OLBERDING ENVIRONMENTAL, INC.
Wetland Regulation and Permitting

April 10, 2023

Mr. Rob Harris
Rescue Rasmussen Pond Alliance
4092 Calymore Court
Cameron Park, California 95682

Subject: Peer Review for the Cameron Meadows Property, El Dorado County, California

Dear Mr. Harris:

This memo is intended to provide you with our analysis and conclusions regarding your request for Olberding Environmental Inc. (Olberding Environmental) to peer review biotic resource documents prepared for the Cameron Meadows Property (Property) in association with TTLC Cameron Park-Meadows, LLC's Formal Development Application.

1. Desktop Analysis & Literature Review

Olberding Environmental, Inc. (Olberding Environmental) conducted a desktop analysis of the Property for the purpose of identifying sensitive plant and wildlife species, sensitive habitats, and biological constraints associated with the Property. The purposes of the desktop analysis were (1) to determine whether any suitable habitat for any special-status plant species occurs within the study area; and (2) to determine whether any sensitive habitat types (e.g., wetlands) occur within the study area. Sources reviewed included a query of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (USFWS 2023a), the California Natural Diversity Database (CNDDB 2023), and the California Native Plant Society (CNPS 2023) for a five-mile radius around the Property. From the above sources, a list of potential sensitive habitats and special-status plant and wildlife species with potential to occur in the Property vicinity was developed. Olberding Environmental provided the detailed results of the desktop analysis in January of 2023 (Attachment 1).

2. Biological Resources Assessment Peer Review

Olberding Environmental conducted a peer review of the *Biological Resources Assessment for the Cameron Park Project* (BRA). After review of the BRA, we found the following potential issues:

- Section 4.1 – The document identifies the soil as deriving from "gabbrodiorite" (not an actual mineral, a portmanteau of "gabbro" and "diorite") as opposed to soil derived from "gabbro".

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- Table 3 within the document identifies Nissenan manzanita (*Arctostaphylos nissenana*) as not occurring as the project is outside the elevation range. However, the whole eastern portion of the property is 1,475 – 1,500 feet in elevation, within the range of the species.
- Table 3 within the document identifies oval-leaved viburnum as not occurring because, "The chaparral and oak woodland within the Study Area are not sufficiently mesic to support this species." However, mesic requirements are not provided in the habitat description from either the CNPS or CalFlora.
- Table 3 within the document does not include the western bumble bee (*Bombus occidentalis*), a state candidate for Endangered status, within the analysis.
- Table 3 within the document does not include western spadefoot (*Spea hammondii*), a CDFW Species of Special Concern, within the analysis.
- Table 3 within the document does not include the grasshopper sparrow (*Ammodramus savannarum*), a CDFW Species of Special Concern, within the analysis.
- Table 3 within the document does not include the golden eagle (*Aquila chrysaetos*), a CDFW Fully Protected Species, within the analysis.
- Section 4.2 and 4.3 (and 6.2) – The document does not classify "Arroyo Willow Riparian Thicket" or "Fremont Cottonwood Riparian Woodland" as aquatic resources.
- Section 5.2 – The document states that the sensitive natural communities on the Property are "not within the proposed development area". However, there are impacts to both "valley oak woodland" and "Fremont Cottonwood Riparian Woodland".
- Section 6.1.2 – The document states avoidance of all impacts to "Fremont Cottonwood Riparian", however, there are permanent impacts to this habitat.
- Figure 6 – The rare plant survey area included in the document does not include the entire Proposed Development Area. This is particularly a concern where the proposed EVA road crosses the ephemeral drainage and mixed oak woodland habitat. This area is located only a few hundred feet from mapped occurrences of Red Hills soaproot and El Dorado County mule ears.

3. Aquatic Resources Delineation Report

An Aquatic Resource Delineation Report was conducted on the Property in January of 2023 by Madrone Ecological Consulting. The delineation map submitted with the report has not yet been verified by the U.S. Army Corps of Engineers (Corps) and is still under review. Olberding Environmental did not conduct a site visit to verify the information in the delineation, however, a qualified biologist conducted a desktop review using publicly accessible aerial imagery of the Property. Review of the Aquatic Resource Delineation Report shows that the delineation was adequately done and however it may not accurately represent the conditions on the Property.

The delineation of the Cameron Meadows property was conducted on multiple dates in

December 2021 and June 2022. According to the California Department of Water Resources (2022), "*Water Year 2022 (October 1, 2021 to September 30, 2022) was a third dry year…*" and, "*Water Year 2022 wrapped up with 76% of average statewide precipitation…*". Additionally, while there were two large storm events in October and December 2021, California experienced its driest January through April on record, with only 25% of average statewide precipitation based on records dating back to 1895 (CDWR 2022).

The general prolonged period of drought, coupled with the driest January to April on record, could alter the hydrologic indicators throughout the property, leading to a misrepresentation of the aquatic features. In particular, when analyzing historic aerial imagery from Google Earth, the wetland ditch along the western boundary (WD-1 and WD-2) and the seasonal wetland feature northwest of the pond (SW-1) appear to show a defined channel and evidence of saturation beyond what was delineated by Madrone in 2022. In a typical water year, it is likely that the hydrologic indicators of WD-1 would extend to the northeast along the existing constructed channel, and the area of feature SW-1 would be larger.

4. Recommendations

As part of the peer review, Olberding Environmental cross referenced the verified delineation map included in the Aquatic Resource Delineation Report with the proposed development project site plan (Attachment 2). Due to the lack of shapefiles and other project specific details, the impacts assumed in association with the proposed development project may not be entirely accurate.

Table 1. Water Bodies Impacted

Wetland/Waters (Type)	Existing (Acres)	Impacted (Acres)
Riparian Wetland	2.623 acres	0.02 acres
Seasonal Wetland	0.047 acres	0.02 acres
Wetland Ditch	0.175 acres (741 lnft)	0.00 acres
Drainage Ditch	0.278 acres (1,140 lnft)	0.07 acres
Ephemeral Stream	0.257 acres (2,440 lnft)	0.02 acres
Intermittent Stream	0.287 acres (1,005 lnft)	< 0.01 acres
Pond	5.41 acres	0.00 acres
Total	**9.077 acres (5,326 lnft)**	**0.14 acres**

Source: Madrone Ecological Consulting, LLC (Madrone). 2022. Aquatic Resources Delineation Report Cameron Meadows. Prepared for TTLC Management, Inc an Arizona Corp dba TTLC Cameron Park – Meadows, LLC. Published on 3 January 2023.

Based on the review of the environmental documents provided and focused analysis of literature and special-status species databases, Olberding Environmental has made the following recommendations:

1. Corps Verified Delineation – It is unclear if the proposed development project applicant has obtained verification for the Aquatic Resources Delineation Report dates January 2023. It is our recommendation that the Corps verification be received prior to the submission of any development application materials.

2. Corps Nationwide Permit – Nationwide Permits are general permits issued on a nation-wide basis to streamline the Department of the Army (DA) authorization of activities that will result in no more than minimal individual and cumulative adverse effects on the aquatic environment. Based on the above-mentioned assumed impacts to approximately

0.14 acres jurisdictional features (Table 1), Olberding Environmental has identified the need for the proposed development project applicant to obtain a Nationwide Permit No. 29 (Residential Developments).

3. Section 401 Water Quality Certification – The Regional Water Quality Control Board (RWQCB) has the authority to regulate discharges under section 401 of the Clean Water Act (CWA). CWA Section 401 Water Quality Certifications are issued to applicants for activities that may result in a discharge into waters of the United States, including but not limited to the discharge or dredged or fill material. Based on the above-mentioned assumed impacts to approximately 0.14 acres jurisdictional features (Table 1), as well as the need for a Corps Nationwide Permit, the proposed development project will need to obtain a Section 401 Water Quality Certification from the RWQCB.

4. Pre-Filing Meeting Request – It is unclear if a pre-filing meeting request has been submitted to the RWQCB. It is recommended that if a Section 401 Water Quality Certification has not yet been obtained, that a copy of the pre-filing meeting request submitted to the RWQCB be provided as an attachment to the application packet.

5. Lake and Streambed Alteration Agreement – The California Department of Fish and Wildlife (CDFW) Fish and Game Code section 1602 requires project applicants to notify CDFW prior to beginning any activity that may do one or more of the following: Divert or obstruct the natural flow of any river, stream, or lake; Change the bed, channel, or bank of any river, stream, or lake; Use material from any river, stream, or lake; or Deposit or dispose of material into any river, stream, or lake. Based on the above-mentioned assumed impacts to approximately 0.14 acres jurisdictional features (Table 1), the proposed development project will need to obtain a Streambed Alteration Agreement from CDFW.

6. Rare Plant Survey – A rare plant survey of the Property in accordance with CDFW and CNPS guidelines should be required prior to construction. The survey should be scheduled to coincide with the identified blooming or identification periods for those species having potential to occur. Due to the temporal distribution of the blooming period of these plants it is likely that 2-3 botanical surveys will need to be conducted. A survey for Nissenan manzanita will need to be conducted in February – March, a second survey for the remainder of the plant species should be conducted in May, and a third survey for Sanford's arrowhead may need to be conducted later in the Fall. Any rare, threatened, or endangered plant species, including but not limited to those listed in Attachment 2, Table 1, should be identified and mapped. If any of these species are found, consultation with the USFWS and/or CDFW may be required.

7. Invertebrate Survey – Prior to construction, an invertebrate survey should be conducted on the Property to identify if western bumble bee or monarch butterfly utilize flowering plants growing on the Property. As the special-status species are active during the blooming period of their recognized food plants, the survey should be timed from May to June. The biologists conducting the survey should be familiar with the primary identification characteristics of each invertebrate species.

8. California Red-legged Frog Visual-encounter Survey – Prior to construction, a visual-encounter survey should be conducted to identify the presence or absence of California red-legged frog. Surveys should follow the methodology outlined in the *Revised Guidance on Site Assessments and Field Surveys of the California Red-legged Frog* (USFWS 2005). The most common method of surveying for CRF is the visual-encounter survey. These survey are conducted either during daylight hours or at night by walking entirely around the pond or marsh or along the entire length of a creek or stream while repeatedly scanning for frogs.

9. Western Pond Turtle Visual Survey – A survey should be conducted to determine the presence or absence of western pond turtle within the pond immediately adjacent to the northern boundary of the Property. Surveys should be conducted according to the protocol outlined in *USGS Western Pond Turtle (*Emys marmorata*) Visual Survey Protocol for the Southcoast Ecoregion* (USGS 2006). If any western pond turtles are found, consultation with the CDFW may be required.

10. Coast Horned Lizard Visual Survey – Prior to construction, a survey should be conducted to identify the presence or absence of coast horned lizard. There is no standardized survey methodology for this species, so it is recommended that the surveying biologists use a modified version of the *Survey Protocol for the Blunt-nosed Leopard Lizard* (CDFW 2019). Particularly, a minimum of two surveyors, walking parallel transect lines, should survey all areas of potential habitat. In areas of dense vegetation, no greater than 10-meter wide transects should be walked at a slow pace. As this species is diurnal, surveys should be conducted during periods of warm weather. If any coast horned lizards are identified, consultation with the CDFW may be required.

11. Pre-Construction Avian Survey – If project construction-related activities take place during the nesting season (February through August), preconstruction surveys for all nesting birds (including waterfowl, passerines, raptors, and other birds) within and adjacent to (within 1,000 feet) the Property should be conducted by a competent biologist 14 days prior to the commencement of the tree removal or site grading activities. Surveys should focus on areas where birds are likely to nest, including trees, shrubs, grasslands, rock faces, stream banks, or under eves of structures. If any bird listed under the

Migratory Bird Treaty Act is found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for small passerine birds, and a minimum of 250 feet for raptors. The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s). Active nests, including those in the process of being constructed shall not be disturbed. Surveys shall be repeated in areas where Project activities lapse for a period of 7 days or more.

12. Burrowing Owl Surveys – A burrowing owl pre-construction survey should take place before any construction activities commence. Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl or its sign at or near a burrow entrance is observed within the last three years. If a burrowing owl or sign is present on the Property three additional protocol level surveys will be initiated. Once these surveys have been completed to identify the owl's location, disturbance buffers should be placed around each active burrow. No disturbance should occur within 200 meters of occupied burrows during the breeding season (February 1 through August 31) and/or within 50 meters of occupied burrows during non-breeding season (September 1 through January 31). Pre-construction surveys shall be completed 14 days prior to initiating activities.

13. Pre-construction Bat Survey – To avoid "take" of special–status bats, the following mitigation measures shall be implemented prior to the removal of any existing trees or structures on the project site:
    a) A bat habitat assessment shall be conducted by a qualified bat biologist during seasonal periods of bat activity (mid–February through mid–October – ca. Feb. 15 – Apr. 15, and Aug. 15 – October 30), to determine suitability of each existing structure as bat roost habitat.
    b) Structures found to have no suitable openings can be considered clear for project activities as long as they are maintained so that new openings do not occur.
    c) Structures found to provide suitable roosting habitat, but without evidence of use by bats, may be sealed until project activities occur, as recommended by the bat biologist. Structures with openings and exhibiting evidence of use by bats shall be scheduled for humane bat exclusion and eviction, conducted during appropriate seasons, and under supervision of a qualified bat biologist.

d) Bat exclusion and eviction shall only occur between February 15 and April 15, and from August 15 through October 30, in order to avoid take of non–volant (non–flying or inactive, either young, or seasonally torpid) individuals.

OR

A qualified wildlife biologist experienced in surveying for and identifying bat species should survey the portion of the Property with large trees and abandoned structures. If tree removal is proposed to determine if any special–status bats reside in the trees. Any special–status bats identified should be removed without harm. Bat houses sufficient to shelter the number of bats removed should be erected in open space areas that would not be disturbed by project development.

14. Final Mitigation Proposal – The Corps federal permit program requires a written statement that clearly describes measures that have been developed to compensate for any impacts to wetlands or waters of the United States.

15. Alternatives Analysis – It is unclear if an Alternatives Analysis has been competed for the proposed Project. Project applicants are required to complete an alternatives analysis in order to demonstrate that their proposed project is the least environmentally damaging practicable alternative (LEDPA) when submitting an application for a 401 Water Quality Certification. California has incorporated and redefined the 404(b)(1) guidelines as applicable to state waters (State Guidelines), and an alternatives analysis will now be required for all projects, with few exceptions. Thus, even if an alternative analysis is not required by the Corps for fill discharged to waters of the U.S., the RWQCB will require an analysis of alternatives for the entire project where there is fill to waters of the state, unless the project qualifies for an exemption.

This concludes the results of our desktop analysis and peer review for the Cameron Meadows Property. Should you have any further questions, please do not hesitate to contact me at (916) 985-1188.

Sincerely,

Jeff Olberding
Wetland Specialist

ATTACHMENTS

ATTACHMENT 1

BIOLOGICAL RESOURCES ANALYSIS REPORT
(OLBERDING ENVIRONMENTAL, INC. FEBRUARY 2023)

BIOLOGICAL RESOURCES ANALYSIS REPORT

FOR THE

CAMERON MEADOWS PROPERTY

EL DORADO COUNTY, CALIFORNIA

Prepared for:
MR. ROB HARRIS
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Cameron Park, California 95682

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FEBRUARY 2023

TABLE OF CONTENTS

SUMMARY 1
1.0 INTRODUCTION 2
2.0 LOCATION 2
3.0 PROPERTY DESCRIPTION 3
4.0 REGULATORY SETTING 4
4.1 Federal Regulatory Setting 4
4.1.1 Plants and Wildlife 4
4.1.2 Wetlands/Waters 4
4.1.3 Migratory Bird Treaty Act 5
4.1.4 Federal Bald and Golden Eagle Protection Act 6
4.2 State Regulatory Setting 7
4.2.1 Plants and Wildlife 7
4.2.2 Wetlands/Waters 8
4.2.3 California Environmental Quality Act 8
4.3 County Regulatory Setting 9
5.0 METHODS OF ANALYSIS FOR GENERAL BIOLOGICAL RESOURCES 9
5.1 Soils Evaluation 10
5.2 Desktop Analysis Methods 10
5.2.1 Review of Literature and Data Sources 11
6.0 RESULTS FOR GENERAL BIOLOGICAL RESOURCES 11
6.1 Soil Evaluation Results 11
6.2 Plant Analysis Results 12
6.2.1 Floristic Inventory and Habitat Characterization 12
6.2.2 Special-Status Plant Species 14
6.2.3 General Wildlife Species 15
6.2.4 Special-status Wildlife 15
7.0 CONCLUSIONS 17
7.1 Wetlands and Waters 17
7.2 Special-status Plants 17
7.3 Special-status Wildlife 18
8.0 RECOMMENDATIONS 18

LIST OF ATTACHMENTS

ATTACHMENT 1 FIGURES

Figure 1	Regional Map
Figure 2	Vicinity Map
Figure 3	USGS Topographic Map
Figure 4	Aerial Map
Figure 5	CNDDB Wildlife Occurrences within 5 miles
Figure 6	CNDDB Plant Occurrences within 5 miles
Figure 7	USFWS Critical Habitat
Figure 8	Soils Map
Figure 9	Habitat Map

ATTACHMENT 2 TABLES

Table 1	Special-Status Species Occurring Within/Adjacent to the Property

This report should be cited as: Olberding Environmental, Inc. February 2023. *Biological Resources Analysis Report for the Cameron Meadows Property, El Dorado County, California*. Prepared for Mr. Rob Harris.

SUMMARY

Olberding Environmental, Inc. (Olberding Environmental) conducted a desktop analysis of the Cameron Meadows Property (Property) for the purpose of identifying sensitive plant and wildlife species, sensitive habitats, and biological constraints associated with the Property. The Property analyzed is comprised of approximately 104 acres within El Dorado County, California.

The analysis identified seven habitat types that occur on the Property, including annual grassland, chaparral, intermittent drainage, mixed woodland, perennial pond, riparian woodland, and seasonal wetland. An intermittent drainage feature enters the southeastern boundary of the Property and flows north and west before flowing into the perennial pond feature near the middle of the Property. Along the west edge of the pond there is a drainage outlet and a second intermittent drainage feature flows west, off the Property. Aerial imagery suggests that the eastern drainage feature is highly scoured and contains little vegetation within the channel. However, the western drainage feature contains woody riparian vegetation along its length.

The Property contains two seasonal wetland features. Both of these features were identified by the National Wetland Inventory (NWI) and are within the national wetland database. The first wetland feature is located along the southern boundary of the perennial pond. The NWI indicates that this feature has a Cowardin Code of PEM1Ch indicated that it is an emergent palustrine feature that is persistent, seasonal flooded, and diked/impounded. The second wetland feature is located in the western portion of the Property. This feature has a Cowardin Code of PEM1C, indicating that the feature is an emergent palustrine feature that is persistent and seasonal flooded. It is recommended that a U.S. Army Corps of Engineers (Corps) wetland delineation be conducted to determine the actual extent and possible jurisdiction of the existing wetland and drainage features.

A query of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (USFWS 2023a), the California Natural Diversity Database (CNDDB 2023), and the California Native Plant Society (CNPS 2023) showed that fourteen special-status plant species and twelve special-status wildlife species have a low to moderate potential to occur on the Property. The special-status plant species with a potential to occur on the Property include Nissenan manzanita (*Arctostaphylos nissenana*), big-scale balsamroot (*Balsamorhiza macrolepis*), Stebbins' morning glory (*Calystegia stebbinsii*), Van Zuuk's morning glory (*Calystegia vanzuukiae*), chaparral sedge (*Carex xerophila*), Pine Hill ceanothus (*Ceanothus roderickii*), Red Hills soaproot (*Chlorogalum grandiflorum*), Tuolumne button-celery (*Eryngium pinnatisectum*), Pine Hill flannelbush (*Fremontodendron californicum* ssp. *decumbens*), El Dorado bedstraw (*Galium californicum* ssp. *sierrae*), Layne's ragwort (*Packera layneae*), Sanford's arrowhead (*Sagittaria sanfordii*), oval-leaved viburnum (*Viburnum ellipticum*), and El

Dorado County mule ears (*Wyethia reticulata*). Due to the temporal distribution of the blooming period of these plants it is likely that 2-3 botanical surveys will need to be conducted. A survey for Nissenan manzanita will need to be conducted in February – March, a second survey for the remainder of the plant species should be conducted in May, and a third survey for Sanford's arrowhead may need to be conducted later in the Fall.

Special-status wildlife species with the potential to occur on the Property include western bumble bee (*Bombus occidentalis*), monarch butterfly (*Danaus plexippus*), California red-legged frog (*Rana draytonii*), western spadefoot (*Spea hammondii*), western pond turtle (*Emys marmorata*), coast horned lizard (*Phrynosoma blainvillii*), tricolored blackbird (*Agelaius tricolor*), grasshopper sparrow (*Ammodramus savannarum*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), and pallid bat (*Antrozous pallidus*). Prior to any construction related activities, species specific surveys should be conducted to determine the presence or absence of the species. This includes an invertebrate survey to identify the presence of western bumble bee or monarch butterfly, a California red-legged frog visual-encounter survey, a western pond turtle visual survey, a coast horned lizard visual survey, a pre-construction avian survey for nesting birds (if project activities occur from February through August), a burrowing owl survey, and a pre-construction bat survey.

1.0 INTRODUCTION

Olberding Environmental has conducted a biological resources analysis (biological constraints assessment) of the Cameron Meadows Property, located in El Dorado County, California. This biological resources analysis includes a review of pertinent literature on relevant background information and habitat characteristics of the site. Our review includes researching existing information contained in an IPaC provided by the USFWS (2023a), occurrences within the CNDDB maintained by the California Department of Fish and Wildlife (CDFW) (2023), and the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (2023). Also included was a review of information related to species of plants and animals that could potentially utilize the described habitats identified on and immediately surrounding the Property. A field reconnaissance survey of the Property was not conducted. This report documents the methods, results, and conclusions for the reconnaissance-level analysis associated with the biological resources analysis for the Property.

2.0 LOCATION

The Property is located within the census designated community of Cameron Park, situated between the cities of El Dorado Hills and Placerville, El Dorado County, California. The Property is located approximately two miles north of California Highway 50 (CA-50) and is

situated within a rural neighborhood. There are existing suburban housing developments to the west and south of the Property, but the remainder of the Property is surrounded by open land and large, rural residential lots.

Attachment 1, Figure 1 depicts the regional location of the Property in El Dorado County, while Attachment 1, Figure 2 illustrates the vicinity of the Property in relationship to the town of Rescue. Attachment 1, Figure 3 identifies the location of the Property on the Shingle Springs USGS 7.5' Quadrangle. An aerial photograph of the Property has been included as Attachment 1, Figure 4.

Access to the Property is provided from Sacramento, CA. Take US-50 East, towards South Lake Tahoe. Take exit 35 for Cameron Park Drive and turn left. In approximately 1.6 miles, turn right onto Meder Road. Turn left onto Carousel Lane and follow the road until the intersection with Braemer Drive. The Property is to the north of this intersection.

3.0 PROPERTY DESCRIPTION

The Property encompasses approximately 104 acres of currently undeveloped land. The Property is currently privately owned, but is utilized by many local residents for hiking, bird watching, and other recreational activities. In the west and south where the Property borders suburban development, there are a variety of wood and rod-iron fences that run along the Property boundary. The remainder or the Property is unfenced and contains several established dirt trails.

The Property contains seven habitat types consisting of annual grassland, chaparral, intermittent drainage, mixed woodland, perennial pond, riparian woodland, and seasonal wetland. A physical site assessment of the Property was not conducted, so habitat types were delineated using Google Earth aerial imagery, historic imagery, and Street View ™.

Elevation on the Property ranges from approximately 1,500 feet above sea level in the northeast of the Property to approximately 1,370 feet above sea level along the western edge. Most of the elevation change is located along the east of the Property among the mixed woodland and chaparral areas, while the annual grassland areas are generally flat.

4.0 REGULATORY SETTING

4.1 Federal Regulatory Setting

4.1.1 Plants and Wildlife

The federal Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq., as amended) prohibits federal agencies from authorizing, permitting, or funding any action that would result in biological jeopardy to a plant or animal species listed as Threatened or Endangered under the Act. Listed species are taxa for which proposed and final rules have been published in the Federal Register (USFWS 2023a). If a proposed project may jeopardize listed species, Section 7 of the ESA requires consideration of those species through formal consultations with the USFWS. Federal Proposed species (USFWS 2023b) are species for which a proposed listing as Threatened or Endangered under ESA has been published in the Federal Register. If a proposed project may jeopardize proposed species, Section 7 of the ESA affords consideration of those species through informal conferences with USFWS. The USFWS defines federal Candidate species as "those taxa for which we have on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded by other higher priority listing actions" (USFWS 2023b). Federal Candidate species are not afforded formal protection, although USFWS encourages other federal agencies to give consideration to Candidate species in environmental planning.

4.1.2 Wetlands/Waters

The federal government, acting through the Corps and the Environmental Protection Agency (EPA), has jurisdiction over all "waters of the United States" as authorized by §404 of the Clean Water Act (CWA) and §10 of the Rivers and Harbors Act of 1899 (33 CFR Parts 320-330). Properties that cause the discharge of dredged or fill material into waters of the United States require permitting by the Corps. Actions affecting small areas of jurisdictional waters of the United States may qualify for a Nationwide Permit (NWP), provided conditions of the permit are met, such as avoiding impacts to threatened or endangered species or to important cultural sites. Properties that affect larger areas or which do not meet the conditions of an NWP require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan.

Waters of the United States are defined as territorial seas and traditionally navigable waters, tributaries, lakes and ponds, and impoundments of jurisdictional waters, and adjacent wetlands. Under federal regulation, wetlands are defined as areas that are inundated or saturated by surface

of groundwater at a frequency or 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 Part 328.3(c)(16)). Wetlands generally include swamps, marshes, bogs, and similar areas. In addition, portions of the riparian habitat along a river or stream may be a wetland where the riparian vegetation is at or below the ordinary high water mark and thus also meets the wetland hydrology and hydric soil criteria.

Navigable waters include all waters subject to the ebb and flow of the tides, including the open ocean, tidal bays, and tidal sloughs. Navigable waters also include some large, non-tidal rivers and lakes, which are important for transportation in commerce. The jurisdictional limit over navigable waters extends laterally to the entire water surface and bed of the waterbody landward to the limits of the mean high tide line. For non-tidal rivers or lakes, which have been designated (by the Corps) to be navigable waters, the limit of jurisdiction along the shoreline is defined by the ordinary high water mark. "Other waters" refer to waters of the United States other than wetlands or navigable waters. Other waters include streams and ponds, which are generally open water bodies and are not vegetated. Other waters can be perennial or intermittent water bodies and waterways. The Corps regulates other waters to the outward limit of the ordinary high water mark. Streams should exhibit a defined channel, bed and banks to be delineated as other waters.

The Corps does not generally consider "non-tidal drainage and irrigation ditches excavated on dry land" to be jurisdictional waters of the United States (and such ditches would therefore not be regulated by the Corps (33 CFR Parts 320-330, November 13, 1986). Other areas generally not considered jurisdictional waters include: 1) artificially irrigated areas that would revert to upland habitat if the irrigation ceased; 2) artificial lakes and ponds created by excavating and/or diking of dry land to collect and retain water, used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; 3) waste treatment ponds; 4) ponds formed by construction activities including borrow pits until abandoned; and 5) ponds created for aesthetic reasons such as reflecting or ornamental ponds (33 CFR Part 328.3). However, the preamble also states "the Corps reserves the right on a case-by-case basis to determine that a particular waterbody within these categories" can be regulated as jurisdictional water. The EPA also has authority to determine jurisdictional waters of the U.S. on a case-by-case basis. Riparian habitat that is above the ordinary high water mark and does not meet the three-parameter criteria for a wetland would not be regulated as jurisdictional waters of the United States.

4.1.3 Migratory Bird Treaty Act

Raptors are migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR. Part 10, including

feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Sections 3503, 3503.5, and 3800 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that Property-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (generally February 1 – September 1, annually). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend, is considered "taking" and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds (e.g., MBTA).

4.1.4 Federal Bald and Golden Eagle Protection Act

In addition to protection under the MBTA, both the bald eagle and the golden eagle are also protected by the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668c). The Bald and Golden Eagle Protection Act, and amended several times since being enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts, nests, or eggs (USFWS 2007). The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" (USFWS 2007).

For purposes of these guidelines, "disturb" means: "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (USFWS 2007).

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment (USFWS 2007).

4.2 State Regulatory Setting

4.2.1 Plants and Wildlife

Property permitting and approval requires compliance with California Environmental Quality Act (CEQA), the 1984 California Endangered Species Act (CESA), and the 1977 Native Plant Protection Act (NPPA). The CESA and NPPA authorize the California Fish and Game Commission to designate Endangered, Threatened and Rare species and to regulate the taking of these species (§§2050-2098, Fish & Game Code). The California Code of Regulations (Title 14, §670.5) lists animal species considered Endangered or Threatened by the State.

The Natural Heritage Division of the CDFW administers the state rare species program. The CDFW maintains lists of designated Endangered, Threatened, and Rare plant and animal species (CDFW 2023a and 2023b). Listed species either were designated under the NPPA or designated by the Fish and Game Commission. In addition to recognizing three levels of endangerment, the CDFW can afford interim protection to candidate species while they are being reviewed by the Fish and Game Commission.

The CDFW also maintains a list of animal species of special concern (CDFW 2023b), most of which are species whose breeding populations in California may face extirpation. Although these species have no legal status, the CDFW recommends considering them during analysis of proposed property impacts to protect declining populations and avoid the need to list them as endangered in the future.

The California Fish & Game Code §3503, 3503.5, and 3513 cover native bird protection. Mitigation for avoidance of impacts to nesting birds are typically necessary to comply with these Sections of the Fish and Game Code in CEQA and other permitting documents.

Under provisions of §15380(d) of the CEQA Guidelines, the CEQA lead agency and CDFW, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFW considers plant species on List 1A (Plants Presumed Extinct in California), List 1B (Plants Rare, Threatened, or Endangered in California and elsewhere), or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik 1994) as qualifying for legal protection under §15380(d). Species on CNPS Lists 3 or 4 may, but generally do not, qualify for protection under this provision.

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species and CDFW Species of Special Concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the CNDDB working list of "high priority" habitats (i.e., those habitats that are rare or endangered within the borders of California) (Holland 1986).

4.2.2 Wetlands/Waters

The RWQCB regulates activities in wetlands and other waters through §401 of the Clean Water Act and the Porter-Cologne Act. Section 401 requires a state water quality certification for properties subject to 404 regulations. Requirements of the certification include mitigation for loss of wetland habitat. In the San Francisco Bay region, the RWQCB may identify additional wetland mitigation beyond the mitigation required by the Corps. California Fish and Game Code §§1600-1607 require the CDFW be notified of any activity that could affect the bank or bed of any stream that has value to fish and wildlife. Upon notification, the CDFW has the discretion to execute a Streambed Alteration Agreement. The CDFW defines a stream as follows:

> *"... a body of water that flows at least periodically...through a bed or channel having banks and supporting fish and other aquatic life. This includes watercourses having a subsurface flow that supports or has supported riparian vegetation."*
>
> (Source: Streambed Alteration Program, California Department of Fish and Wildlife, 2016).

In practice, CDFW authority is extended to any "blue line" stream shown on a USGS topographic map, as well as unmapped channels with a definable bank and bed. Wetlands, as defined by the Corps, need not be present for CDFW to exert authority.

4.2.3 California Environmental Quality Act

According to Appendix G of the CEQA (CEQA 2016) Guidelines, a proposed project would have a significant impact on biological resources if it would:

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 CDFW and USFWS?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

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?

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

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?

4.3 County Regulatory Setting

The Property is subject to all applicable regulations within the El Dorado County General Plan (El Dorado County Planning Department 2004). Specifically, policy 7.3.3.4, which states that the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands.

5.0 METHODS OF ANALYSIS FOR GENERAL BIOLOGICAL RESOURCES

A special-status plant and wildlife species database search and review was conducted using the CNDDB and other sources. An additional search was conducted for special-status plants using the CNPS on-line Inventory. Special-status species reports were accessed by searching the CNDDB database for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown USGS 7.5-minute quadrangles which surround the Property, and by examining those species that have been identified in the vicinity of the Property. These quadrangles will be henceforth noted as surrounding quads. The database report identified special-status species known to occur in the region or those that have the potential to occur in the vicinity of the Property.

The objectives of the desktop analysis were to determine the potential presence or absence of special-status species habitat listed in the CNDDB database report and to identify any wetland areas that could be potentially regulated by the Corps, RWQCB, and/or CDFW (CNDDB 2023). Regulatory agencies evaluate the possibility of occurrence based on habitats observed on-site and the degree of connectivity with other special-status animal habitats in the vicinity of the

Property. These factors are discussed in each special-status plant or animal section. Potential for occurrence of each special-status or protected plant and animal species was evaluated using the following criteria.

- **Present**: The species has been recorded by CNDDB or other literature as occurring on the Property.

- **May Occur**: The species has been recorded by CNDDB or other literature as occurring within five miles of the Property, and/or was observed within five miles of the Property, and/or suitable habitat for the species is present on the Property or its immediate vicinity.

- **Not Likely to Occur**: The species has historically occurred on or within five miles of the Property but has no current records. The species occurs within five miles of the Property, but only marginally suitable habitat conditions are present. The Property is likely to be used only as incidental foraging habitat or as an occasional migratory corridor.

- **Presumed Absent**: The species will not occur on the Property due to the absence of suitable habitat conditions, and/or the lack of current occurrences.

Sources consulted for agency status information include USFWS (2023a) for federally listed species and CDFW (2023b) for State of California listed species. Based on information from the above sources, Olberding Environmental developed a target list of special-status plants and animals with the potential to occur within or in the vicinity of the Property (Attachment 2, Table 1).

5.1 Soils Evaluation

The soils present on a property may determine if habitat on the site is suitable for certain special-status plants and animals. The host plants of some special-status invertebrates may also require specific soil conditions. In the absence of suitable soil conditions, special-status plants or animals requiring those conditions would be presumed absent. Information regarding soil characteristics for the Property was obtained by viewing the Natural Resources Conservation Service (NRCS) Web Soil Survey report for the Property (NRCS 2023).

5.2 Desktop Analysis Methods

The purposes of the desktop analysis were (1) to characterize the habitat types (plant communities) of the study area; (2) to determine whether any suitable habitat for any special-

status plant species occurs within the study area; and (3) to determine whether any sensitive habitat types (e.g., wetlands) occur within the study area.

5.2.1 Review of Literature and Data Sources

Olberding Environmental conducted focused analysis of literature and special-status species databases in order to identify special-status plant species and sensitive habitat types with potential to occur in the study area. Sources reviewed included the USFWS IPaC database (2023a), CNDDB occurrence records (CNDDB 2023) and CNPS *Inventory* (2023) for the surrounding quads; and standard flora (Hickman 2012). From the above sources, a list of special-status plant and wildlife species with potential to occur in the Property vicinity was developed (Attachment 2, Table 1).

6.0 RESULTS FOR GENERAL BIOLOGICAL RESOURCES

The search and review of the CNDDB database reports revealed the occurrence of special-status plant and wildlife species that occur in the habitats found within the Property boundaries (CNDDB 2022). The CNDDB database and background data were reviewed for the surrounding quads. Animal occurrences shown on Attachment 1, Figure 5 and plant occurrences shown on Attachment 1, Figure 6 are located within 5 miles of the Property and were reviewed for their potential to occur on the Property based on general habitat types. Results of the species review is tabulated on Attachment 2, Table 1. Critical habitat within the surrounding quads is shown on Attachment 1, Figure 7.

6.1 Soil Evaluation Results

The NRCS (2023) reports four soil types within the Property. A detailed map of the soils for the Property can be found in Attachment 1, Figure 8. The soils mapped include the following types as described in the Soil Survey of the El Dorado Area, California (USGS 1974):

- **ReB - Rescue sandy loam, 2 to 9 percent slopes –** The Rescue series consists of well drained soils derived from residuum weather from gabbro. This soil type is not considered hydric.

- **RfC—Rescue very stony sandy loam, 3 to 15 percent slopes** – This soil series is similar to the Rescue sandy loam describe above but with larger diameter gravel and cobble and steeper slopes.

- **Rk—Rescue clay, clayey variant** – The Rescue clay series is poorly drained and

consists of alluvium derived from mixed sources over igneous rock. This soil type is considered hydric.

- **Water** – This area consists of a perennial water feature.

6.2 Plant Analysis Results

6.2.1 Floristic Inventory and Habitat Characterization

The Property supports seven habitat types consisting of annual grassland, chaparral, intermittent drainage, mixed woodland, perennial pond, riparian woodland, and seasonal wetland. In classifying the habitat types on the Property, generalized plant community classification schemes were used (Sawyer, Keeler-Wolf, and Evens 2009). Special-status plant species occurrences that are located within 5 miles of the Property are shown in Attachment 1, Figure 6. The habitats found on the Property are mapped on Attachment 1, Figure 9.

Annual Grassland

Annual grassland makes up a large portion of the Property, particularly the western half. Information provided by the client suggests that the grassland habitat area is dominated by non-native species such as brome (*Bromus* sp.) and little quaking grass (*Briza minor*), with additional native species such as purple needle grass (*Stipa pulchra*), bluegrass (*Poa annua*), and blue wild rye (*Elymus glaucus*).

Chaparral

Chaparral habitat is located along the northern and eastern boundaries of the Property. Information provided by the client suggests that this habitat area is dominated by shrub species such as chamise (*Adenostoma fasciculatum*), white leaf manzanita (*Arctostaphylos viscida* ssp. *pulchella*), toyon (*Heteromeles arbutifolia*), western redbud (*Cercis occidentalis*), poison oak (*Toxicodendron diversilobum*), ceanothus (*Ceanothus* sp.), and California buckthorn (*Frangula californica*).

Intermittent Drainage

An intermittent drainage feature enters the southeastern boundary of the Property and flows north and west before flowing into the perennial pond feature in the middle of the Property. Along the west edge of the pond there is a drainage outlet and a second intermittent drainage feature flows west, off of the Property. Aerial imagery suggests that the eastern drainage feature

is highly scoured and contains little vegetation with the channel. However, the western drainage feature contains woody riparian vegetation along its length.

Mixed Woodland

Areas of mixed woodland are located across the northern portion of the Property and a second area near the southwestern portion of the Property. These woodland areas contain a mix of deciduous and evergreen hardwood trees. Google Earth Street View ™ and information provided from the client suggest that this habitat area is dominated by species such as gray pine (*Pinus sabiniana*), ponderosa pine (*Pinus ponderosa*), interior live oak (*Quercus wislizeni*), blue oak (*Quercus douglasii*), and California black oak (*Quercus kelloggii*).

Perennial Pond

There is a perennial pond feature located near the middle of the Property. There is an artificial berm along the western portion of the pond, and riparian vegetation grows around much of it. Google Earth historic imagery suggests that the pond stays inundated at a relatively consistent level throughout the year.

Riparian Woodland

Areas of riparian woodland occur around the perennial pond feature in the middle of the Property and the intermittent drainage features that flow into and out of the pond. It is likely that the species composition of the tree canopy within this habitat type is similar to that of the mixed woodland, and the understory is likely a mix of species also found among the annual grassland and seasonal wetland habitats.

Seasonal Wetland

The Property contains two seasonal wetland features. Both of these features were identified by the National Wetland Inventory (NWI) and are within the national wetland database. The first wetland feature is located along the southern boundary of the perennial pond. The NWI indicates that this feature has a Cowardin Code of PEM1Ch indicated that it is an emergent palustrine feature that is persistent, seasonal flooded, and diked/impounded.

The second wetland feature is located in the western portion of the Property. This feature has a Cowardin Code of PEM1C, indicating that the feature is an emergent palustrine feature that is persistent and seasonal flooded.

6.2.2 Special-Status Plant Species

Special-status plant species include species listed as Rare, Threatened, or Endangered by the USFWS (2023a) or by the State of California (CDFW 2023a). Federal Proposed and Candidate species (USFWS, 2023b) are also special-status species. Special-status species also include species listed on List 1A, List 1B, or List 2 of the CNPS Inventory (Skinner and Pavlik, 1994; CNPS 2023). All species in the above categories fall under state regulatory authority under the provisions of CEQA, and may also fall under federal regulatory authority. Considered special-status species are species included on List 3 (Plants About Which We Need More Information—A Review List) or List 4 (Plants of Limited Distribution—A Watch List) of the CNPS *Inventory*. These species are considered to be of lower sensitivity and generally do not fall under specific state or federal regulatory authority. Specific mitigation considerations are not generally required for List 3 and List 4 species.

Attachment 2, Table 1 includes a list of special-status plants with the potential to occur within or in the immediate vicinity of the Property based on a review of the surrounding quads. The special-status plant species identified by the CNDDB as potentially occurring on the Property are known to grow only from specific habitat types. The specific habitats or "micro-climate" necessary for many of the plant species to occur are not found within the boundaries of the Property. Occurrences of special-status plants within a five-mile radius of the Property are described in detail (Attachment 1, Figure 6).

Fourteen special status plants species were determined to have a potential to occur on the Property based on present habitat types, soils, and nearby CNDDB occurrences. Additional information on the required habitat types for each species can be found in Table 1.

- Nissenan manzanita (*Arctostaphylos nissenana*). CNPS 1B.2
- Big-scale balsamroot (*Balsamorhiza macrolepis*). CNPS 1B.2
- Stebbins' morning glory (*Calystegia stebbinsii*). Federally Endangered, State Candidate for Endangered, CNPS 1B.1
- Van Zuuk's morning glory (*Calystegia vanzuukiae*). CNPS 1B.3
- Chaparral sedge (*Carex xerophila*). CNPS 1B.2
- Pine Hill ceanothus (*Ceanothus roderickii*). Federally Endangered, State Rare, CNPS 1B.1

- Red Hills soaproot (*Chlorogalum grandiflorum*). CNPS 1B.2
- Tuolumne button-celery (*Eryngium pinnatisectum*). CNPS 1B.2
- Pine Hill flannelbush (*Fremontodendron californicum* ssp. *decumbens*). Federally Endangered, State Rare, CNPS 1B.2
- El Dorado bedstraw (*Galium californicum* ssp. *sierrae*). Federally Endangered, State Rare, CNPS 1B.2
- Layne's ragwort (*Packera layneae*). Federally Threatened, State Rare, CNPS 1B.2
- Sanford's arrowhead (*Sagittaria sanfordii*). CNPS 1B.2
- Oval-leaved viburnum (*Viburnum ellipticum*). CNPS 2B.3
- El Dorado County mule ears (*Wyethia reticulata*). CNPS 1B.2

Due to the temporal distribution of the blooming period of these plants it is likely that 2-3 botanical surveys will need to be conducted. A survey for Nissenan manzanita will need to be conducted in February – March, a second survey for the remainder of the plant species should be conducted in May, and a third survey for Sanford's arrowhead may need to be conducted later in the Fall. The soils for the Property are classified as sandy and/or gravely and derived from gabbro soils, but they are not classified as serpentinite soils. As such, special-status plant species that require serpentinite soils were presumed absent from the Property.

6.2.3 General Wildlife Species

Information provided by the client indicates that the Property supports a variety of wildlife typical of foothill grasslands and woodland habitats. Species of note include coyote (*Canis latrans*), black-tailed jackrabbit (*Lepus californicus*), black-tailed deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), California ground squirrel (*Otospermophilus beecheyi*), black bear (*Ursus americanus*), western rattlesnake (*Crotalus oreganus*), California whipsnake (*Masticophis lateralis*), and California horned lizard (*Phrynosoma coronatum*).

6.2.4 Special-status Wildlife

Special-status wildlife species includes species listed as Rare, Threatened, or Endangered by the USFWS (2023a) or by the State of California (CDFW 2023a). Federal Proposed and Candidate

species (USFWS, 2023b) and species listed as Species of Special Concern by the CDFW are also includes as special-status.

Attachment 2, Table 1 includes a list of special-status wildlife species with the potential to occur within or in the immediate vicinity of the Property based on a review of the surrounding quads. Occurrences of special-status wildlife within a five-mile radius of the Property are shown in Attachment 1, Figure 7.

Twelve special status wildlife species were determined to have a potential to occur on the Property. Additional information on the required habitat types for each species can be found in Table 1.

- Western bumble bee (*Bombus occidentalis*). State candidate for Endangered
- Monarch butterfly (*Danaus plexippus*). Federal candidate for listing
- California red-legged frog (*Rana draytonii*). Federally Threatened, State Species of Special Concern
- Western spadefoot (*Spea hammondii*). State Species of Special Concern
- Western pond turtle (*Emys marmorata*). State Species of Special Concern
- Coast horned lizard (*Phrynosoma blainvillii*). State Species of Special Concern
- Tricolored blackbird (*Agelaius tricolor*). State Species of Special Concern
- Grasshopper sparrow (*Ammodramus savannarum*). State Species of Special Concern
- Golden eagle (*Aquila chrysaetos*). State Fully Protected
- Burrowing owl (*Athene cunicularia*). State Species of Special Concern
- White-tailed kite (*Elanus leucurus*). State Fully Protected
- Pallid bat (*Antrozous pallidus*). State Species of Special Concern

It was determined that western bumble bee and monarch butterfly may utilize flowering species growing within the annual grassland habitat for foraging. California red-legged frog and western pond turtle may occur within the perennial pond feature found on the Property. Western spadefoot may breed within the seasonal wetlands or within the intermittent drainage features on

the Property. Coast horned lizard may occur among sandy areas of the annual grassland or chaparral areas. Tricolored blackbird may utilize the seasonal wetlands for breeding habitat, and grasshopper sparrow and burrowing owl may forage and/or nest within the annual grassland areas. Golden eagle and white-tailed kite may nest within the woodland habitat and forage throughout the Property. Finally, there is foraging and roosting habitat for pallid bat throughout the Property.

7.0 CONCLUSIONS

7.1 Wetlands and Waters

The Property contains two seasonal wetland features, two intermittent drainage features, and a perennial pond feature. The pond feature is located near the middle of the Property. Google Earth historic imagery suggests that the feature stays inundated at a relatively consistent level throughout the year. There is one intermittent drainage feature that empties enters the Property from the east and flows into the pond, and a second feature that flows from the pond to the west and off the Property. Google Earth aerial imagery suggests that the eastern drainage feature is highly scoured and contains little vegetation within the channel. However, the western drainage feature contains woody riparian vegetation along its length.

The Property contains two seasonal wetland features. Both of these features were identified by the National Wetland Inventory (NWI) and are within the national wetland database. The first wetland feature is located along the southern boundary of the perennial pond. The NWI indicates that this feature has a Cowardin Code of PEM1Ch indicated that it is an emergent palustrine feature that is persistent, seasonal flooded, and diked/impounded. The second wetland feature is located in the western portion of the Property. This feature has a Cowardin Code of PEM1C, indicating that the feature is an emergent palustrine feature that is persistent and seasonal flooded.

7.2 Special-status Plants

Results of the desktop analysis indicate that the Property has the potential to support fourteen special-status plant species. This includes Nissenan manzanita, big-scale balsamroot, Stebbins' morning glory, Van Zuuk's morning glory, chaparral sedge, Pine Hill ceanothus, Red Hills soaproot, Tuolumne button-celery, Pine Hill flannelbush, El Dorado bedstraw, Layne's ragwort, Sanford's arrowhead, oval-leaved viburnum, and El Dorado County mule ears. A site visit was not conducted, so the presence or absence of these species cannot be confirmed without targeted botanical surveys.

7.3 Special-status Wildlife

Results of the desktop analysis indicate that the Property has the potential to support twelve special-status wildlife species. This includes western bumble bee, monarch butterfly, California red-legged frog, western spadefoot, western pond turtle, coast horned lizard, tricolored blackbird, grasshopper sparrow, golden eagle, burrowing owl, white-tailed kite, and pallid bat. Protocol-level surveys would need to be conducted to confirm the presence or absence of these species.

8.0 RECOMMENDATIONS

- **Corps Jurisdictional Delineation** – A Corps wetland delineation should be prepared to document the actual extent of jurisdictional features if any construction activity could result in impacts to wetlands/waters. If the wetlands/waters are deemed jurisdictional and construction activities are proposed that could impact these features, permits must be obtained prior to construction. Setbacks from the wetlands/water features may be required to protect habitat quality and to protect water quality. Permitting to allow impacts to wetlands/waters features may also require mitigation.

- **Rare Plant Survey** – A rare plant survey of the Property in accordance with CDFW and CNPS guidelines should be required prior to construction. The survey should be scheduled to coincide with the identified blooming or identification periods for those species having potential to occur. Due to the temporal distribution of the blooming period of these plants it is likely that 2-3 botanical surveys will need to be conducted. A survey for Nissenan manzanita will need to be conducted in February – March, a second survey for the remainder of the plant species should be conducted in May, and a third survey for Sanford's arrowhead may need to be conducted later in the Fall. Any rare, threatened, or endangered plant species, including but not limited to those listed in Attachment 2, Table 1, should be identified and mapped. If any of these species are found, consultation with the USFWS and/or CDFW may be required.

- **Invertebrate Survey –** Prior to construction, an invertebrate survey should be conducted on the Property to identify if western bumble bee or monarch butterfly utilize flowering plants growing on the Property. As the special-status species are active during the blooming period of their recognized food plants, the survey should be timed from May to June. The biologists conducting the survey should be familiar with the primary identification characteristics of each invertebrate species.

- **California Red-legged Frog Visual-encounter Survey –** Prior to construction, a visual-encounter survey should be conducted to identify the presence or absence of California

red-legged frog. Surveys should follow the methodology outlined in the *Revised Guidance on Site Assessments and Field Surveys of the California Red-legged Frog* (USFWS 2005). The most common method of surveying for CRF is the visual-encounter survey. These survey are conducted either during daylight hours or at night by walking entirely around the pond or marsh or along the entire length of a creek or stream while repeatedly scanning for frogs.

- **Western Pond Turtle Visual Survey** – A survey should be conducted to determine the presence or absence of western pond turtle within the pond immediately adjacent to the northern boundary of the Property. Surveys should be conducted according to the protocol outlined in *USGS Western Pond Turtle (*Emys marmorata*) Visual Survey Protocol for the Southcoast Ecoregion* (USGS 2006). If any western pond turtles are found, consultation with the CDFW may be required.

- **Coast Horned Lizard Visual Survey –** Prior to construction, a survey should be conducted to identify the presence or absence of coast horned lizard. There is no standardized survey methodology for this species, so it is recommended that the surveying biologists use a modified version of the *Survey Protocol for the Blunt-nosed Leopard Lizard* (CDFW 2019). Particularly, a minimum of two surveyors, walking parallel transect lines, should survey all areas of potential habitat. In areas of dense vegetation, no greater than 10-meter wide transects should be walked at a slow pace. As this species is diurnal, surveys should be conducted during periods of warm weather. If any coast horned lizards are identified, consultation with the CDFW may be required.

- **Pre-Construction Avian Survey** – If project construction-related activities take place during the nesting season (February through August), preconstruction surveys for all nesting birds (including waterfowl, passerines, raptors, and other birds) within and adjacent to (within 1,000 feet) the Property should be conducted by a competent biologist 14 days prior to the commencement of the tree removal or site grading activities. Surveys should focus on areas where birds are likely to nest, including trees, shrubs, grasslands, rock faces, stream banks, or under eves of structures. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for small passerine birds, and a minimum of 250 feet for raptors. The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer

needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s). Active nests, including those in the process of being constructed shall not be disturbed. Surveys shall be repeated in areas where Project activities lapse for a period of 7 days or more.

- **Burrowing Owl Surveys** – A burrowing owl pre-construction survey should take place before any construction activities commence. Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl or its sign at or near a burrow entrance is observed within the last three years. If a burrowing owl or sign is present on the Property three additional protocol level surveys will be initiated. Once these surveys have been completed to identify the owl's location, disturbance buffers should be placed around each active burrow. No disturbance should occur within 200 meters of occupied burrows during the breeding season (February 1 through August 31) and/or within 50 meters of occupied burrows during non-breeding season (September 1 through January 31). Pre-construction surveys shall be completed 14 days prior to initiating activities.

- **Pre-construction Bat Survey –** To avoid "take" of special–status bats, the following mitigation measures shall be implemented prior to the removal of any existing trees or structures on the project site:

  a) A bat habitat assessment shall be conducted by a qualified bat biologist during seasonal periods of bat activity (mid–February through mid–October – ca. Feb. 15 – Apr. 15, and Aug. 15 – October 30), to determine suitability of each existing structure as bat roost habitat.

  b) Structures found to have no suitable openings can be considered clear for project activities as long as they are maintained so that new openings do not occur.

  c) Structures found to provide suitable roosting habitat, but without evidence of use by bats, may be sealed until project activities occur, as recommended by the bat biologist. Structures with openings and exhibiting evidence of use by bats shall be scheduled for humane bat exclusion and eviction, conducted during appropriate seasons, and under supervision of a qualified bat biologist.

  d) Bat exclusion and eviction shall only occur between February 15 and April 15, and from August 15 through October 30, in order to avoid take of non–volant (non–flying or inactive, either young, or seasonally torpid) individuals.

  OR

a) A qualified wildlife biologist experienced in surveying for and identifying bat species should survey the portion of the Property with large trees and abandoned structures. If tree removal is proposed to determine if any special–status bats reside in the trees. Any special–status bats identified should be removed without harm. Bat houses sufficient to shelter the number of bats removed should be erected in open space areas that would not be disturbed by project development.

- **Erosion Control** – Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the Property could adversely affect aquatic life within the adjacent water features. Surface water runoff could remove particles of fill or excavated soil from the site, or could erode soil down-gradient, if the flow were not controlled. Deposition of eroded material in adjacent water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat. Implementation of appropriate mitigation measures would ensure that impacts to aquatic organisms would be avoided or minimized. Mitigation measures may include best management practices (BMP's) such as hay bales, silt fencing, placement of straw mulch and hydro seeding of exposed soils after construction as identified in the Storm Water Pollution Prevention Plan (SWPPP).

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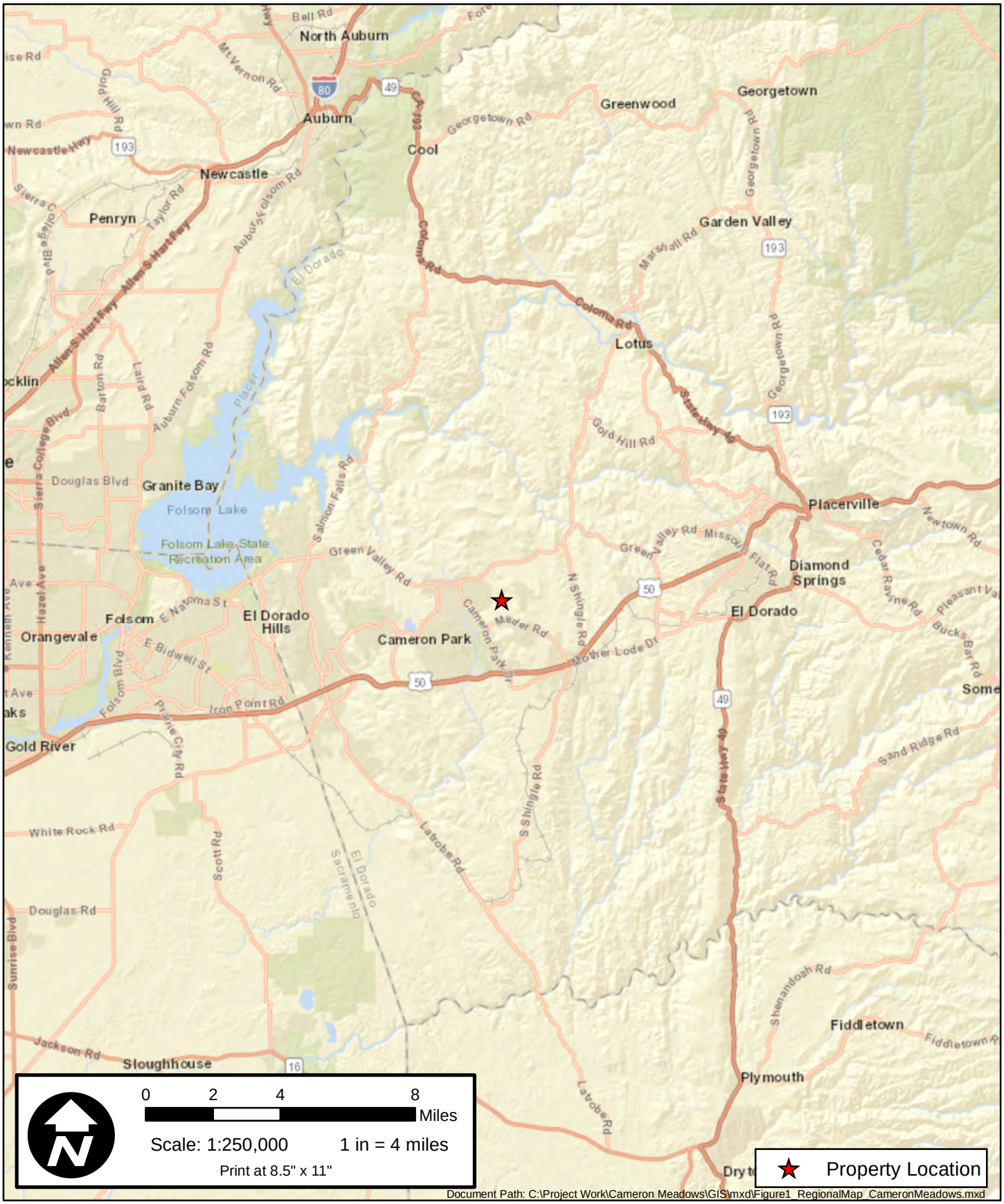
ATTACHMENTS

ATTACHMENT 1
FIGURES

Figure 1 **Regional Map**
Figure 2 **Vicinity Map**
Figure 3 **USGS Quadrangle Map**
Figure 4 **Aerial Photograph**
Figure 5 **CNDDB Map of Special Status Wildlife**
Figure 6 **CNDDB Map of Special Status Plants**
Figure 7 **USFWS Designated Critical Habitat**
Figure 8 **Soils Map**
Figure 9 **Habitat Map**



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OLBERDING -ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 1: Regional Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/09/2023

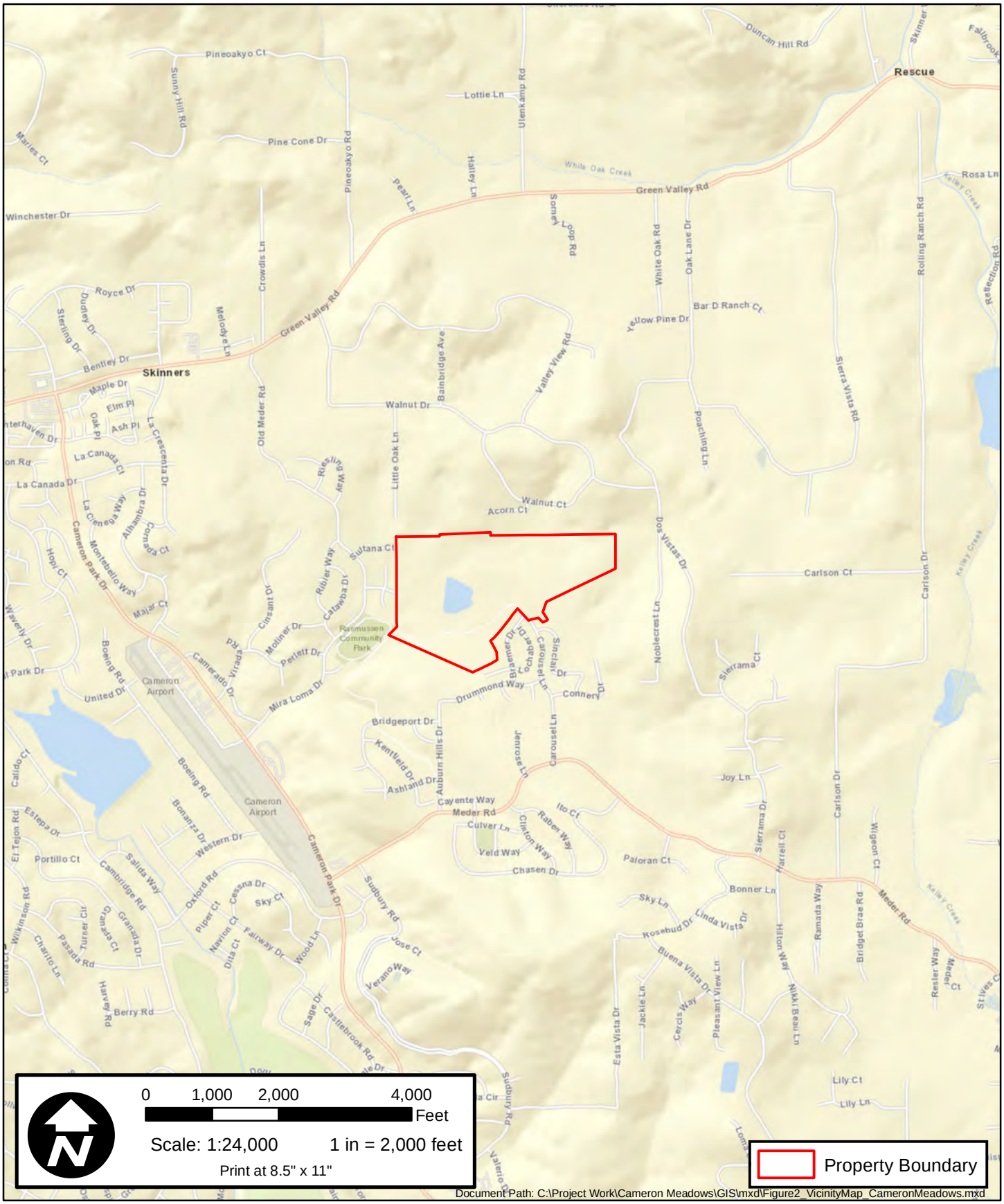

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Figure 2: Vicinity Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/09/2023

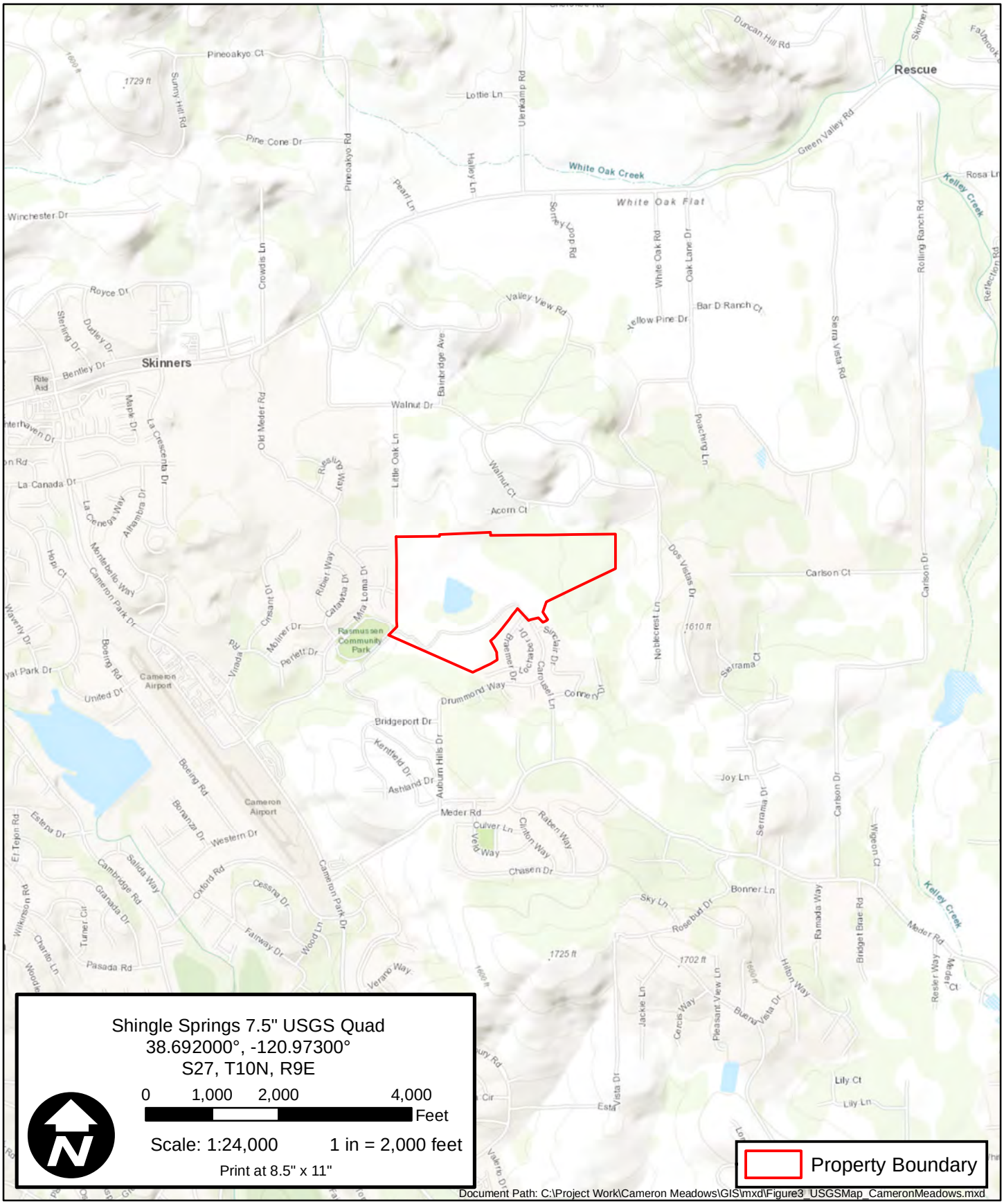

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Figure 3: USGS Topographic Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/09/2023

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Figure 4: Aerial Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/09/2023

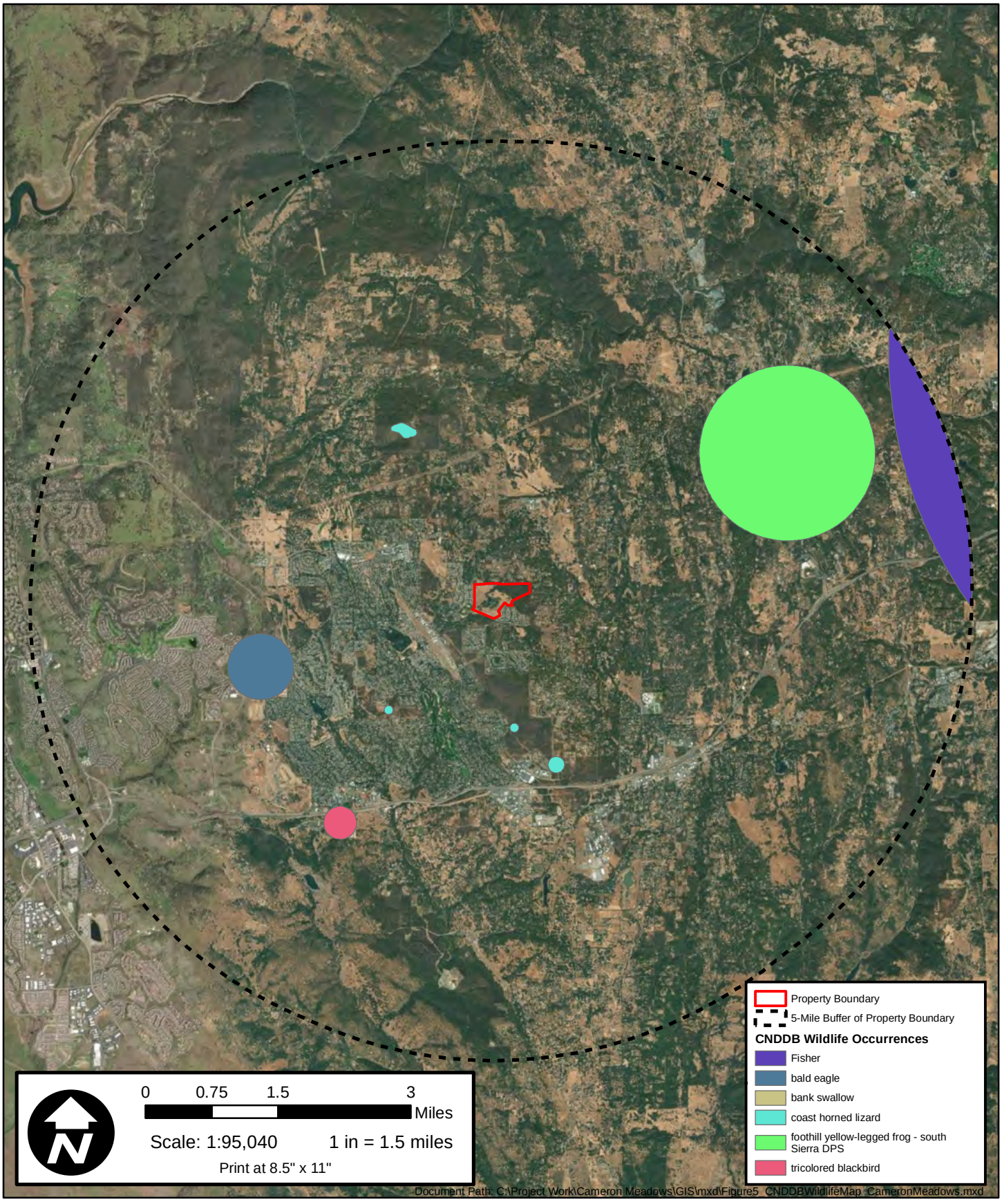

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Figure 5: CNDDB Wildlife Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/09/2023

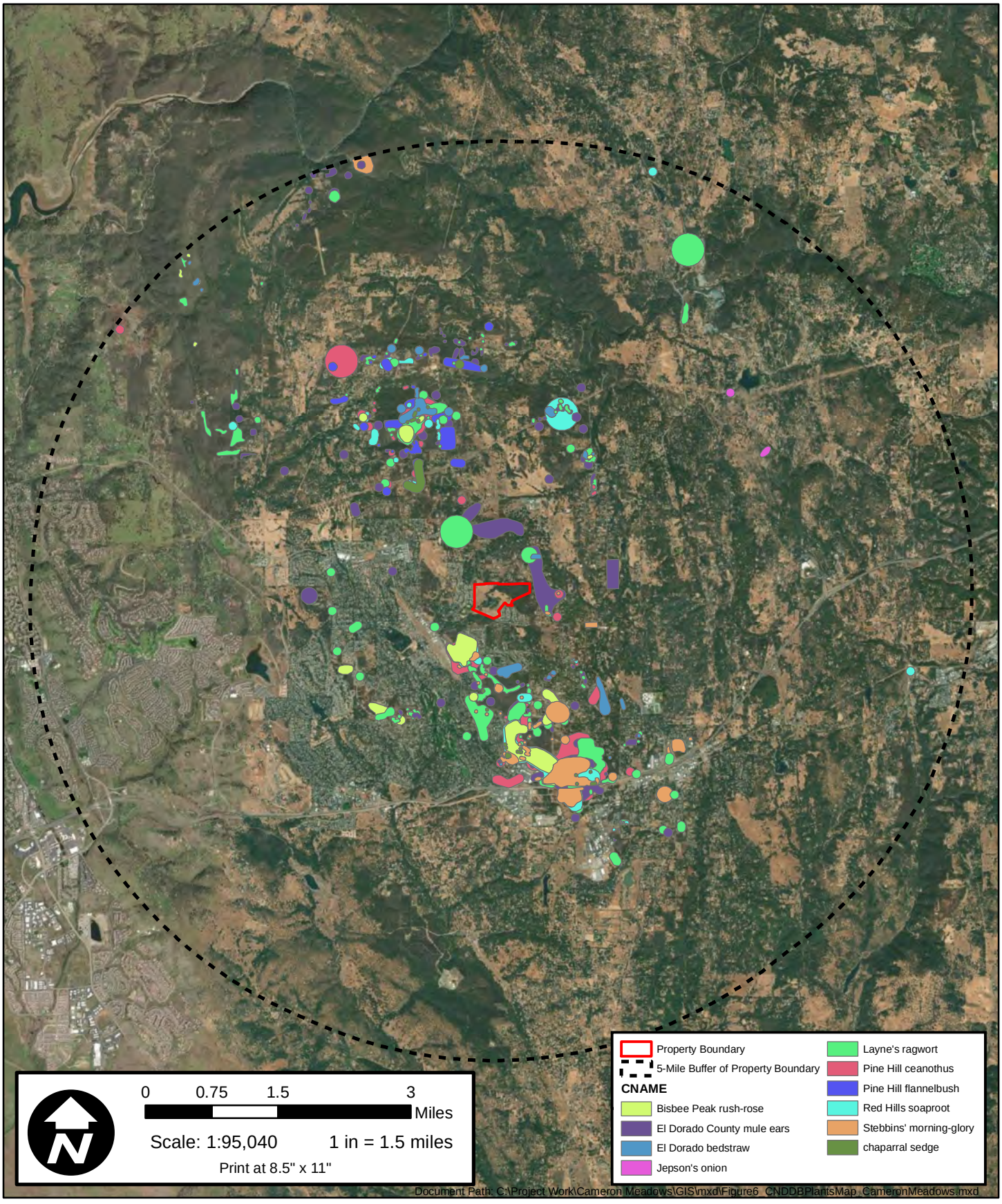

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Figure 6: CNDDB Plants Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/09/2023

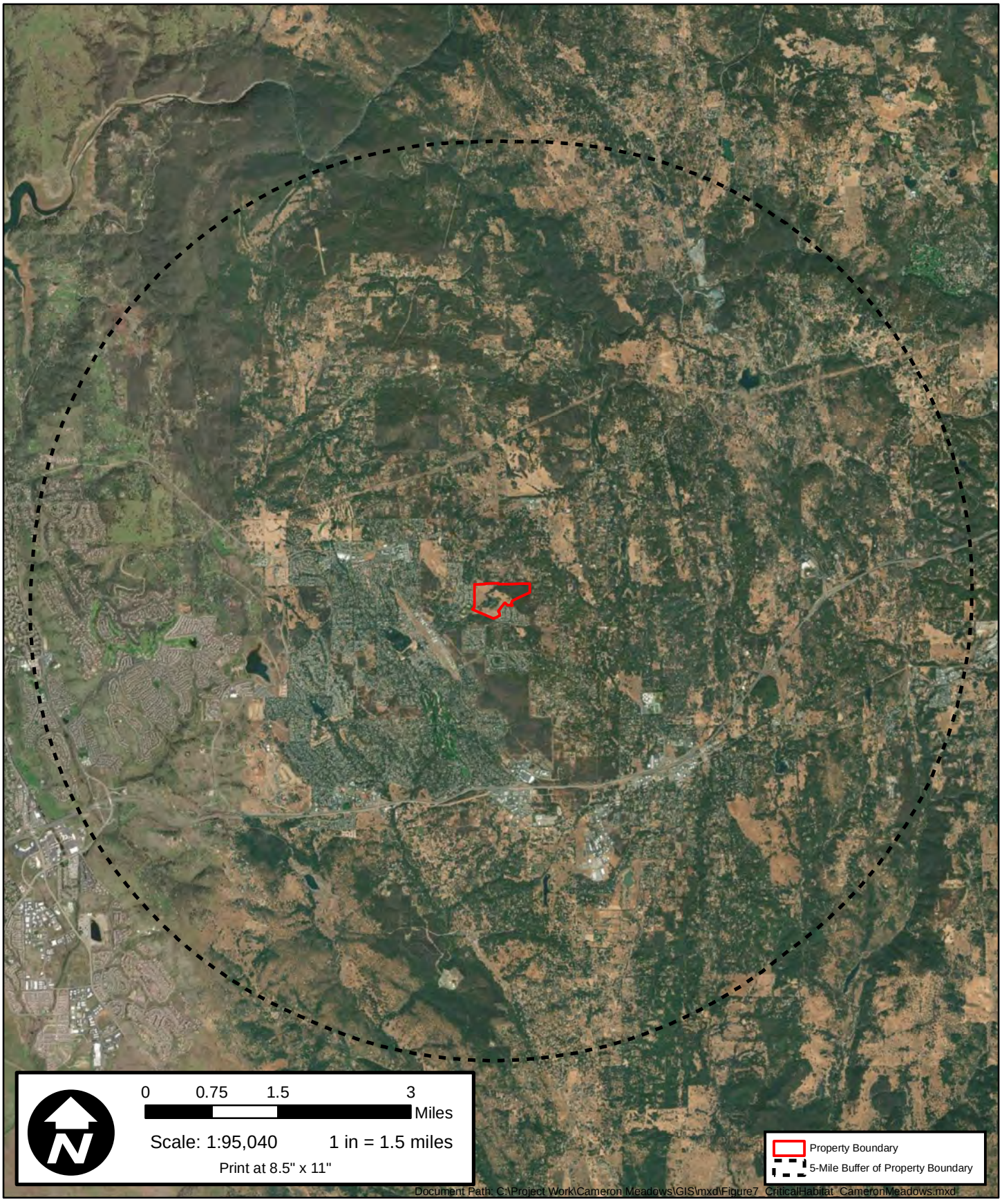

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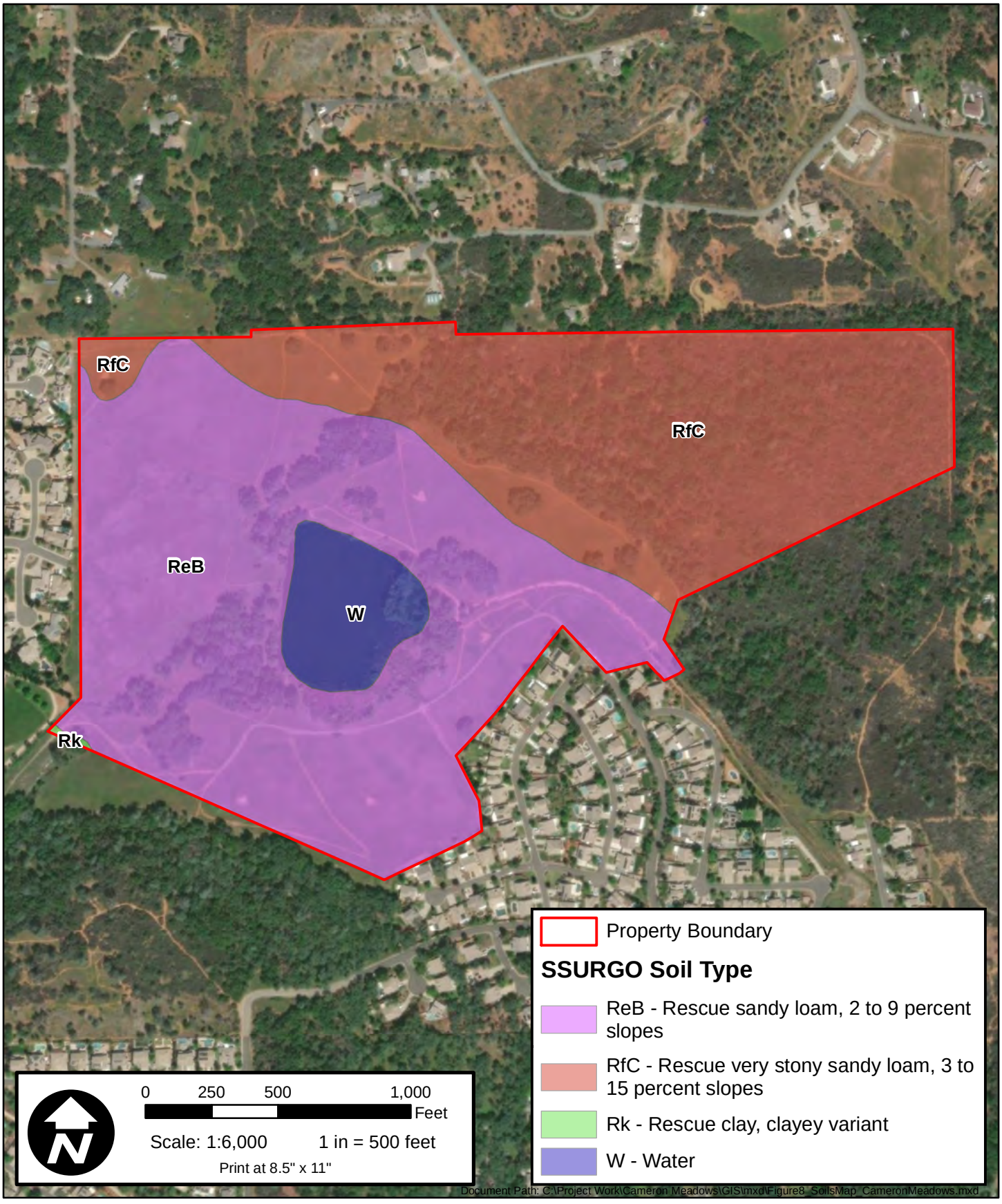
Figure 7: Critical Habitat Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/09/2023



OLBERDING -ENVIRONMENTAL-
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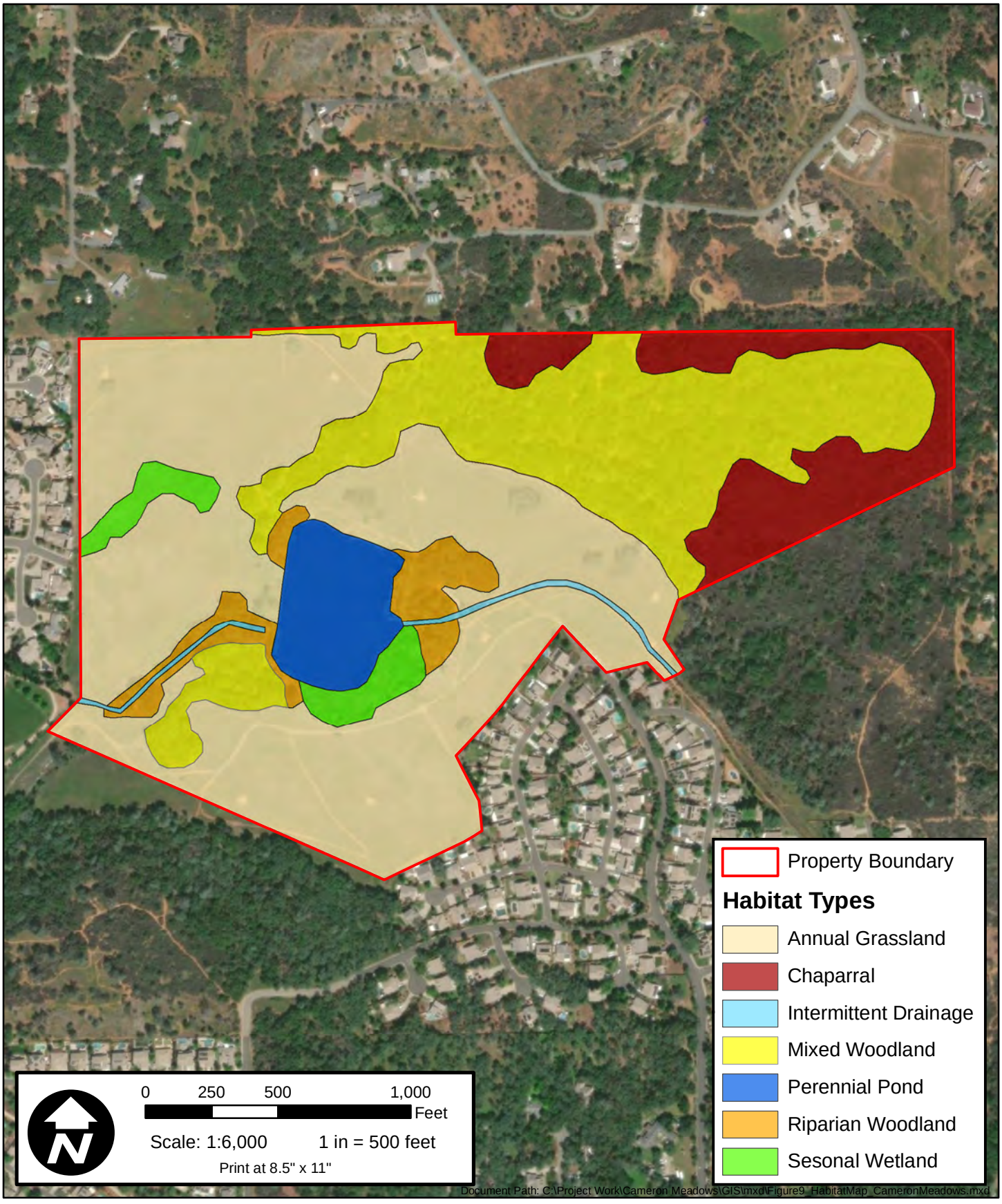
Figure 8: Soils Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/09/2023



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Phone: (916) 985-1188

Figure 9: Habitat Map
Cameron Meadows
El Dorado County, California

Revision Date: 01/10/2023

ATTACHMENT 2

TABLES

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
PLANTS					
Jepson's onion (*Allium jepsonii*)	-/-/1B.2	April – August	Perennial bulbiferous herb, found among chaparral, cismontane woodland, and lower montane coniferous forest that have serpentinite or volcanic soils. Located from 985 – 4,330 ft. elevation.	No serpentinite or volcanic soils.	Presumed absent.
Nissenan manzanita (*Arctostaphylos nissenana*)	-/-/1B.2	February – March	Perennial evergreen shrub, found among rocky areas of closed-cone coniferous forests and chaparral. Located from 1,475 – 3,610 ft. elevation.	Moderate Rocky areas of chaparral present.	May occur.
big-scale balsamroot (*Balsamorhiza macrolepis*)	-/-/1B.2	March - June	Perennial herb found among chaparral, cismontane woodland, and valley and foothill grasslands, sometimes in serpentinite soils. Located from 150 – 5,100 ft. elevation.	Low Habitat present but no serpentinite soils.	Not likely to occur.
Stebbins' morning glory (*Calystegia stebbinsii*)	FE/CE/1B.1	April – July	Perennial rhizomatous herb, found among openings in chaparral, cismontane woodlands, sometimes among gabbroic soils or seeps. Located from 605 – 3,575 ft. elevation.	Moderate Habitat present and nearby CNDDB occurrences	May occur.
Van Zuuk's morning glory (*Calystegia vanzuukiae*)	-/-/1B.3	May – August	Perennial rhizomatous herb, found among chaparral and cismontane woodlands with gabbroic or serpentinite soils. Located from 1,640 – 3,870 ft. elevation.	Moderate Habitat and gabbroic soils present	May occur.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Sierra arching sedge (*Carex cyrtostachya*)	-/-/1B.2	May – August	Perennial herb found among mesic areas of lower montane coniferous forests, meadows and seeps, marshes and swamps, and the margins of riparian areas. Located from 2,000 – 4,460 ft. elevation.	Outside the elevation range for the species	Presumed absent.
chaparral sedge (*Carex xerophila*)	-/-/1B.2	March – June	Perennial herb found among chaparral, cismontane woodland, and lower montane coniferous forests among gabbroic or serpentinite soils. Located from 1,445 – 2,525 ft. elevation.	Moderate Habitat and gabbroic soils present	May occur.
Pine Hill ceanothus (*Ceanothus roderickii*)	FE/CR/1B.1	April – June	Perennial evergreen shrub, found among chaparral and cismontane woodland, sometimes in gabbroic or serpentinite soils. Requires nutrient deficient forms of gabbro-derived soils characterized by low concentrations of available K, P, S, Fe, and Zn. Located from 805 – 3,575 ft. elevation.	Moderate Habitat and soils present and numerous nearby CNDDB occurrecnes.	May occur.
Red Hills soaproot (*Chlorogalum grandiflorum*)	-/-/1B.2	May – June	Perennial bulbiferous herb found from 805' – 5,545' in elevation. Located among chaparral, cismontane woodlands, lower montane coniferous forests, in gabbroic, serpentinite, and sometimes other soils.	Moderate Habitat and gabbroic soils present	May occur.
Tuolumne button-celery (*Eryngium pinnatisectum*)	-/-/1B.2	May – August	Annual/perennial herb found among mesic areas of cismontane woodlands, lower montane coniferous forest, and vernal pools. Located from 230 – 3,000 ft. elevation.	Moderate Habitat present.	May occur.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Pine Hill flannelbush (*Fremontodendron californicum* ssp. *decumbens*)	FE/CR/1B.2	April – July	Perennial evergreen shrub, found among rocky areas of chaparral, cismontane woodland, sometimes among gabbroic or serpentinite soils. Located from 1,395 – 2,495 ft. elevation.	Low Habitat present but all CNDDB occurrences clustered north of the Property.	Not likely to occur.
El Dorado bedstraw (*Galium californicum* ssp. sierrae)	FE/CR/1B.2	May – June	Perennial herb found among chaparral, cismontane woodland, and lower montane coniferous forests with gabbroic soils. Located from 330 – 1,920 ft. elevation.	Moderate Habitat and soils present and numerous nearby CNDDB occurrences.	May occur.
Parry's horkelia (*Horkelia parryi*)	-/-/1B.2	April – September	Perennial herb found among Ione formation and similar soils among chaparral and cismontane woodland. Located from 260 – 3,510 ft. elevation.	No Ione soils and no nearby CNDDB occurrences.	Presumed absent.
Layne's ragwort (*Packera layneae*)	FT/CR/1B.2	April – August	Perennial herb found among rocky areas of chapparal and cismontane woodland, sometimes in gabbroic or serpentinite soils. Located from 655 – 3,560 ft. elevation.	Moderate Habitat and soils present, and numerous CNDDB occurrences surround the Property.	May occur.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Sanford's arrowhead (*Sagittaria sanfordii*)	-/-/1B.2	May – November	Emergent perennial rhizomatous herb found among shallow, freshwater marshes and swamps. Located from 0 – 2,135 ft. elevation.	Moderate Habitat present.	May occur.
oval-leaved viburnum (*Viburnum ellipticum*)	-/-/2B.3	May – June	Perennial deciduous shrub found among chaparral, cismontane woodland, and lower montane coniferous forests. Located from 705 – 4,595 ft. elevation.	Moderate Habitat present.	May occur.
El Dorado County mule ears (*Wyethia reticulata*)	-/-/1B.2	April – August	Perennial herb found among chaparral, cismontane woodland, and lower montane coniferous forest, sometimes among clay or gabbroic soils. Located from 605 – 2,065 ft. elevation.	Moderate Habitat present and CNDDB occurrence within 200 feet of Property.	May occur.
INVERTEBRATES					
western bumble bee (*Bombus occidentalis*)	-/CE/-	Resident	Found in a range of habitats including mixed woodlands, farmlands, urban areas, montane meadows, and prairie grasslands with abundant flora resources that provide pollen and nectar throughout their flight period. Usually nests underground. Occurs in Canada and USA from southern British Columbia to central California.	Moderate Habitat present	May occur.
vernal pool fairy shrimp (*Branchinecta lynchi*)	T/-/-	Resident	Endemic to central valley vernal pools and swales.	No vernal pools present	Presumed absent.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
monarch butterfly (*Danaus plexippus*)	C/-/-	September – March (wintering) April – August (migrating)	Overwintering habitat includes forested groves from Mendocino County south to Baja, Mexico. Located within 1.5 miles of the ocean or SF Bay. Most commonly use eucalyptus, Monterey Pine, and Monterey cypress trees. Will forage on most nectar producing flowers, but require milkweed (*Asclepias* sp.) to lay their eggs and to feed their caterpillars.	Moderate Foraging habitat present.	May occur.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	T/-/-	Resident	Only found in association with its host plant, elderberry (*Sambuscus* spp.). Most occurrences are found below 500 feet in elevation.	Outside of elevation range.	Presumed absent.
FISH					
Delta smelt (*Hypomesus transpacificus*)	T/T/-	Resident	Endemic to upper SF Estuary and Delta. Inhabits open waters of bays, tidal rivers, channels, and sloughs, but rarely occurs in water with salinity of more than 10-12 ppt. Spawning occurs in freshwater, primarily in tidal dead-end sloughs and channel edgewaters.	Outside of species range.	Presumed absent.
steelhead – Central Valley DPS (*Oncorhynchus mykiss irideus* pop. 11)	T/-/-	Resident	Cool, clear, well-oxygenated water preferred. Prefer complex structured river systems with large boulders, etc.	No habitat present	Presumed absent.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
AMPHIBIANS					
foothill yellow-legged frog – south Sierra DPS (*Rana boylii* pop. 5)	PE/E/-	May 1 – November 1	Range of this DPS includes the South Fork American River subbasin, south to the Tehachapi Mountains. Inhabits partially shaded, rocky streams at low to moderate elevations among chaparral, open woodland, and forest. Breeding occurs in pools of streams.	No suitable habitat present.	Presumed absent.
California red-legged frog (*Rana draytonii*)	T/-/SSC	May 1 – November 1	Lowlands and foothills in or near permanent deep water with dense, shrubby or emergent riparian habitat. Requires 11-20 weeks of permanent water for breeding and larval development. Must have access to aestivation habitat.	Moderate Pond provides potential habitat.	May occur.
western spadefoot (*Spea hammondii*)	-/-/SSC	December – May	Endemic to Central and SW CA and Baja CA. Lives in wide variety of habitats including lowlands to foothills, grasslands, open chaparral, pine-oak woodlands, prefers short-grass plains and sandy or gravely soil. Breeds in temporary pools and slow moving streams. Inactive most of the year, most active during rains and winter/spring period.	Moderate Habitat present.	May occur.
REPTILES					
western pond turtle (*Emys marmorata*)	-/-/SSC	March – October	Aquatic turtle needs permanent water in ponds, streams, irrigation ditches. Nests on sandy banks or grassy fields.	Moderate Pond provides potential habitat.	May occur.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
coast horned lizard (*Phrynosoma blainvillii*)	-/-/SSC	Year-round resident	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes; requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Moderate Habitat present.	May occur.
giant garter snake (*Thamnophis gigas*)	T/T/-	May 1 to October 1	Found in the Valley from the City of Chico, south to the Mendota Wildlife Area in Fresno County. Habitat includes marshes, sloughs, ponds, small lakes, low gradient streams, and other waterways and agricultural lands such as irrigation and drainage canals, rice fields, and the adjacent uplands.	Outside of species range.	Presumed absent.
BIRDS					
northern goshawk (*Accipiter gentilis*)	-/-/SSC	Resident	Range includes the northern coastal mountains, and the Cascade and Sierra Nevada south into the Tehachapi Mountains. Nest in mature and old-growth forests. Utilizes a broad range of conifer and conifer-hardwood tree stands. Forage in mature and old-growth forests with dense canopy, but will also forage along meadow edges and open sage brush.	No suitable habitat present.	Presumed absent.
tricolored blackbird (*Agelaius tricolor*)	-/-/SSC	February – August	Nesting within seasonal wetland marshes, blackberry brambles or other protected substrates. Forages in annual grassland and wetland habitats.	Low Seasonal wetland provides potential breeding habitat.	Not likely to occur.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
grasshopper sparrow (*Ammodramus savannarum*)	-/-/SSC	February – August	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes; favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Nesting and feeding mostly takes place on the ground; loosely colonial when nesting.	Moderate Habitat present.	May occur.
golden eagle (*Aquila chrysaetos*)	-/-/FP	February – August	Nests in cliff-walled canyons and tall trees in open areas. (Nesting and wintering) Rolling foothills mountain areas, sage-juniper flats, and desert.	Low No nesting habitat present. Minimal foraging habitat.	Not likely to occur.
burrowing owl (*Athene cunicularia*)	-/-/SSC	February – August	Dry open annual or perennial grassland, desert, and scrubland. Uses abandoned mammal burrows for nesting.	Moderate Grassland with friable soils.	May occur.
ferruginous hawk (*Buteo regalis*)	-/-/WL	Late Fall – Winter	Open country such as semiarid grasslands with few trees, rocky outcrops, and open valleys. Also, along streams or in agricultural areas during migration.	No habitat present.	Presumed absent.
Swainson's hawk (*Buteo swainsoni*)	-/T/-	February – October	Nests in riparian areas and in oak savannah near foraging areas. Forages in alfalfa and grain fields with rodent populations.	No habitat present.	Presumed absent.
white-tailed kite (*Elanus leucurus*)	-/-/FP	February – August	Various grassland habitats, urban land, oak woodlands with grassland for foraging. Nests in trees, often near a marsh.	Moderate Foraging and nesting habitat present.	May occur.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
bald eagle (*Haliaeetus leucocephalus*)	D/E/FP	Resident	Breeding habitat includes areas within 4 km of coastal areas, bays, rivers, lakes, etc. with large amounts of fish, waterfowl, seabirds, or other prey. Nests are in trees or pinnacles near the water. Wintering areas are commonly associated with water, but may utilize montane areas if there are abundant enough food sources.	No habitat present.	Presumed absent.
California black rail (*Laterallus jamaicensis coturniculus*)	-/T/FP	Resident	Found in various habitats including marshland with unrestricted tidal influence. Areas of pickleweed, bulrushes, and matted salt grass. Breeding populations are confined to a few remaining patches of habitat in central and southern CA and western AZ. Most of the population is within the northern reaches of the SF Bay and tidal marshland of San Pablo Bay.	No habitat present.	Presumed absent.
bank swallow (*Riparia riparia*)	-/T/-	April – August	Large nesting range in North America and Eurasia. While the species migrates south for the winter, northern winter range includes southern California. Habitat includes open and partial open areas, near flowing water. Nests are in steep sand, dirt, or gravel banks, in burrows dug near the top of the bank.	No suitable habitat present.	Presumed absent.

Table 1

Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
MAMMALS					
pallid bat (*Antrozous pallidus*)	-/-/SSC	Resident	Forages in grasslands, shrublands, deserts, forests, and woodlands. Most common in open, dry habitats. Roosts in rock crevices, caves, tree hollows, and artificial structures. Roosts must protect bats from high temperatures; very sensitive to disturbance of roosting sites.	Moderate Foraging and roosting habitat present.	May occur.
Fisher (*Pekania pennanti*)	-/-/SSC	Resident	Found throughout much of northern North America. Uncommon permanent resident of Sierra Nevada, Cascade, Klamath, and North Coast Ranges. Occurs in intermediate to large-tree stages of coniferous forests and deciduous-riparian habitats with a high percent canopy closure. Den in a variety of protected cavities (hollow logs, trees, etc.).	No suitable habitat present.	Presumed absent.

Table 1

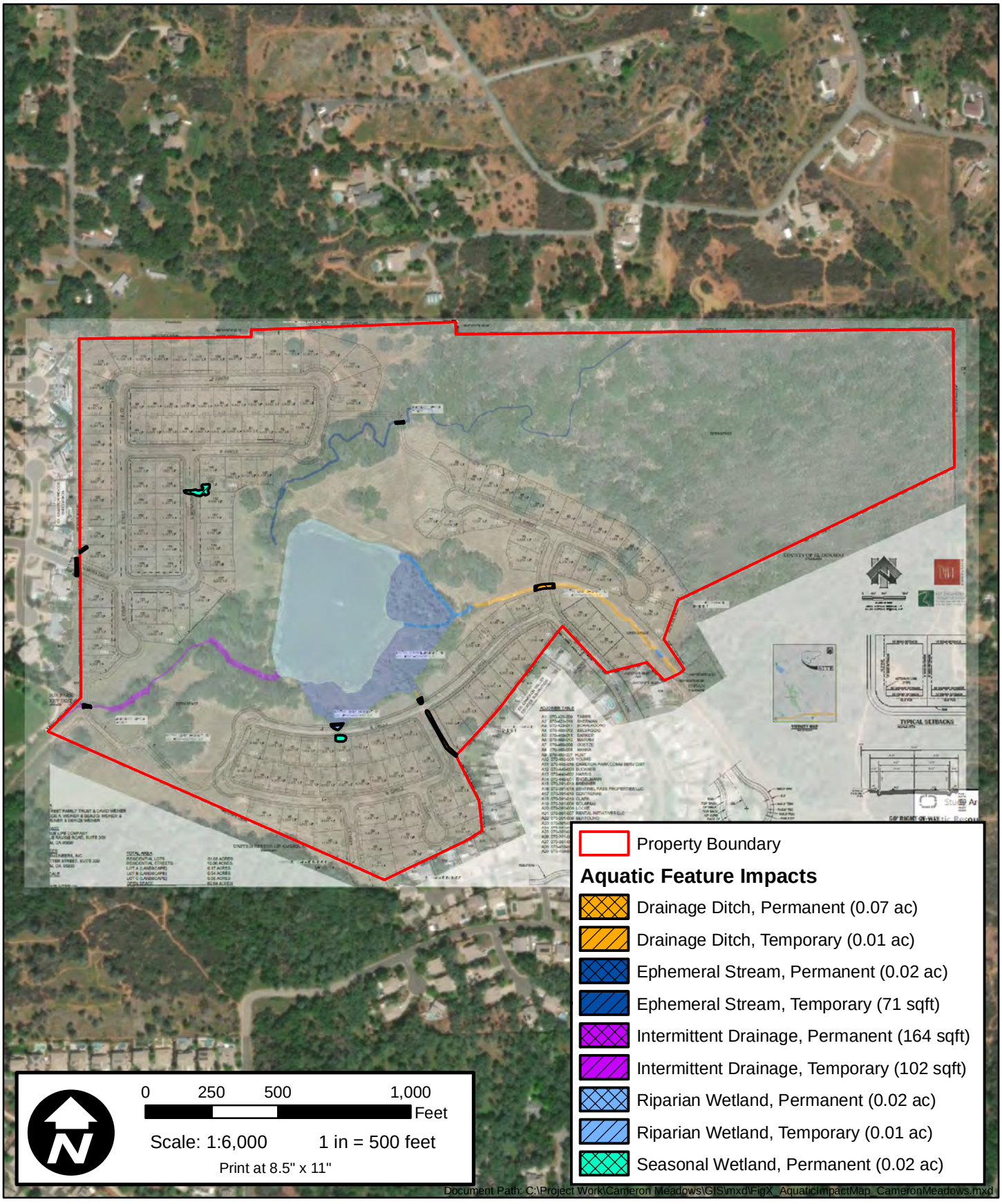
Special-Status Species for the Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, Placerville, Folsom SE, Latrobe, Fiddletown 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**

1. Special-status plants and animals as reported by the California Natural Diversity Data Base, California Native Plant Society, and other background research November 2022
2. Order of Codes for Plants - Fed/State/CNPS
   Order of Codes for Animals - Fed/State/CDFW
   Codes:
   E – Federally/State Listed as an Endangered Species
   T – Federally/State Listed as a Threatened Species
   C – Species listed as a Candidate for Federal Threatened or Endangered Status
   CE – Candidate for State Endangered Status
   PE – Petition for Federal listing of Endangered Status
   R – State listed as Rare
   SSC – California Species of Special Concern
   1A – CNPS Plants presumed extinct in California.
   1B – CNPS Plants Rare, Threatened, or Endangered in California and elsewhere.
   2B – CNPS Plants Rare, Threatened or Endangered in California, but more common elsewhere.
   x.1 – CNPS Plants seriously endangered in California
   x.2 – CNPS Plants fairly endangered in California
   x.3 – CNPS Plants nor very endangered in California

ATTACHMENT 2

AQUATIC IMPACT MAP



OLBERDING -ENVIRONMENTAL-
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Aquatic Impacts Map
Cameron Meadows
El Dorado County, California

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