (Beedy and Pandolfino 2013). California black rails were also reported to have nested in El Dorado Hills, El Dorado County in 2017 (CDFW 2025a). Nesting for this species typically occurs from March through September (Eddleman et al. 2020).

No documented CNDDDB occurrences of California black rail are located within 5 miles of the BSA (CDFW 2025a). No suitable nesting or foraging habitat occurs within the BSA. The adjacent freshwater wetlands do not support the dense stands of vegetation preferred by this species. California black rail has a low potential to occur within the BSA.

4.5.6.2 Mountain Plover

The mountain plover (*Anarhynchus montanus*) is not listed pursuant to either the California or federal ESAs; however, it is designated as a BCC by USFWS and an SSC by CDFW. The breeding range for this species includes Montana, eastern Colorado, Wyoming, New Mexico, Texas, and Oklahoma; the wintering range extends from northern central California to Mexico (Knopf and Wunder 2023). Within their wintering (September through March) range, which consists primarily of the Sacramento, San Joaquin, and Imperial valleys, mountain plovers can be found in plowed fields, heavily grazed annual grassland, and burned fields (Knopf and Rupert 1995; Knopf and Wunder 2023). Mountain plovers do not nest in California but may occasionally forage in grassland communities (or plowed agricultural fields) during winter.

No documented CNDDDB occurrences of mountain plover are located within 5 miles of the BSA (CDFW 2025a). No suitable nesting habitat for this species occurs within the BSA, but wintering habitat occurs within the BSA. Mountain plover has a low potential to occur within the BSA.

4.5.6.3 White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not listed pursuant to either the California or federal ESAs; however, the species is fully protected pursuant to Section 3511 of the California Fish and Game Code. This species is a common resident in the Central Valley and throughout the entire length of the California coast, as well as all areas up to the Sierra Nevada foothills and southeastern deserts (Dunk 2020). In northern California, white-tailed kite nesting occurs from March through early August, with nesting activity peaking from March through June. Nesting for this species occurs in trees in riparian, oak woodland, savannah, and agricultural communities that are near foraging areas such as low elevation grasslands, agricultural, meadows, farmlands, savannahs, and emergent wetlands (Dunk 2020).

No documented CNDDDB occurrences of white-tailed kite are located within 5 miles of the BSA (CDFW 2025a). No suitable nesting habitat for this species occurs within the BSA, but foraging habitat occurs within the BSA. White-tailed kite has a low potential to occur within the BSA.

4.5.6.4 Golden Eagle

The golden eagle (*Aquila chrysaetos*) is not listed pursuant to either the California or federal ESAs; however, it is fully protected according to Section 3511 of the Fish and Game Code of California and the federal Bald and Golden Eagle Protection Act and is designated as a CDFW Watch List species. Golden eagles generally nest on cliff ledges and/or large lone trees in rolling to mountainous terrain. Golden eagles nest throughout California except in the flat portions of the Central Valley, the immediate coast, and portions of southeastern California (Katzner et al. 2020). Occurrences of this species within the Central Valley are usually dispersing post-breeding birds, nonbreeding subadults, or migrants. Foraging habitat for this species includes open grassland and savannah. Nesting for this species occurs from February through August.

No documented CNDDDB occurrences of golden eagle are located within 5 miles of the BSA (CDFW 2025a). No suitable nesting habitat for this species occurs within the BSA, but foraging habitat occurs within the BSA. Golden eagle has a low potential to occur within the BSA.

4.5.6.5 Northern Harrier

The northern harrier (*Circus hudsonius*) is not listed pursuant to either the California or federal ESAs; however, it is designated as a USFWS BCC and a CDFW SSC. This species is known to nest in the Central Valley, along the Pacific Coast, and in northeastern California. The northern harrier is a ground-nesting species that typically nests in emergent wetland/marsh, open grasslands, or savannah communities, usually in areas with dense vegetation (Smith et al. 2020). Foraging for this species occurs in a variety of open environments such as marshes, agricultural fields, and grasslands. Nesting for this species occurs from April through September.

No documented CNDDDB occurrences of northern harrier are located within 5 miles of the BSA (CDFW 2025a). No suitable nesting habitat for this species occurs within the BSA, but foraging habitat occurs within the BSA. Northern harrier has a low potential to occur within the BSA.

4.5.6.6 Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is listed as a Threatened species and is protected pursuant to the California Endangered Species Act. This species nests in North America (Canada, the western U.S., and Mexico) and typically winters from South America north to Mexico; however, a small population has been observed wintering in the Sacramento-San Joaquin River Delta (Bechard et al. 2020). In California, the nesting season for Swainson's hawk ranges from mid-March to late August.

Swainson's hawks nest in tall trees in a variety of wooded communities including riparian, oak woodland, roadside landscape corridors, urban areas, and agricultural areas, among others. Foraging habitat for this species includes open grassland, savannah, low-cover row crop fields, and livestock pastures. In the Central Valley, Swainson's hawks typically feed on a combination of California vole (*Microtus californicus*), California ground squirrel (*Otospermophilus beecheyi*), ring-necked pheasant (*Phasianus colchicus*), many passerine birds, and grasshoppers (*Melanoplus* species). Swainson's hawks are opportunistic foragers and will readily forage in association with agricultural mowing, harvesting, disking, and irrigating (Estep 1989). The removal of vegetative cover by such farming activities results in more readily available prey items for this species.

Thirty-four CNDDDB occurrences of Swainson's hawk are located within 5 miles of the BSA (CDFW 2025a). The nearest reported occurrences are located between one to two miles away to the north, east and south. The disturbed agricultural field within the BSA provides suitable foraging habitat for this species. Mature street trees within and adjacent to the BSA, including Aleppo pine (*Pinus halepensis*), provide marginally suitable nesting habitat. As is evident by the number of occurrences within 5 miles of the BSA, the BSA is located within an area that has high Swainson's Hawk density. However, Swainson's hawk has a low potential to occur within or adjacent to the BSA due to the lack of suitable nesting trees.

4.5.6.7 Burrowing Owl

The burrowing owl (*Athene cunicularia*) is not listed pursuant to the federal ESA but is currently a candidate for listing under the California ESA; in addition, it is designated as a BCC by USFWS and an SSC by CDFW. Burrowing owls inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. This species can also inhabit developed areas such as golf courses, cemeteries, roadsides in cities, airports, vacant lots in residential areas, school campuses, and fairgrounds (Poulin et al. 2020). This species typically uses burrows created by fossorial mammals, most notably the California ground squirrel, but may also use human-made structures such as concrete culverts or pipes; concrete, asphalt, or wood debris piles; or openings beneath concrete or asphalt pavement (California Department of Fish and Game [CDFG] 2012). The breeding season for this species typically occurs between February 1 and August 31 (CDFG 2012).

No documented CNDDDB occurrences of burrowing owl are located within 5 miles of the BSA (CDFW 2025a). Animal burrows greater than 4 inches in diameter were not observed within the BSA. No suitable nesting habitat for this species occurs within the BSA, but it does provide potential foraging habitat. Burrowing owl has a low potential to occur within the BSA.

4.5.6.8 Prairie Falcon

Prairie falcon (*Falco mexicanus*) is not listed pursuant to either the California or federal ESAs; however, it is designated as a CDFW Watch List species. The breeding distribution of prairie falcons includes the majority of the State except the extreme northwestern part of the State and coastal areas (Steenhof 2024). Nesting occurs from March through July. Prairie falcons have not been documented to nest in the Central Valley but may occur in this area as migrants and wintering birds. This species nests primarily on shelves, ledges, or potholes in cliffs, but may also use trees, power line structures, buildings, mine highwalls, caves, or stone quarries (Steenhof 2024). Breeding habitat for this species includes open habitat at elevations up to 3,350 meters above MSL in arid plains and steppes, wherever cliffs or bluffs are present (Steenhof 2024).

No documented CNDDDB occurrences of prairie falcon are located within 5 miles of the BSA (CDFW 2025a). No suitable nesting habitat for this species occurs within the BSA, but wintering habitat occurs within the BSA. Prairie falcon has a low potential to occur within the BSA.

4.5.6.9 Yellow-Billed Magpie

The yellow-billed magpie (*Pica nuttalli*) is not listed pursuant to either the California or federal ESAs but is designated as a USFWS BCC. This endemic species is a yearlong resident of the Central Valley and Coast Ranges from San Francisco Bay to Santa Barbara County. Yellow-billed magpies build large, bulky nests in trees in a variety of open woodland habitats, typically near grassland, pastures, or cropland. Nest building for this species begins between late-January and mid-February and may take up to 6 to 8 weeks to complete, with eggs laid from April through May, and fledging occurring from May through June (Koenig et al. 2022). The young leave the nest about 30 days after hatching (Koenig et al. 2022).

Yellow-billed magpies are highly susceptible to West Nile Virus, which may have been the cause of death to thousands of magpies from 2004 to 2006 (Koenig et al. 2022).

No documented CNDDDB occurrences of yellow-billed magpie occur within 5 miles of the BSA (CDFW 2025a). Suitable oak woodland nesting habitat for this species does not occur within the BSA; however, the open ground and agricultural field within the BSA is marginally suitable foraging habitat for this species. Yellow-billed magpie has a low potential to occur within the BSA.

4.5.6.10 California Horned Lark

The California horned lark (*Eremophila alpestris actia*) is not listed and protected pursuant to either the California or federal ESAs but is designated as a CDFW Watch List species. Horned larks are widely distributed throughout North America with 21 recognized subspecies (American Ornithologists' Union 1957). The California horned lark is one of approximately nine subspecies that breeds and/or winters in California and is found in the Coast Range and southern San Joaquin Valley south into northern Baja California (Beason 2020). The California horned lark is resident and nonmigratory. This species occurs in grasslands and other open habitats with sparse vegetation. Nests for this species are grass-lined and built on the ground. The breeding season for this species ranges from March through July, with a peak of activity in May.

No documented CNDDDB occurrences of California horned lark occur within 5 miles of the BSA (CDFW 2025a). The agricultural area observed within the BSA provides marginally suitable habitat. California horned lark has a low potential to occur within the BSA.

4.5.7 Mammals

The literature review identified two special-status mammal species as having the potential to occur in the vicinity of the BSA (Table 2). Based on the site visit and further analysis, ECORP considers both of these species to be absent from the BSA due to lack of suitable habitat; therefore, this assessment does not further discuss those species.

4.6 Critical Habitat or Essential Fish Habitat

No designated critical habitat is mapped within the BSA for taxa other than fish (NOAA 2025b; USFWS 2025).

The literature review identified anadromous fish critical habitat for Chinook salmon (Central Valley Spring Run), steelhead (California Central Valley), and green sturgeon (southern distinct population segment) as well as Essential Fish Habitat for Chinook salmon in the Upper Bear Watershed below Camp Far West on the *Olivehurst, California* and the *Nicolaus, California* 7.5-minute topographic quadrangles (NOAA 2022, 2025b). However, no potential habitat for special-status fish species occurs within the BSA because no riverine habitats occur within the BSA (Figure 3).

4.7 Wildlife Movement Corridors and Nursery Sites

The BSA does not intersect an Essential Connectivity Area. The Essential Connectivity Map depicts large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for ecological connectivity between them (Essential Connectivity Areas) (CDFW 2025b).

No nursery sites have been documented within or in the vicinity of the BSA (CDFW 2025a) and ECORP did not observe nursery sites during the site reconnaissance. A list of animal species observed within the BSA during the site visit is provided in Appendix E.

4.8 Protected Trees/Oak Woodlands

No oak trees or other protected sensitive natural communities were observed within the BSA during the site visit.

5.0 IMPACT ASSESSMENT AND RECOMMENDATIONS

This section specifically addresses questions raised by the Biological Resources section of the Environmental Checklist Form in Appendix G of the CEQA Guidelines.

5.1 CEQA Checklist Criteria IV(a) – Special-Status Species

Would the Project:

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

Multiple special-status species have the potential to occur within the BSA and, therefore, may be affected by the Project. The BSA is located within the Plumas Lake Specific Plan Area, and construction of homes, schools and businesses has occurred or is currently active on the adjacent properties to the east and north. The BSA is therefore subject to impacts from noise, human activity, and night lighting from adjacent areas under existing conditions. The property has been actively used for agricultural crops and has been tilled and plowed. The vegetation is dominated by non-native plants and crop species. No sensitive habitats or aquatic resources are present in the BSA. However, open space lands with agricultural fields and natural habitats occur to the west, and the BSA could be used as foraging habitat by raptors and other birds nesting in these areas. The BSA could also occasionally be used as foraging or dispersal habitat for other species of wildlife.

The following sections describe impacts and provide mitigation for each species or group of species with the potential to occur within the BSA. ECORP recommends the following general measures to minimize or avoid impacts to special-status species with the potential to occur within the BSA, as referenced in their respective sections:

- Prior to the start of construction and earthwork activities, the project applicant shall retain a qualified biologist on an as-needed basis to assist with potential biological issues that might arise during construction. Prior to start of construction and earthwork activities, the qualified biologist shall walk the project site and offsite improvement area with the construction project manager and establish project impact limits and avoidance areas around identified biological resources. Impact limits define the areas where ground disturbing or project-related activities may occur. Avoidance areas are areas where project activities are not allowed.
- Project impact limits shall be clearly demarcated prior to construction, and all workers shall be made aware of the impact limits and avoidance areas. No ground- or vegetation-disturbing activities shall occur outside of the Project impact limits. All vehicles and equipment shall be restricted to the Project impact limits or existing designated access roads and staging areas.
- Erosion control measures shall be placed between avoided aquatic resources and the outer edge of the Project impact limits prior to commencement of construction activities, and such measures shall be maintained until construction is completed and soils have stabilized. Plastic monofilament netting or similar material shall not be used for erosion control because smaller wildlife may become entangled or trapped in these materials; this includes products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials to be used for erosion control include natural fibers such as jute, coconut, twine, or other similar fibers.
- A qualified biologist shall conduct mandatory worker environmental awareness training for all contractors, work crews, and any onsite personnel to aid workers in recognizing special-status species and sensitive biological resources that are known to occur or that have the potential to occur within the Project Area. This program shall identify the special-status species and their habitats, describe the regulatory status and general ecological characteristics of sensitive resources, and review the limits of construction, environmentally sensitive areas, measures required to reduce impacts to biological resources, and possible penalties for noncompliance.
- The qualified biologist shall periodically visit the construction site to confirm that construction work is occurring within the demarcated areas and that the proposed project impact limits and avoidance areas are maintained. The qualified biologist shall also determine if the impact limits and/or avoidance areas need to be adjusted.

5.1.1 Special-Status Plants

During the site visit Parry's rough tarplant was found at the northern edge of the project boundary. Habitat for one of the other plant species, red-stemmed cryptantha (*Cryptantha rostellata*) was found on the property.

5.1.1.1 Parry's Rough Tarplant

Parry's rough tarplant is a CRPR list 4.2 taxon that was found at the northern boundary of the BSA. The CRPR list 4 is a watch list for taxa whose occurrences are infrequent throughout California. Threat to

Parry's rough tarplant currently appears low and impacts to CRPR 4 plants are typically not considered significant under CEQA; however, these taxa warrant regular monitoring to determine if there is evidence of local or rapid global decline, which would necessitate their transfer to a more sensitive rank (CNPS 2020).

CDFW does not typically review and track the occurrences of CRPR 4 taxa (CDFW 2025a); however, the CNDDDB has unprocessed data for Parry's rough tarplant. Unprocessed occurrences are those that have been submitted to CNDDDB but have not yet been evaluated by a senior biologist or incorporated into the main CNDDDB dataset. The unprocessed dataset includes 15 occurrences of Parry's rough tarplant (CDFW 2025c), and these occurrences document an estimated 16,200 individuals of Parry's rough tarplant. The closest unprocessed occurrence is located 16 miles southwest of the BSA and is estimated to include 500 or more individuals. The largest unprocessed occurrence of the taxon is within the Yolo Bypass area, where R. E. Preston recorded an estimated 10,000 or more individuals.

There is no indication that Parry's rough tarplant is exhibiting a substantial decline locally. It is unlikely that impacts to the population in the vicinity of the BSA would result in a loss of viability for the species or otherwise increase its endangerment. A single individual of Parry's rough tarplant was documented near the Project impact area. The BSA is centrally located within the distribution of the taxon and is within 20 miles of other large occurrences of the taxon. For these reasons, impacts to Parry's rough tarplant within or near the BSA would be less than significant.

5.1.1.2 Special-Status Plant Impact Minimization Recommendations

To determine the presence and extent of all special-status plant species within the BSA, perform floristic plant surveys according to current USFWS, CDFW, and CNPS protocols (CDFW 2018; CNPS 2001; USFWS 2000) prior to construction. Surveys shall be conducted throughout all suitable habitat within the Project impact area and a 25-foot buffer to address potential direct and indirect impacts of the Project on surrounding plant habitats. Surveys shall be conducted by a qualified biologist and timed according to the appropriate phenological stage for identifying target species. Known reference populations shall be visited and/or local herbaria records shall be reviewed, if available, prior to surveys to confirm the phenological stage of the target species.

If special-status plants are identified within or adjacent to the Project impact limits, implement the following measures:

- If avoidance of special-status plants is feasible, establish and clearly demarcate avoidance zones for special-status plant occurrences prior to construction and maintain such zones until the completion of construction. Avoidance zones shall include the extent of the special-status plant species plus a 25-foot buffer to the extent feasible. No ground- or vegetation-disturbing activities shall occur within avoidance zones. A qualified biologist or qualified biological monitor shall be present if work must occur within the avoidance buffer to ensure that special-status plants are not adversely affected by the work.
- If avoidance of special-status plants is not feasible, an impact assessment shall be conducted by a qualified biologist to determine whether Project-related activities would have the potential to

eliminate, substantially reduce the number of, or restrict the range of special-status plant species (a significant impact) and/or conflict with any local policies or ordinances protecting special-status plant species.

- If impacts are determined to be less than significant, no further measures shall be needed. If impacts are determined to be significant, mitigation may be required. Mitigation measures, if needed, shall be developed in consultation with the California Department of Fish and Wildlife. Mitigation measures may include the restoration or permanent preservation of onsite or offsite habitat for special-status plants and/or translocation of plants or seeds from affected areas to unaffected habitats.

5.1.2 Special-Status Wildlife Species

The BSA or surrounding area supports potential habitat for special-status wildlife species, including invertebrates, a reptile, and nesting habitat for special-status birds, including raptors. The following sections discuss survey recommendations for special-status wildlife species.

5.1.2.1 Crotch bumble bees

Project implementation may result in take of individual Crotch bumble bees (CBB) if present within the Project Area. ECORP recommends implementation of the following measures to avoid or minimize potential impacts to CBB:

- If CBB is no longer a candidate or listed species under the California ESA at the time ground-disturbing activities occur, no additional protection measures shall be required.
- If CBB is legally protected under the California ESA as a candidate or listed species and ground-disturbing activities are scheduled to begin between February 1 and October 31, a qualified biologist shall conduct pre-construction surveys. Based on CDFW's *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023b), it is recommended that three Crotch bumble bee surveys be conducted at 2 to 4 week intervals during the colony active period (April through August), if possible.
- If CBB are detected, any remaining surveys shall focus on nest location. If no nests are found but the species is observed during pre-construction surveys, work crews shall be informed of the possibility of CBB or their nests being present within the Project Area. If a CBB is encountered during construction, work shall stop until the individual leaves of its own volition. If an active CBB nest is detected, an appropriate no-disturbance buffer zone (including foraging resources and flight corridors essential for supporting the colony) shall be established around the nest to reduce the risk of disturbance or accidental take, and a qualified biologist shall coordinate with CDFW to determine if an Incidental Take Permit under Section 2081 of the California ESA will be required. No-disturbance buffers may be removed at the completion of the flight season (October 31) and/or once the qualified biologist deems that the nesting colony is no longer active.

- If initial grading does not start within 2 weeks (1 week, if prior to colony active period) of the completion date of the CBB pre-construction surveys, pre-construction surveys shall be repeated prior to ground-disturbing activities.

5.1.2.2 *Northwestern Pond Turtle*

The aquatic features immediately west of the BSA provide marginally suitable aquatic habitat for northwestern pond turtle, and the BSA supports marginally suitable upland habitat for the species. Project implementation could result in direct effects to this species, such as death or injury of individual turtles through construction-associated vehicular traffic or mortality of eggs or juveniles in nests as a result of ground disturbance. Should the northwestern pond turtle be federally listed prior to initiation of Project activities, consultation with USFWS would be required.

ECORP recommends implementation of the following measures to avoid or minimize potential effects to northwestern pond turtle:

- A qualified biologist shall perform a pre-construction clearance survey for northwestern pond turtle within 24 hours of the initiation of Project activities.
- If a northwestern pond turtle is found within the Project Area, it shall be allowed to move out of the Project Area of its own volition. If after a reasonable period of time the turtle is not leaving the Project site, a qualified biologist may move the animal to an appropriate location outside the impact area.
- If northwestern pond turtle is observed on or immediately adjacent to the BSA, or if recommended by a qualified biologist, exclusion fencing shall be installed between the impact area and adjacent suitable northwestern pond turtle habitat.

5.1.2.3 *Nesting Birds and Raptors*

The BSA and immediately adjacent area contains potentially suitable foraging or nesting habitat for 10 special-status bird species, including migratory birds, non-migratory non-game birds, and raptors protected under the California Fish and Game Code and MBTA. If Project-related activities occur during the nesting season, the removal of active nests or disruption of nesting activities could lead to take of a protected bird or an active nest with eggs or young, which would be considered a significant impact under CEQA.

Swainson's Hawk

The BSA is within an area that has a high density of Swainson's hawks, and the agricultural field in the BSA provides suitable foraging habitat for the species. The mature street trees within and adjacent to the BSA provide marginal nesting habitat for Swainson's hawk. If an active nest is present in or near the BSA, high levels of noise and human presence from construction activity could cause a nesting pair to abandon their nest, potentially resulting in incidental take of eggs or nestlings.

The Project is located immediately adjacent to existing developed portions of Plumas Lake, and construction has been actively occurring on the parcel to the north. With these existing ongoing sources of noise and human activity, Project construction would represent a minimal additional disturbance, particularly for birds nesting at greater distances from the site. ECORP recommends implementation of the following measures to avoid or minimize potential impacts to Swainson's hawk that may be nesting nearby.

- If Project activities are scheduled during the Swainson's hawk nesting season (March 1 to August 31), then, prior to beginning work on the Project, a qualified biologist shall survey for Swainson's hawk nesting activity.
- A qualified biologist shall conduct pre-construction surveys within 14 days prior to the commencement of Project-related activities to identify active nests that could be affected by construction. The pre-construction survey shall include accessible areas within 500 feet of the Project Site, including any temporary disturbance areas. If Swainson's hawk nesting activity is observed during the survey, the survey results shall be submitted to CDFW for review and acceptance prior to the initiation of Project activities.
- If the qualified biologist identifies nesting Swainson's hawks, they shall recommend a no-disturbance buffer, and the contractor shall implement this buffer under the supervision of a qualified biologist. Project activities shall be prohibited within the no-disturbance buffer from March 1 to August 31, unless otherwise approved in writing by CDFW, which may include consultation pursuant to the California ESA and issuance of an Incidental Take Permit, or a qualified biologist determining that the nest is no longer active. If there is a lapse in Project-related work of 14 days or longer, an additional survey shall be conducted prior to resuming Project activities.

Burrowing Owl

The BSA provides suitable foraging habitat for burrowing owl, but no burrows suitable for nesting habitat were observed on site. Burrowing owls have potential to occur in suitable habitats west and south of the BSA. If present within the vicinity of the BSA, noise and human activity from construction could result in disturbance leading to abandonment of an active nest. To avoid potential impacts to burrowing owl, the following avoidance and minimization measures are recommended:

- A pre-construction survey for nesting burrowing owl will be conducted by a qualified biologist within 14 days prior to commencement of Project activities within the BSA and a 250-foot buffer. Surveys shall be conducted at appropriate times and in appropriate weather conditions to maximize detection. If active burrowing owl burrows are found, a no-disturbance buffer will be immediately established, and an avoidance plan will be prepared in consultation with CDFW prior to the commencement of any ground-disturbing activities.

Nesting Birds and Raptors

ECORP recommends implementation of the following measures to avoid or minimize impacts to protected birds and active nests:

- To the extent feasible, tree and shrub removal or trimming shall be conducted outside of the bird nesting season (typically February 1 to August 31, and as early as January 1 for raptors).
- During the nesting season (typically February 1 to August 31, and as early as January 1 for raptors), a pre-construction nesting bird survey shall be conducted within 14 days prior to the commencement of Project-related activities to identify active nests that could be affected by construction. The pre-construction nesting bird survey shall include accessible areas within 100 feet of the Project Area, including any temporary disturbance areas. For raptors, the pre-construction nesting bird survey shall include accessible areas within 500 feet of the Project Area.
- If active nests are found, an appropriate no-disturbance buffer shall be established around the nest. A qualified biologist shall establish the buffer distance in consultation with CDFW. The buffer shall be maintained until the nestlings have fledged (i.e., are capable of flight and become independent of the nest), which shall be determined by a qualified biologist. The no-disturbance buffer can be removed—and no further measures are necessary—once the young have fledged or the nest is no longer occupied, as determined by a qualified biologist.

5.2 CEQA Checklist Criteria IV(b) – Sensitive Natural Communities

Would the Project:

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

ECORP did not identify riparian habitats or sensitive natural communities within the BSA during the site reconnaissance.

5.3 CEQA Checklist Criteria IV(c) – Aquatic Resources

Would the Project:

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

No aquatic features occur within the BSA (see Section 4.4 for details).

5.4 CEQA Checklist Criteria IV(d) – Movement Corridors and Nursery Sites

Would the Project:

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No known migratory wildlife corridors or nursery sites occur within the BSA; therefore, the Project would not substantially interfere with wildlife movement or impede the use of nursery sites.

5.5 CEQA Checklist Criteria IV(e) – Conflicts with Local Policies or Ordinances

Would the Project:

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

ECORP did not identify native trees within the Project impact limits; therefore, the Project is not expected to conflict with local conservation policies or tree protection ordinances.

5.6 CEQA Checklist Criteria IV(f) – Conflicts with Conservation Plans

Would the Project:

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The BSA is not located within the plan area of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

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LIST OF APPENDICES

Appendix A – Overall Site Plan

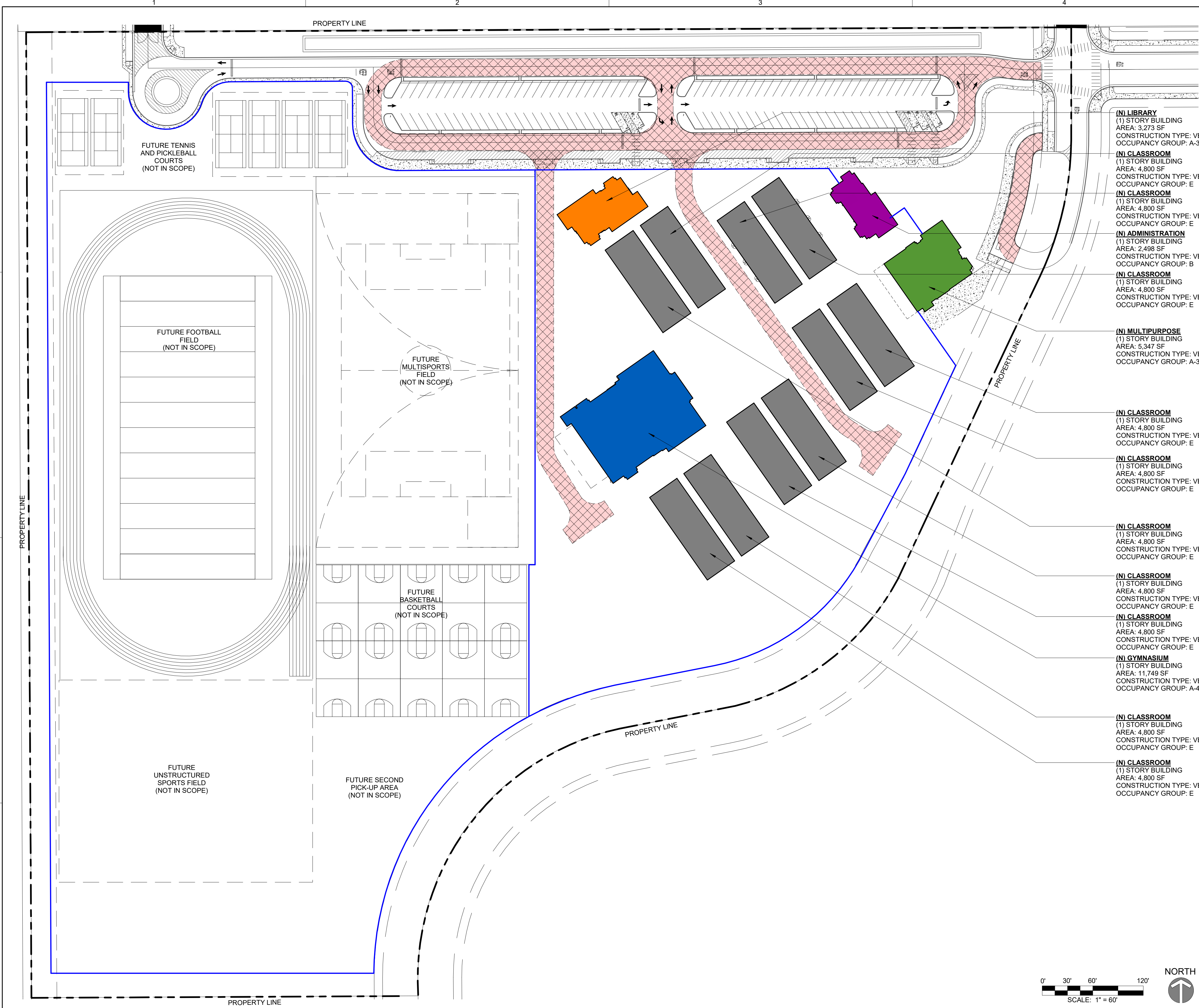
Appendix B – Results of Database Queries

Appendix C – Representative Photographs

Appendix D – Plant Species Observed (May 13, 2025)

Appendix E – Wildlife Species Observed (May 13, 2025)

7/15/2024 5:13:42 PM
ALL IDEAS, DESIGNS AND ARRANGEMENTS INDICATED ON THESE DRAWINGS ARE THE PROPERTY OF THE ARCHITECT AND ARE TO BE USED IN CONNECTION WITH THIS SPECIFIC PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED CONSENT OF THE ARCHITECT. THERE SHALL BE NO CHANGES OR DEVIATION FROM THE DRAWINGS OR ACCOMPANYING SPECIFICATION WITHOUT THE EXPRESSED CONSENT OF THE ARCHITECT.



GENERAL NOTES

- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS

SHEET KEYNOTES

NUMBER	SHEET NOTE TEXT
--------	-----------------

SITE PLAN LEGEND

- | | |
|-------|---------------------------|
| | ACCESSIBLE PATH OF TRAVEL |
| --- | PROPERTY LINE |
| --- | SETBACK |
| --- | NEW PERIMETER FENCE |
| --- | NEW BUILDING |
| --- | NEW 20' WIDE FIRE LANE |



PLUMAS LAKE
MIDDLE SCHOOL

RIVER OAKS BLVD.,
PLUMAS LAKE, CA

PROJ. NO. 24196

REV/NO.	DATE ISSUED	REASON
---------	-------------	--------

7/3/2024
SCHEMATIC DESIGN

Sheet Title
OVERALL SITE
PLAN

G-100

A1

OVERALL SITE PLAN

B1 / A-201-A

1" = 60'-0"

1

2

3

D-64

4

5



Selected Elements by Element Code

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad(Browns Valley (3912124) OR Gilsizer Slough (3912116) OR Knights Landing (3812176) OR Nicolaus (3812185) OR Olivehurst (3912115) OR Pleasant Grove (3812174) OR Sheridan (3812184) OR Sutter (3912126) OR Sutter Causeway (3812186) OR Verona (3812175) OR Wheatland (3912114) OR Yuba City (3912125))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAABF02020	<i>Spea hammondi</i> western spadefoot	Proposed Threatened	None	G2G3	S3S4	SSC
ABNGA11010	<i>Nycticorax nycticorax</i> black-crowned night heron	None	None	G5	S4	
ABNJB05035	<i>Branta hutchinsii leucopareia</i> cackling (=Aleutian Canada) goose	Delisted	None	G5T3	S3	WL
ABNKC06010	<i>Elanus leucurus</i> white-tailed kite	None	None	G5	S3S4	FP
ABNKC11011	<i>Circus hudsonius</i> northern harrier	None	None	G5	S3	SSC
ABNKC19070	<i>Buteo swainsoni</i> Swainson's hawk	None	Threatened	G5	S4	
ABNME03041	<i>Laterallus jamaicensis coturniculus</i> California black rail	None	Threatened	G3T1	S2	FP
ABNNB03100	<i>Charadrius montanus</i> mountain plover	None	None	G3	S2	SSC
ABNRB02022	<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	Threatened	Endangered	G5T2T3	S1	
ABNSB10010	<i>Athene cunicularia</i> burrowing owl	None	Candidate Endangered	G4	S2	SSC
ABPAU08010	<i>Riparia riparia</i> bank swallow	None	Threatened	G5	S3	
ABPBW01114	<i>Vireo bellii pusillus</i> least Bell's vireo	Endangered	Endangered	G5T2	S3	
ABPBXA3013	<i>Melospiza melodia pop. 1</i> song sparrow ("Modesto" population)	None	None	G5T3?Q	S3?	SSC
ABPBXB0020	<i>Agelaius tricolor</i> tricolored blackbird	None	Threatened	G1G2	S2	SSC
AFCAA01031	<i>Acipenser medirostris pop. 1</i> green sturgeon - southern DPS	Threatened	None	G2T1	S1	SSC
AFCHA0205L	<i>Oncorhynchus tshawytscha pop. 11</i> chinook salmon - Central Valley spring-run ESU	Threatened	Threatened	G5T2Q	S2	



Selected Elements by Element Code
California Department of Fish and Wildlife
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AFCHA0209K	<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	Threatened	None	G5T2Q	S2	SSC
AFCHB03040	<i>Spirinchus thaleichthys pop. 2</i> longfin smelt - San Francisco Bay-Delta DPS	Endangered	Threatened	G5TNRQ	S1	
AFCHB04010	<i>Thaleichthys pacificus</i> eulachon	Threatened	None	G5	S1	SSC
AFCJB34020	<i>Pogonichthys macrolepidotus</i> Sacramento splittail	None	None	G3	S3	SSC
AMACC05032	<i>Lasiurus cinereus</i> hoary bat	None	None	G3G4	S4	
AMACC05080	<i>Lasiurus frantzii</i> western red bat	None	None	G4	S3	SSC
AMACC10010	<i>Antrozous pallidus</i> pallid bat	None	None	G4	S3	SSC
AMAFJ01010	<i>Erethizon dorsatum</i> North American porcupine	None	None	G5	S3	
ARAAD02031	<i>Actinemys marmorata</i> northwestern pond turtle	Proposed Threatened	None	G2	SNR	SSC
ARADB36150	<i>Thamnophis gigas</i> giant gartersnake	Threatened	Threatened	G2	S2	
ICBRA03010	<i>Branchinecta conservatio</i> Conservancy fairy shrimp	Endangered	None	G2	S2	
ICBRA03030	<i>Branchinecta lynchi</i> vernal pool fairy shrimp	Threatened	None	G3	S3	
ICBRA06010	<i>Lindieriella occidentalis</i> California linderiella	None	None	G2G3	S2S3	
ICBRA10010	<i>Lepidurus packardii</i> vernal pool tadpole shrimp	Endangered	None	G3	S3	
IICOL02106	<i>Cicindela hirticollis abrupta</i> Sacramento Valley tiger beetle	None	None	G5TH	SH	
IICOL48011	<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	Threatened	None	G3T3	S3	
IICOL49010	<i>Anthicus sacramento</i> Sacramento anthicid beetle	None	None	G4	S4	
IICOL49020	<i>Anthicus antiochensis</i> Antioch Dunes anthicid beetle	None	None	G3	S3	
IIHYM24260	<i>Bombus pensylvanicus</i> American bumble bee	None	None	G3G4	S2	
IIHYM24480	<i>Bombus crotchii</i> Crotch's bumble bee	None	Candidate Endangered	G2	S2	
PDAST7P010	<i>Pseudobahia bahiifolia</i> Hartweg's golden sunburst	Endangered	Endangered	G1	S1	1B.1



Selected Elements by Element Code
California Department of Fish and Wildlife
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDASTE8470	<i>Symphotrichum lentum</i> Suisun Marsh aster	None	None	G2	S2	1B.2
PDCAM060C0	<i>Downingia pusilla</i> dwarf downingia	None	None	GU	S2	2B.2
PDCAM0C010	<i>Legenere limosa</i> legenere	None	None	G2	S2	1B.1
PDFAB0F8R3	<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	None	None	G2T1	S1	1B.1
PDLAM18082	<i>Monardella venosa</i> veiny monardella	None	None	G1	S1	1B.1
PDMAL0H0R3	<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	None	None	G5T3	S3	1B.2
PDPLM0C0E1	<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	None	None	G4T2	S2	1B.1
PDRAN0B1J0	<i>Delphinium recurvatum</i> recurved larkspur	None	None	G2?	S2	1B.2
PDSCR0R060	<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	None	Endangered	G2	S2	1B.2
PMALI040Q0	<i>Sagittaria sanfordii</i> Sanford's arrowhead	None	None	G3	S3	1B.2

Record Count: 47

Search Results

17 matches found. Click on scientific name for details

Search Criteria: , Quad is one of
[3912115:3812185:3912126:3912125:3912124:3912116:3912114:3812186:3812176:3812175:3812174:3812184]

SCIENTIFIC NAME	COMMON NAME	▲ FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	1B.2	Yes	1984-01-01
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	None	None	4.2	Yes	2007-05-22
<i>Hesperevax caulescens</i>	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	4.2	Yes	2001-01-01
<i>Pseudobahia bahiifolia</i>	Hartweg's golden sunburst	Asteraceae	annual herb	Mar-Apr	FE	CE	1B.1	Yes	1974-01-01
<i>Symphyotrichum lentum</i>	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	1B.2	Yes	1974-01-01
<i>Cryptantha rostellata</i>	red-stemmed cryptantha	Boraginaceae	annual herb	Apr-Jun	None	None	4.2		2018-06-26
<i>Downingia pusilla</i>	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	2B.2		1980-01-01
<i>Legenere limosa</i>	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	1B.1	Yes	1974-01-01
<i>Astragalus tener</i> var. <i>ferrisiae</i>	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	None	None	1B.1	Yes	1994-01-01
<i>Monardella venosa</i>	veiny monardella	Lamiaceae	annual herb	May-Jul	None	None	1B.1	Yes	1984-01-01
<i>Fritillaria agrestis</i>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	4.2	Yes	1980-01-01

<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose- mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	1B.2	Yes	1974- 01-01
<i>Gratiola</i> <i>heterosepala</i>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	1B.2		1974- 01-01
<i>Navarretia</i> <i>leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	1B.1	Yes	1994- 01-01
<i>Delphinium</i> <i>recurvatum</i>	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	1B.2	Yes	1988- 01-01
<i>Darlingtonia</i> <i>californica</i>	California pitcherplant	Sarraceniaceae	perennial rhizomatous herb (carnivorous)	Apr-Aug	None	None	4.2		1980- 01-01
<i>Brodiaea rosea</i> ssp. <i>vallicola</i>	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr- May(Jun)	None	None	4.2	Yes	2019- 01-07

Showing 1 to 17 of 17 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 1 July 2025].
}

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.

Location

Yuba 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

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 species¹ 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 Fisheries²).

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.

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

Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle <i>Actinemys marmorata</i> 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 <i>Spea hammondi</i> No critical habitat has been designated for this species.	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> 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 <i>Desmocerus californicus dimorphus</i> 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
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> 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

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>

Flowering Plants

NAME	STATUS
Hartweg's Golden Sunburst Pseudobahia bahiifolia	Endangered
Wherever found	
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/1704	

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-incidenta- 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

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 <i>Haliaeetus leucocephalus</i> 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
Golden Eagle <i>Aquila chrysaetos</i> 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. https://ecos.fws.gov/ecp/species/1680	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.

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.

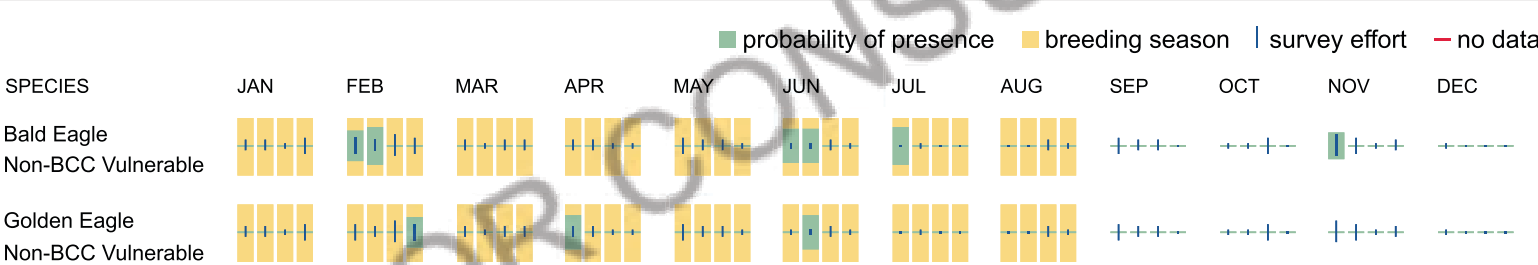
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



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 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.

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.

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 on 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 <i>Haliaeetus leucocephalus</i> 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 <i>Passerculus sandwichensis beldingi</i> 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
Black Tern <i>Chlidonias niger surinamensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Bullock's Oriole <i>Icterus bullockii</i> 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 <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31

Common Yellowthroat <i>Geothlypis trichas sinuosa</i>	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	
Golden Eagle <i>Aquila chrysaetos</i>	Breeds Jan 1 to Aug 31
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. https://ecos.fws.gov/ecp/species/1680	
Lawrence's Goldfinch <i>Spinus lawrencei</i>	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 <i>Circus hudsonius</i>	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 <i>Dryobates nuttallii</i>	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 <i>Baeolophus inornatus</i>	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 <i>Contopus cooperi</i>	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 <i>Melospiza melodia graminea</i>	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	
Tricolored Blackbird <i>Agelaius tricolor</i>	Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	
Western Grebe <i>aechmophorus occidentalis</i>	Breeds Jun 1 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/6743	

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

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

Yellow-billed Magpie *Pica nuttalli*

Breeds Apr 1 to Jul 31

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

<https://ecos.fws.gov/ecp/species/9726>

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 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.

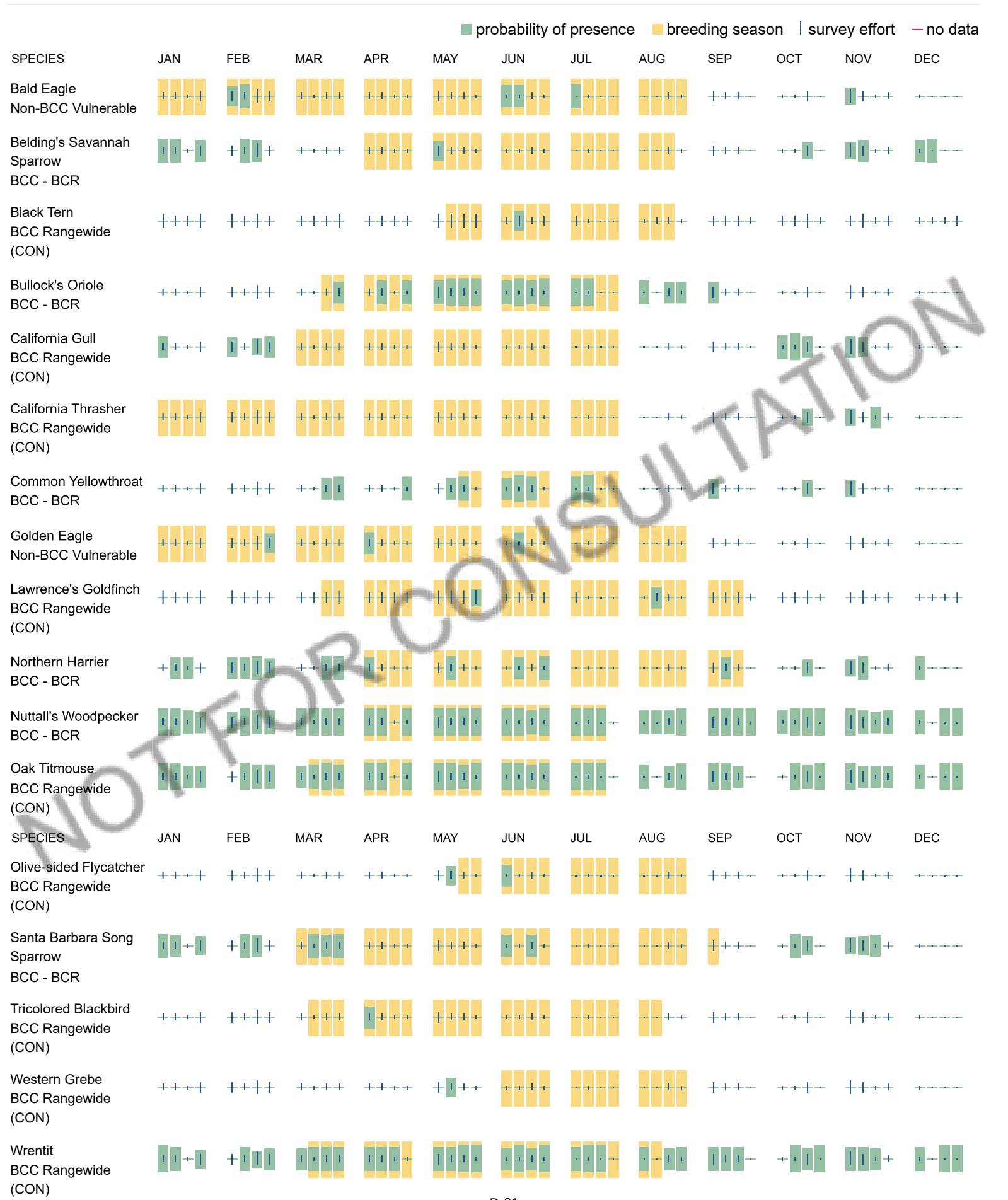
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.





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 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".

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.

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](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

[R4SBCx](#)

[R2UBH](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

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 tubercid 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.

NOT FOR CONSULTATION

	Olivehurst 39121-A5	Nicolaus 38121-H5
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ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

X

X

SRWR Chinook Salmon ESU (E) -

X

X

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) -

X

X

Eulachon (T) -

sDPS Green Sturgeon (T) -

X

X

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

X

X

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

X

X

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

X

X

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

X

X

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long
Beach office

562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds

Representative Photographs



**Photo 1. Disturbed/Developed—Northern Boundary of BSA
(facing west; May 13, 2025)**



**Photo 2. Disturbed/Developed—Center of BSA
(facing south toward a row crop field; May 13, 2025).**



**Photo 3. Disturbed/Developed—Northern Boundary of BSA
(facing east toward single-family homes; May 13, 2025).**



**Photo 4. Urban—Planted Median of River Oaks Boulevard
(facing northwest; May 13, 2025).**



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Appendix C – Representative Photographs

2025-082—Plumas Lake Middle School Project

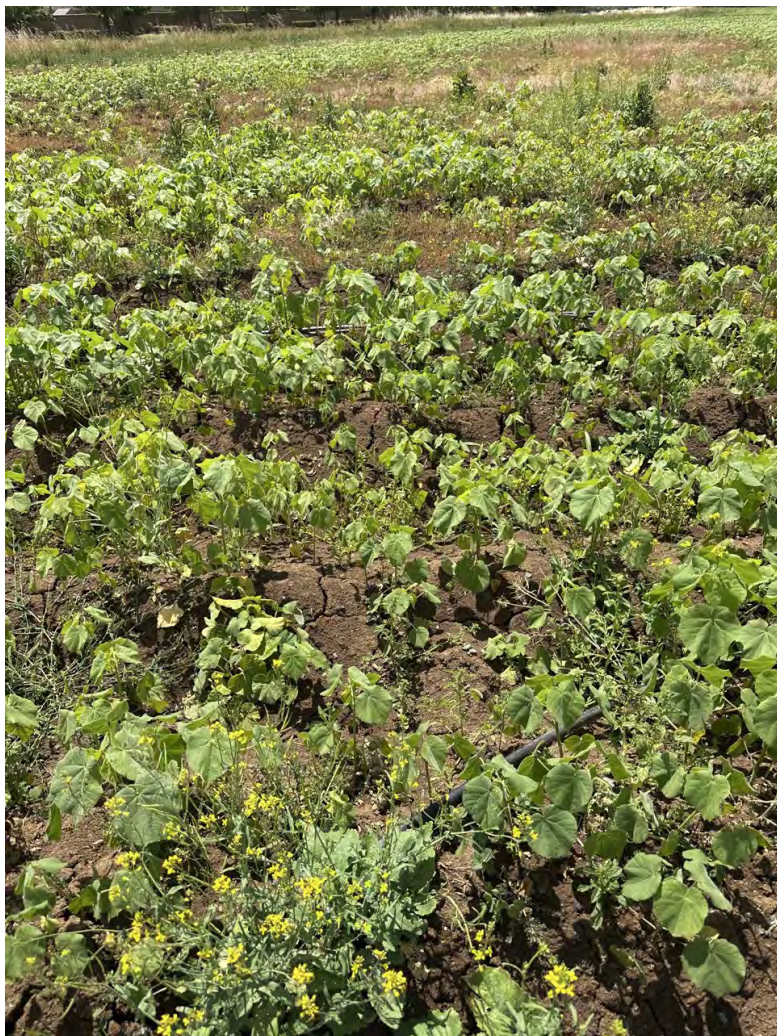


Photo 5. Area Where NWI Aquatic Feature was Mapped. No Evidence of a Drainage was Found (May 13, 2025).



Plant Species Observed (May 13, 2025)

SCIENTIFIC NAME	COMMON NAME
AMARANTHACEAE	AMARANTH FAMILY
<i>Amaranthus albus</i> *	Pigweed amaranth
APIACEAE	CARROT FAMILY
<i>Torilis arvensis</i> *	Field hedge parsley
ASTERACEAE	SUNFLOWER FAMILY
<i>Anthemis cotula</i> *	Mayweed
<i>Baccharis pilularis</i>	Coyote brush
<i>Centaurea solstitialis</i> *	Yellow star-thistle
<i>Centromadia parryi</i> ssp. <i>rudis</i> †	Pappose tarweed
<i>Erigeron bonariensis</i> *	Flax-leaved horseweed
<i>Helminthotheca echioides</i> *	Bristly oxtongue
<i>Hypochaeris glabra</i> *	Smooth cat's-ear
<i>Lactuca serriola</i> *	Prickly lettuce
<i>Leontodon saxatilis</i> *	Hairy hawkbit
<i>Matricaria discoidea</i>	Pineapple weed
<i>Pseudognaphalium luteoalbum</i> *	Jersey cudweed
<i>Senecio vulgaris</i> *	Common groundsel
<i>Silybum marianum</i> *	Milk thistle
<i>Sonchus oleraceus</i> *	Common sowthistle
<i>Taraxacum officinale</i> *	Common dandelion
BERBERIDACEAE	BARBERRY FAMILY
<i>Berberis thunbergii</i>	Barberry (cultivated)
BRASSICACEAE	MUSTARD FAMILY
<i>Brassica nigra</i> *	Black mustard
<i>Capsella bursa-pastoris</i> *	Shepherd purse
<i>Cardamine parviflora</i> *	Sand bittercress
<i>Lepidium didymum</i> *	Lesser wartcress
<i>Planodes virginica</i>	Common rock cress
<i>Raphanus raphanistrum</i> *	Yellow wild radish
<i>Rorippa curvipes</i>	Bluntleaf yellow cress
CARYOPHYLLACEAE	PINK FAMILY
<i>Cerastium glomeratum</i> *	Mouse-ear chickweed

SCIENTIFIC NAME	COMMON NAME
<i>Spergularia rubra</i> *	Purple sandspurry
<i>Stellaria media</i> *	Common chickweed
CHENOPODIACEAE	GOOSEFOOT FAMILY
<i>Chenopodium album</i> *	White goosefoot
CONVOLVULACEAE	MORNING-GLORY FAMILY
<i>Convolvulus arvensis</i> *	Field bindweed
CUCURBITACEAE	GOURD FAMILY
<i>Cucurbita pepo</i> *	Zucchini (cultivated)
CYPERACEAE	SEDGE FAMILY
<i>Cyperus eragrostis</i>	Tall flatsedge
<i>Cyperus esculentus</i>	Nutsedge
FABACEAE	LEGUME FAMILY
<i>Lupinus bicolor</i>	Bicolored lupine
<i>Medicago polymorpha</i> *	Bur clover
<i>Trifolium dubium</i> *	Shamrock clover
<i>Trifolium hirtum</i> *	Rose clover
<i>Vicia villosa</i> *	Hairy vetch
FAGACEAE	OAK FAMILY
<i>Quercus rubra</i> *	Northern red oak (cultivated)
GENTIANACEAE	GENTIAN FAMILY
<i>Zeltnera muehlenbergii</i>	Muehlenberg's centaury
GERANIACEAE	GERANIUM FAMILY
<i>Erodium moschatum</i> *	White-stemmed filaree
JUNCACEAE	RUSH FAMILY
<i>Juncus bufonius</i>	Toad rush
LAMIACEAE	MINT FAMILY
<i>Lamium amplexicaule</i> *	Henbit
LYTHRACEAE	LOOSESTRIFE FAMILY
<i>Lagerstroemia indica</i> *	Crape myrtle
<i>Lythrum hyssopifolia</i> *	Hyssop loosestrife

SCIENTIFIC NAME	COMMON NAME
MALVACEAE	MALLOW FAMILY
<i>Abutilon theophrasti</i> *	Velvet leaf
<i>Malva parviflora</i> *	Cheeseweed
MONTIACEAE	MINER'S LETTUCE FAMILY
<i>Calandrinia menziesii</i>	Red maids
MYRSINACEAE	MYRSINE FAMILY
<i>Lysimachia arvensis</i> *	Scarlet pimpernel
ONAGRACEAE	EVENING PRIMROSE FAMILY
<i>Epilobium brachycarpum</i>	Panicled willow-herb
PHYTOLACCACEAE	POKEWEED FAMILY
<i>Phytolacca americana</i> *	American pokeweed
PINACEAE	PINE FAMILY
<i>Pinus halepensis</i>	Pine (cultivated)
PITTOSPORACEAE	CHEESEWOODS
<i>Pittosporum tobira</i> *	Japanese cheesewood (cultivated)
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Plantago major</i> *	Broad-leaf plantain
<i>Veronica arvensis</i> *	Corn speedwell
<i>Veronica peregrina</i> ssp. <i>xalapensis</i>	Purslane speedwell
PLATANACEAE	PLANE-TREE FAMILY
<i>Platanus x acerifolia</i>	London planetree (cultivated)
POACEAE	GRASS FAMILY
<i>Avena fatua</i> *	Wild oat
<i>Bromus hordeaceus</i> *	Soft brome
<i>Elymus caput-medusae</i> *	Medusahead grass
<i>Festuca bromoides</i> *	Brome fescue
<i>Festuca perennis</i> *	Italian ryegrass
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> *	Mediterranean barley
<i>Phalaris paradoxa</i> *	Paradox canary grass
<i>Poa annua</i> *	Annual bluegrass
<i>Sorghum halepense</i> *	Johnson grass

SCIENTIFIC NAME	COMMON NAME
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Polygonum aviculare</i> *	Prostrate knotweed
<i>Rumex crispus</i> *	Curly dock
PORTULACAEAE	PURSLANE FAMILY
<i>Portulaca oleracea</i> *	Common purslane
ROSACEAE	ROSE FAMILY
<i>Crataegus monogyna</i> *	Hawthorn
<i>Photinia serratifolia</i> *	Taiwanese photinia
<i>Rhaphiolepis indica</i>	Indian hawthorn (cultivated)
SCROPHULARIACEAE	FIGWORT FAMILY
<i>Myoporum laetum</i> *	Lollypop tree
SOLANACEAE	NIGHTSHADE FAMILY
<i>Datura stramonium</i> *	Jimson weed
<i>Physalis</i> sp.*	Groundcherry
<i>Solanum nigrum</i> *	Black nightshade
VERBENACEAE	VERVAIN FAMILY
<i>Verbena litoralis</i> *	Seashore vervain

Notes: † = special-status species; * = non-native species

Wildlife Species Observed (May 13, 2025)

SCIENTIFIC NAME	COMMON NAME
INSECTS	
Honey Bee	<i>Apis mellifera</i>
Cabbage White	<i>Pieris rapae</i>
BIRDS	
Killdeer	<i>Charadrius vociferus</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
House Finch	<i>Haemorhous mexicanus</i>
Lesser Goldfinch	<i>Spinus psaltria</i>
American Goldfinch	<i>Spinus tristis</i>
Red-Winged Blackbird	<i>Agelaius phoeniceus</i>
Brown-Headed Cowbird	<i>Molothrus ater</i>
Blue Grosbeak	<i>Passerina caerulea</i>

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