

Bank of Stockton Proposed Branch Office Project

Draft Biological Resources Technical Report

DRAFT

Prepared for:
John Dentoni, VP CFO
Bank of Stockton
PO Box 1110
Stockton, CA 95201

Prepared by:
Greg Matuzak, Principal Biologist
Greg Matuzak Environmental Consulting LLC
471 Sutton Way, Suite #210
Grass Valley, CA 95945
Email: gmatuzak@gmail.com

May 2019

TABLE OF CONTENTS

1.0	INTRODUCTION AND SUMMARY	1-1
1.1	Introduction	1-1
1.2	Project Location.....	1-1
1.3	Previous Biological Resources Assessments within the Project Area	1-2
1.4	Purpose.....	1-2
2.0	REGULATORY OVERVIEW	2-1
2.1	Section 404 of the Clean Water Act	2-1
2.2	Section 401 of the Clean Water Act	2-2
2.3	State and Federal Regulations Protecting Sensitive Biological Resources	2-2
2.4	Amador County Regulations	2-4
3.0	METHODOLOGY.....	3-1
3.1	Background Resources Reviewed for Sensitive Biological Resources.....	3-1
3.2	California Special Species of Concern, Fully Protected, and Special Status Species	3-2
3.3	Reconnaissance-level Biological Resources Field Surveys.....	3-2
4.0	ENVIRONMENTAL SETTING.....	4-1
4.1	Project Area Habitats	4-1
4.2	Project Area Wildlife and Special-Status Species.....	4-2
4.3	Project Area Climate.....	4-4
4.4	Project Area Geology and Soil Types	4-4
5.0	RESULTS, CONCLUSIONS, AND RECOMMENDATIONS	5-1
5.1	Biological Resources Background Research and Database Search Results	5-1
5.2	Conclusions and Recommendations	5-1
6.0	REFERENCES	6-1

LIST OF APPENDICES

- Appendix A Project Area Overview Figures
- Appendix B Photo Log (still pending)
- Appendix C Plants Observed During Site Visit (still pending)
- Appendix D CNDDDB 3-Mile Project Area Buffer Figure
- Appendix E USDA Soils Map
- Appendix F National Wetland Inventory (NWI) Map
- Appendix G Development Area Analysis for the proposed Project (dated March 19th, 2019)
- Appendix H CNDDDB Occurrence Report and USDWS IPaC Report

DRAFT

1.0 INTRODUCTION AND SUMMARY

1.1 Introduction

At the request of Bank of Stockton, Mr. Greg Matuzak was retained to prepare a Biological Resources Technical Report for the Bank of Stockton Proposed Branch Office Project (Project) located at 19882 Highway 88 in Pine Grove, California. The Biological Resources Technical Report includes an assessment of the presence of potential “waters of the United States”, including wetlands and “waters of the State of California”, as well as an assessment of sensitive habitats and special-status wildlife and plant species protected by California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife (USFWS) jurisdiction within the Bank of Stockton Proposed Branch Office Project site (Project area). Preparation of the Biological Resources Technical Report included background research on the potential of sensitive biological resources that may occur within or adjacent to the Project area. A follow up site visit and reconnaissance-level biological resources survey will be conducted of the entirety of the Project area and the results of the site visit and survey will be integrated into a Final Biological Resources Technical Report.

Mr. Greg Matuzak, Principal Biologist and owner of Greg Matuzak Environmental Consulting LLC is a biologist with 20 years of experience conducting biological resources assessments in Northern California. Mr. Matuzak has a Master of Science degree in ecology from the University of California, Davis and has conducted biological resources assessments for 100+ projects and 1000+ of acres of site development projects. Mr. Matuzak has lived and worked in Nevada County for over 13 years and has developed biological resources assessments and processed permit applications for several many projects within the small towns within the Sierra Nevada, including projects in Amador County.

1.2 Project Location

The project area is located approximately 10 miles northeast of the town of Jackson. The project area consists of 3.1 acres and is plotted at Township 7 North, Range 12 East, Section 33 on the 1973 Pine Grove USGS 7.5' Quadrangle (see Figure 1 and Figure 2). The Bank of Stockton is proposing the construction of a new branch office at 19882 Highway 88, Pine Grove, California. The Assessor's Parcel Numbers are 030-200-074 and - 130. The property is currently owned by Miner Joaquin Building Corporation, a subsidiary of the Bank of Stockton.

Currently the Project area is completely developed in the northern section along Highway 88 and includes construction deposits in the southern and eastern areas of the Project area.

1.3 Previous Biological Resources Assessments within the Project Area

A single previous assessment of biological resources was reviewed as it pertains to Pine Grove and the Project area. The previous biological resources assessment reviewed as part of the development of this Biological Resources Technical Report includes the following:

- *State Route 88 Pine Grove Corridor Improvement Project Initial Study and Proposed Mitigated Negative Declaration/Environmental Assessment and Section 4(f) Evaluation* developed by the State of California Department of Transportation and the Amador County Transportation Commission, dated October 2015. The reporting includes the portion of State Route 88 that occurs along the frontage of the Project Area.

1.4 Purpose

The purpose of this Biological Resources Technical Report is to identify the location and extent of sensitive biological resources within the Project area, including special-status plant and special-status wildlife species, and the presence of drainage, stream, pond, and wetland features that could potentially meet the U.S. Army Corps of Engineers (USACE) criteria as a “waters of the United States,” pursuant to Section 404 of the Clean Water Act (CWA), and streams that could be under the jurisdiction of the California Fish and Wildlife Code Section 1600 *et. seq.* This Biological Resources Technical Report also satisfies the Amador County Code 19.50.040, which contains standards and findings to protect biological resources for discretionary use permits through Amador County.

2.0 REGULATORY OVERVIEW

2.1 Section 404 of the Clean Water Act

The U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA) regulate the discharge of dredge or fill material into “waters of the U.S.” under Section 404 of the Clean Water Act (CWA). “Waters of the U.S.” include wetlands and lakes, rivers, streams, and their tributaries. Wetlands are defined for regulatory purposes as areas “...inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated solid conditions” as specified in 33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3.

Generally, wetlands include swamps, marshes, bogs, and similar areas. Lakes, rivers, and streams are defined as “other waters of the U.S.” Jurisdictional limits of these features are typically noted by the Ordinary High Water Mark (OHWM). The OHWM is the line on the shore established by the fluctuations of water and indicated by physical characteristics such as mark a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (33 CFR 328 and 33 CFR 329).

Isolated ponds or seasonal depressions had been previously regulated as waters of the U.S. However, in *Solid Waste Agency of Northwestern Cook County (SWANCC) v. USACE et al.* (January 8, 2001), the U.S. Supreme Court ruled that certain “isolated” wetlands (e.g., non-navigable, isolated, and intrastate) do not fall under the jurisdiction of the CWA and are no longer under the jurisdiction of the USACE. Some circuit courts (e.g., *U.S. v. Deaton*, 2003; *U.S. Rapanos*, 2003; *Northern California River Watch v. City of Healdsburg*, 2006), though, have ruled that SWANCC does not prevent CWA jurisdiction if a “significant nexus” such as a hydrologic connection exists, whether it be man-made (e.g., roadside ditch) or natural tributary to navigable waters, or direct seepage from the wetland to the navigable water, a surface or underground hydraulic connection, an ecological connection (e.g., the same bird, mammal, and fish populations are supported by both the wetland and the navigable water), and changes to chemical concentrations in the navigable water is present due to water from the wetland.

Areas considered to be non-jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially-irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water-filled depressions with no outlet for drainage (33 CFR, Part 328).

The *Clean Water Rule* is a 2015 regulation published by the EPA and USACE to clarify water resources management in the United States under a provision of the

CWA. The regulation defined the scope of federal water protection in a more consistent manner, particularly over streams and wetlands, which have a significant hydrological and ecological connection to traditional navigable waters, interstate waters, and territorial seas. It is also referred to as the *Waters of the United States* rule, which defines all bodies of water that fall under U.S. federal jurisdiction. The rule has been contested in litigation and in 2017 the Trump administration announced its intent to review and rescind or revise the rule. Following a Supreme Court ruling on January 22, 2018 that lifted a nationwide stay on the rule, the Trump administration formally suspended the rule until February 6, 2020, thereby giving the EPA time to issue a draft proposal of replacement water regulatory requirements.

2.2 Section 401 of the Clean Water Act

Section 401 of the CWA requires an applicant, for any federal permit which may result in a discharge into waters of the U.S., to obtain a certification from the state that the discharge will comply with provisions of the CWA. The nine regions of the State Water Quality Control Board administer this program. Any condition of water quality certification would be incorporated into the USACE permit. California has a policy of no-net-loss of wetlands and typically requires mitigation for impacts to wetlands before it will issue a water quality certification. This Project is located under the jurisdiction of Region 5, the Central Valley Regional Water Quality Control Board (RWQCB).

2.3 State and Federal Regulations Protecting Sensitive Biological Resources

CDFW regulates the modifications of streams, rivers, and lakes under Sections 1601 to 1607 of the CDFW Code. Modification includes diverting, obstruction, or changing the natural flow or bed, channel, or bank of a regulated feature. The CDFW Code, Sections 1601 to 1607, require that CDFW be notified of any activity that could affect the band or bed of any stream that has value to fish and wildlife. In practice, CDFW authority is extended to any stream shown on a U.S. Geological Survey (USGS) topographic map, as well as unmapped channels with a definable bed and bank. Upon notification, CDFW has the discretion to excite a Streambed Alteration Agreement that stipulates restrictions on proposed project activities and mitigation requirements for proposed project impacts.

On April 2, 2019, the State Water Resources Control Board (State Water Board) adopted rules to protect wetlands and other environmentally sensitive waterways throughout the state. More than 90 percent of California's historic wetlands have been lost to development and other human activity. Wetlands are a critical natural resource that protect and improve water quality, provide habitat for fish and wildlife, and buffer developed areas from flooding and sea-level rise. The newly adopted rules provide a common, statewide definition of what constitutes a wetland. They also provide consistency in the way the State Water Board and nine regional water boards regulate

activities to protect wetlands and other waterways, such as rivers and streams, and bays and estuaries. The State of California waters of the state are, by definition, broader than “waters of the United States” covered by federal regulation. The newly adopted rules do not change that and will ensure that waters of the state will continue to be protected even if protections for federal waters are narrowed by administrative actions or the courts. The new definition clarifies what is considered a wetland – and what is not – for the entire state, provides a common framework for monitoring and reporting the quality of California’s remaining wetlands, helps ensure no overall net loss, and promote an increase, in the quantity, quality, and sustainability of waters of the state, including wetlands, improves transparency and consistency across the State Water Board and the nine Regional Water Quality Control Boards in how discharges of dredged or fill material in sensitive waterways are monitored and regulated, and avoids duplicative work and streamline requirements to cover all waters of the state, so both state and federal environmental concerns are addressed at once.

CDFW has jurisdiction over species listed as threatened or endangered under section 2080 of the CDFW Code. The California Endangered Species Act (CESA) prohibits take of state-listed threatened and endangered species. The state Act differs from the federal Act in that it does not include habitat destruction in its definition of take. The CDFW defines take as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The CDFW may authorize take under the CESA through Sections 2081 agreements. If the results of a biological survey indicate that a state-listed species would be affected by the project, the CDFW would issue an Agreement under Section 2081 of the CDFW Code and would establish a Memorandum of Understanding for the protection of state-listed species. CDFW maintains lists for threatened, endangered, and candidate species. California candidate species are afforded the same level of protection as listed species. California also designates Species of Special Concern (SSC), which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational or educational values. These species do not have the same legal protection as listed species but may be added to official lists in the future.

The USFWS has jurisdiction over species listed as threatened or endangered under Section 9 of the Federal Endangered Species Act (ESA). The act protects listed species from harm or “take” which is broadly defined as “...the action of harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct.” For any project involving a federal agency in which a listed species could be affected, the federal agency must consult with the USFWS in accordance with Section 7 of the ESA. The USFWS issues a biological opinion and, if the project does not jeopardize the continued existence of the listed species, issues an incidental-take permit.

2.4 Amador County Regulations

The Amador County Code 19.50.040 contains standards and findings to protect biological resources for discretionary use permits through Amador County. Therefore, the Tech Memo will include the integration of the following Amador County Code 19.50.040 containing the standards and findings to protect biological resources for discretionary use permits, which applies to the proposed project:

19.50.040 Standards and findings to protect biological resources for discretionary use permits and new subdivisions of ten or more lots.

Approval of discretionary use permits and subdivisions of ten lots or more is subject to the county making all of the following findings concurrent with project approval:

- A. The project has specific, measurable public benefits that outweigh its harm to the county's sensitive biological resources identified as special status, sensitive natural communities, jurisdictional wetlands and state-identified wildlife corridors.
- B. Where avoidance of adverse impacts to these biological resources is infeasible, such impacts will be mitigated to the extent feasible.
- C. Native trees and tree canopies will be maintained to the extent feasible unless removal or modification is required to comply with fire-safe building standards or to otherwise protect lives and property.
- D. New residential, commercial, industrial, or agricultural structures, excluding bridges and appurtenant roads constructed in compliance with state standards, shall meet the following standards:
 1. The structure is set back one hundred feet on either side of year-round and perennial streams or fifty feet from intermittent streams, where an "intermittent stream" is defined as a stream that may receive appreciable quantities of water from numerous sources including snowmelt and groundwater, and that ceases to flow during dry periods.
 2. In the event that a structure cannot meet the above standard, the applicant may apply for a variance for the structure subject to a finding that the structure cannot feasibly be relocated on the parcel to avoid adverse impacts to aquatic resources, in which case any adverse impacts shall be mitigated to ensure no net loss of riparian habitat consistent with adopted general plan EIR Mitigation Measure 4.4-2: Riparian Habitat Protection reproduced below in full.

Mitigation Measure 4.4-2: Riparian Habitat Protection

If projects require encroachment into the riparian habitat, project applicants will be required to develop a riparian habitat mitigation plan. The mitigation plan will include the following:

- implementation of Best Management Practices (BMPs) while working near riparian habitats to avoid inadvertent damage to riparian vegetation to be retained. BMPs will include establishment of nodisturbance buffers around the outer edge of the riparian vegetation to prevent root and crown damage, soil compaction, and implementation of standard BMPs to reduce erosion and water quality impacts, and introduction and spread of invasive species. Exceptions to riparian buffers will be granted to permit necessary road and bridge repair and construction, trails construction, and other recreational access structures that are water dependent, such as docks and piers;
- methods to be implemented to avoid and/or compensate for impacts on riparian habitat at a ratio adequate to offset the loss of riparian habitat functions and values. At a minimum, riparian habitat losses will be compensated at a 1:1 ratio;
- identification of mitigation sites and criteria for selecting these sites;
- site-specific management procedures to benefit establishment and maintenance of native riparian plant species;
- monitoring protocol, including schedule and annual report requirements (compensatory riparian habitats shall be monitored for a minimum period of five years);
- ecological performance standards and corrective measures if performance standards are not met;
- responsible parties for monitoring and preparing reports; and
- responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.

Mitigation may be accomplished through preservation, replacement, restoration or enhancement of degraded habitat, reestablishing riparian vegetation in areas that historically supported it, or purchase of credits at an established mitigation bank, such as the Cosumnes Floodplain Mitigation Bank.

Compensatory mitigation will be provided within Amador County to the extent

feasible and available; however, certain impacts may be compensated at an agency-approved mitigation bank in an adjacent county if required by CDFW and an agency-approved mitigation bank is not available in Amador County. If a proposed project requires work on the bed or bank of a stream, or other water body, the project applicant will also obtain a streambed alteration agreement under Section 1602 of the Fish and Game Code from CDFW prior to project implementation, and will implement all requirements of the agreement in the timeframes required therein (Ord. 1777 §2 (part), 2018).

DRAFT

3.0 METHODOLOGY

In order to evaluate the Project area for the presence of sensitive biological resources, baseline information from databases and reporting for similar projects in Amador County was collected and reviewed prior to conducting reconnaissance-level field biological surveys. The database searches, background research, and habitat level field surveys characterized the baseline conditions of the Project area.

Previous surveys, reporting, and the development of a CEQA/NEPA document for State Route 88 that passes along the frontage of the Project area was reviewed closely. Based on the baseline conditions of the Project area, an assessment was implemented to determine if any special-status plant or wildlife species have the potential to use the Project area at any time during their life cycle. The baseline conditions identified the presence of any sensitive habitat or communities, if they were identified within the Project site.

3.1 Background Resources Reviewed for Sensitive Biological Resources

The following information was used to identify potential special-status plant and wildlife species within the Project region that could be found to use the Project area:

- California Department of Fish and Wildlife's California Natural Diversity Database records search of a 3-mile buffer around the Project area (CDFW, 2019);
- California Native Plant Society's online Inventory of Rare and Endangered Plants of California known to occur within the 7.5-minute Pine Grove USGS Quadrangle where the proposed Project is located (CNPS, 2019);
- The U.S. Fish and Wildlife Service Information, Planning, and Consultation System (IPaC) for endangered, threatened, and proposed listed species for the proposed Project area (USFWS, 2019);
- National Wetland Inventory (NWI, 2019);
- United States Department of Agriculture (USDA) Soils Mapper (USDA, 2019);
- Natural Resources Conservation Service (NRCS) Hydric Soils List for Amador County (NRCS, 2019); and
- Amador County Code 19.50.040 containing standards and findings to protect biological resources for discretionary use permits through Amador County.

In addition, and as stated in Section 1.3 of this Draft Biological Resources Technical Report, the following reporting developed specifically for the greater Project area (for State Route 88 in Pine Grove, passing along frontage of Project area) was reviewed closely and included:

- *State Route 88 Pine Grove Corridor Improvement Project Initial Study and Proposed Mitigated Negative Declaration/Environmental Assessment and Section 4(f) Evaluation* developed by the State of California Department of Transportation and the Amador County Transportation Commission, dated October 2015.

3.2 California Special Species of Concern, Fully Protected, and Special Status Species

California designates Species of Special Concern (SSC) as species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational or educational values. These species do not have the same legal protection as listed species but may be added to official lists in the future (CDFW 2014). For example, the coast horned lizard (*Phrynosoma blainvillii*), foothill yellow-legged frog (*Rana boylei*, now a Candidate Species of State ESA Listing), and western pond turtle (*Actinemys marmorata*) are designated as SSC and each species was evaluated as part of this Biological Resources Technical Report.

In the 1960's California created a designation to provide additional protection to rare species. This designation remains today and is referred to as "Fully Protected" species, and those listed "may not be taken or possessed at any time" (CDFW 2014c). California special-status species are identified by the California Natural Diversity Database (CNDDDB) and includes those species considered to be of greatest conservation need by the CDFW.

3.3 Reconnaissance-level Biological Resources Field Surveys

A reconnaissance-level biological field survey will be conducted on foot of the Project area by Greg Matuzak, the results of which will be included in a Final Biological Resources Technical Report covering the entirety of the Project area. The purpose of the reconnaissance-level biological field surveys will be to identify habitat and vegetation types within the Project area that would be considered potential habitat for of any of the special-status plant and wildlife species identified in the desktop analysis and background research to occur within the Project area and specifically within the areas of proposed development as outlined in the Development Area Analysis for the proposed Bank of Stockton New Pine Grove Branch Plus Retail dated March 19th, 2019 (attached in Appendix G). A Photo Log of the Project area will be attached in Appendix B. A list of plant and wildlife species observed during the field surveys will be compiled and will be attached to Appendix C. A map depicting the results of a review of the CNDDDB within 3

miles of the Project area is included in Appendix D, a USDA Soils Map is included in Appendix E, and a National Wetland Inventory (NWI) Map is included in Appendix F.

DRAFT

4.0 ENVIRONMENTAL SETTING

The project area is situated in the western foothills of the Sierra Nevada geomorphic province, a north/south trending asymmetrical ridge extending 400 miles and nearly 80 miles across (Hull 2007), extending from southern California to the Cascade Range in the north, bordered by the Great Valley to the west and the Great Basin to the east. The project area is based at an elevation of 2513 feet amsl. The current landscape has been heavily modified by infrastructure in the north and construction deposits in the south and east.

4.1 Project Area Habitats

The Project area is in the Sierra Nevada Foothill floristic region. Regional vegetation typically includes the following tree-dominated series: blue oak (*Quercus douglasii*), Sierran mixed conifer, valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*) series; grassland-dominated series such as California annual grassland series, montane meadow habitat and needle and thread (*Hesperostipa comata*) series; and shrubland-dominated series such as chamise (*Adenostoma fasciculatum*) series, deerbrush (*Ceanothus integerrimus*) series and tobacco brush (*Ceanothus velutinus*) series. Vegetation specific to the Project area is identified as urban and montane hardwood-conifer forest per the habitat mapping conducted as part of the State Route 88 Project (Caltrans 2015). The descriptions of these habitats are provided below and are based on the descriptions developed by Caltrans (2015).

Urban

The urban habitat in the Project area is a result of past disturbances from commercial, urban residential and pedestrian use. These urban areas consist of roads (SR 88 and Church Street) and parking lots with developed commercial areas. Urban areas are the dominant habitat type in the town of Pine Grove and within the northern section of the Project area where site disturbance is being proposed.

Montane Hardwood-Conifer Forest

Montane hardwood-conifer forest is a transitional forest between dense coniferous forests and montane hardwoods, mixed chaparral or savannahs, characterized by hardwoods and conifers between 1,000 and 4,000 feet in elevation. In the Sierra Nevada northern range, species associated with the habitat include ponderosa pine (*Pinus ponderosa*), California black oak (*Quercus kelloggii*), canyon oak (*Quercus chrysolepis*), Douglas fir (*Pseudotsuga menziesii*), Pacific madrone (*Arbutus menziesii*), and incense-cedar (*Calocedrus decurrens*). The understory is sparse due to the dense bi-layered canopy but can occur after the disturbance of fires or logging. Montane hardwood-conifer forest exists within the southern and eastern areas of the Project area

and most likely consist of ponderosa pine, Pacific madrone, black oak, and incense-cedar, as well as common understory plants for this habitat type.

4.2 Project Area Wildlife and Special-Status Species

Wildlife species, within and adjacent to this region, include various amphibians and reptiles, turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), wild turkey (*Meleagris gallopavo*), black-tailed deer (*Odocoileus hemionus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), mountain lion (*Felis concolor*), bobcat (*Lynx rufus*), western gray squirrel (*Sciurus griseus*), and the oak titmouse (*Baeolophus inornatus*). Chaparral communities are host to additional species including California quail (*Callipepla californica*), California thrasher (*Toxostoma redivivum*), wrentit (*Chamaea fasciata*), and brown towhee (*Melospiza crissalis*) (Storer and Usinger 1963).

The results of the CNDDDB review for a 3-mile buffer around the Project area (see Appendix D and H for a figure and occurrence report) identified several species that have been previously identified within 3 miles of the Project area. Those species, including their state and federal status, are listed below with a notation regarding whether the species has potential to occur within the Project area:

- Foothill yellow-legged frog (*Rana boylei*): State Candidate as Threatened and CDFW Species of Special Concern, no federal status. No suitable habitat within Project area
- Townsend's big-eared bat (*Corynorhinus townsendii*): CDFW Species of Special Concern, no federal status. No suitable habitat within Project area
- North American porcupine (*Erethizon dorastum*): IUCN Least Concern, no federal status. No suitable habitat within Project area
- Western pond turtle (*Emys marmorata*): CDFW Species of Special Concern, no federal status. No suitable habitat within Project area
- Grady's Cave amphipod (*Stygobromus gradyi*): IUCN Vulnerable. No suitable habitat within Project area
- Grubbs' cave harvestman (*Banksula grubbsi*): no state status, no federal status. No suitable habitat within Project area
- Tuolumne button-celery (*Eryngium pinnatisectum*): CNPS 1B.2, no federal status. No suitable habitat within Project area
- Stanislaus monkeyflower (*Erythranthe marmorata*): CNPS 1B.1, no federal status. No suitable habitat within Project area

- Red Hills soaproot (*Chlorogalum grandiflorum*): CNPS 1B.2, no federal status. No suitable habitat within Project area
- Prairie wedge grass (*Sphenopholis obtusata*): CNPS 2B.2, no federal status. No suitable habitat within Project area

California Red-Legged Frog and the State Route 88 Caltrans Project (October 2015)

The State Route 88 Caltrans Project (Caltrans 2015) identified Grass Valley Creek and Jackson Creek as permanent water sources with associated shrubby riparian vegetation and identified both aquatic habitats as containing low to moderate potential for the federally threatened California red-legged frog (*Rana draytonii*) to occur within those streams. However, as part of their assessment, Caltrans determined that the two streams do not contain breeding habitat for the California red-legged frog but both creeks contain dispersal habitat for the species. USFWS however identified the species as having a low to moderate potential within the biological study area of the State Route 88 Project. The State Route 88 Caltrans Project (Caltrans 2015) did not identify any additional species with a potential to occur within the biological study of that project and therefore, this Biological Resources Technical Report contains an assessment of the species identified by Caltrans as having a potential to occur within the State Route 88 Project as well as several other species identified within a current CNDDDB 3 mile database search from the Project area.

For the purposes of the Project area, if suitable breeding locations for California red-legged frog are located within 1.25 miles of a given project area and connected by barrier-free dispersal habitat that is at least 300 feet in width, then suitable dispersal habitat could be located within the overall Project area. However, since California red-legged frog have not been identified in the watershed associated with the Project area and a minimum of a 300-foot wide barrier-free dispersal habitat from the closest potential suitable breeding location does not occur from where the Project area is situated, the potential for this species to occur is extremely low and the species is considered absent from the Project area, including the potential for the species to disperse through the existing disturbed and developed areas that are included within the proposed Project.

Nesting raptors and other migratory birds species - Protected under MBTA, Protected under CA State DFG Code Sections 3503, 3503.5, and 3800

There is a low to moderate potential for nesting raptors and other nesting migratory bird species protected under the MBTA to occur within the Project area given the presence of the forested areas adjacent to the Project area to the south and east. Those forested areas represent potential habitat for bird species protected under the MBTA, such as ground nesting species like the spotted towhee (*Pipilo maculatus*) and dark-eyed junco

(*Junco hyemalis*). Active and inactive nests within and adjacent to the Project area should be documented if they occur during field surveys; however, given the presence of large trees adjacent to the proposed disturbance areas within the Project area, there is at least a low, if not a moderate potential for these species to nest within the forested areas to the south and east of the Project area. Therefore, mitigation and conservation measures for these protected nesting avian species is included in Section 5.0 below to ensure that no active nests of such species are destroyed from tree removal or abandoned by the parents given the presence of loud noises and vibrations.

4.3 Project Area Climate

The area has a Mediterranean climate with cool, wet winters, and warm, dry, summers. In the last two decades, the Sierra Nevada mountain range has experienced radical shifts in climate, ranging from near drought conditions to record rainfalls. Specifically in the project area, the U.S. Climate Data webpage indicates average winter low temperatures of 33°F to average summer high temperatures of 97°F, with an average of 32 inches of rainfall per year, making it a generally mild climate (www.usclimatedata.com).

4.4 Project Area Geology and Soil Types

Tectonic plate shift, the San Andreas Fault Line, and volcanic activities have contributed to the tumultuous geologic landscape in this area. Metamorphic rocks extending to the late Paleozoic and Mid-Cenozoic form a belt along the western slope of the Sierras, including the following: quartzite, slate, crystalline limestone, greenstone, and serpentine. The Sierra Nevada batholith, a solid layer of granite, was created from volcanic activity of the Triassic and Cretaceous periods and later became exposed outcrops dominating the landscape today. During this time, precious minerals such as gold, copper, and tungsten developed (Storer et. al. 2004:15-16). The Project area is located in the California Mother Lode region, dubbed as such for the great vein of hard-rock gold spanning the foothills.

The USDA identifies a single soil type within the Project Area. USDA soil mapping for the Project area is included in Appendix E. The following provides a brief overview of the soil mapping units. The USDA Soil Survey Mapper (USDA, 2019) indicates that the Project area includes a single soil type: Loamy alluvial land (Lo). This soil type is described in detail below and its presence, as identified by the USDA online mapper, is documented in Appendix E:

- **Loamy alluvial land (Lo).** This is a miscellaneous land type with small, narrow stringers of recent alluvium laid down adjacent to streams or behind dams of mining debris across small creeks and drainageways. The alluvium consists of loamy, stratified material washed from different soils derived from various kinds of rock. The elevation is generally more than 1,500 feet. The vegetation is mainly annual grasses and forbs but includes a few conifers and hardwoods.

Loamy alluvial land is well drained. Permeability is variable, but it is moderate in most places. The available water holding capacity is high, root penetration is deep to very deep, and fertility is high. Runoff is slow and some areas adjacent to streams are flooded sometimes by overflow from the streams. The areas with this soil type are used for small home gardens, orchards, and irrigated pasture. The pastures are small, but they provide valuable supplemental feed for livestock in the steep, mountainous uplands. Annual grasses and forbs are on the areas not cropped, and these areas are generally bordered by oaks and conifers, or by alders, willows, and maples.

This soil type is listed on the NRCS Hydric Soils list for Amador County.

DRAFT

5.0 RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Biological Resources Background Research and Database Search Results

A total of 10 special-status species have been previously documented within 3 miles of the Project area. Most of these species associate with aquatic habitats such as streams, ponds, springs, and vernal pools and one of the special-status plant species, the Red Hills soaproot associates with serpentine and gabbro soil types. Given the Project area appears to contain a lack of both aquatic habitats and serpentine and gabbro soil types, the potential for any of these species to occur within the Project area is considered very low to nil. In addition, the Project area does not contain suitable breeding or dispersal habitat for the federally threatened California red-legged frog given the lack of suitable aquatic habitat for the species and the developed nature of the areas proposed for development within the Project area.

The Project area doesn't appear to contain any "waters of the U.S.", including wetlands, or "waters of the State of California." This includes a lack of streams and tributaries to the closest known streams from the Project area, including Jackson Creek located to the west along State Route 88 near Ridge Road and Grass Valley Creek located to the north. A small tributary to Grass Valley Creek is mapped to the east of the Project area and crosses State Route 88. There are no aquatic habitats or stream features known within the Project area; however, during the pending site visit and reconnaissance-level biological survey of the Project area, areas to the south and east within the Project area will be evaluated for the presence of any drainage features, though they are not expected to occur within those areas.

5.2 Conclusions and Recommendations

Given the Project area does contain large trees to the south and east of the proposed areas of disturbance as part of the Project and those trees contain suitable habitat for nesting raptors and MBTA protected nesting bird species, removal of such trees should be done outside the breeding season, if possible, to avoid potential impacts to such nesting species. The breeding season for most protected birds in the vicinity of the Project area is generally from March 1 to August 30. Vegetation clearing or tree removal outside of the breeding season for such bird species would not require the implementation of any avoidance, minimization, or mitigation measures. However, construction or development activities during the breeding season could disturb or remove occupied nests of migratory birds or raptors and could require the implementation of a pre-construction survey within 250 feet of the disturbance area within the Project area for nesting migratory birds and raptors prior to site disturbance. Pre-construction nesting surveys would be conducted by a qualified biologist. If any nesting raptors or migratory birds are identified during surveys, active nests should be avoided and a no-disturbance

buffer should be established around the nesting site to avoid disturbance or destruction of the nest site until after the breeding season or after a wildlife biologist determines that the young have fledged. The extent of these buffers would be determined by a wildlife biologist and would depend on the special-status species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed to make an appropriate decision on buffer distances.

No additional avoidance, minimization, or mitigation measures are recommended at this time. However, once a site visit is conducted and a reconnaissance-level biological resources survey is implemented, this Biological Resources Technical Report will be updated and finalized based on the results of the site visit and survey. Given the Project area disturbance will be focused within areas that are currently developed and disturbed, it is highly unlikely any additional avoidance, minimization, or mitigation measures will be recommended as part of the updated and final Biological Resources Technical Report.

6.0 REFERENCES

- Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press.
- California Department of Fish and Game (CDFG). 2004. Fish and Game Code Sections 1600-1616.
- California Department of Fish and Game (CDFG). 2011. Special - 898 Taxa. California Natural Diversity Database, The Natural Resources Agency, Biogeographic Branch, Department of Fish and Game. California.
- California Department of Fish and Wildlife (CDFW). 2019. RareFind Verion 3: Search of 3-mile buffer around subject parcel. California Natural Diversity Database, California Department of Fish and Wildlife. Sacramento, California.
- California Department of Fish and Wildlife (CDFW). 2019. Threatened and Endangered Species. California Department of Fish and Wildlife. Sacramento, California.
- CaliforniaHerps.com (CaliforniaHerps). 2019. A Guide to Amphibians and Reptiles in California. CaliforniaHerps.com. California.
- California Native Plant Society (CNPS). 2000. A Manual of California Vegetation. [web based version]. California Native Plant Society. Information Center for the Environment, University of California Davis.
- California Native Plant Society (CNPS). 2019. Online Inventory of Rare, Threatened, and Endangered Plants of California, V9-02. California Native Plant Society. California.
- California Department of Transportation (Caltrans). 2015. *State Route 88 Pine Grove Corridor Improvement Project Initial Study and Proposed Mitigated Negative Declaration/Environmental Assessment and Section 4(f) Evaluation*. Developed by the State of California Department of Transportation and the Amador County Transportation Commission, dated October 2015
- Cornell Law School. 2001. Solid Waste Agency of Northern Cook City. V. Army Corps Of Engineers (99-1178) 531 U.S. 159 (2001) 191 F.3d 845, reversed. Legal Information Institute.
- Drake University. 2007. Rapanos v. United States: "Waters of the United States" Under the Clean Water Act (2003). Drake Journal of Agricultural Law, Volume 12, Number 3.
- Environmental Laboratory: US Army Corps of Engineers (Corps). 1987. Corps of Engineers Wetlands Delineation Manual.

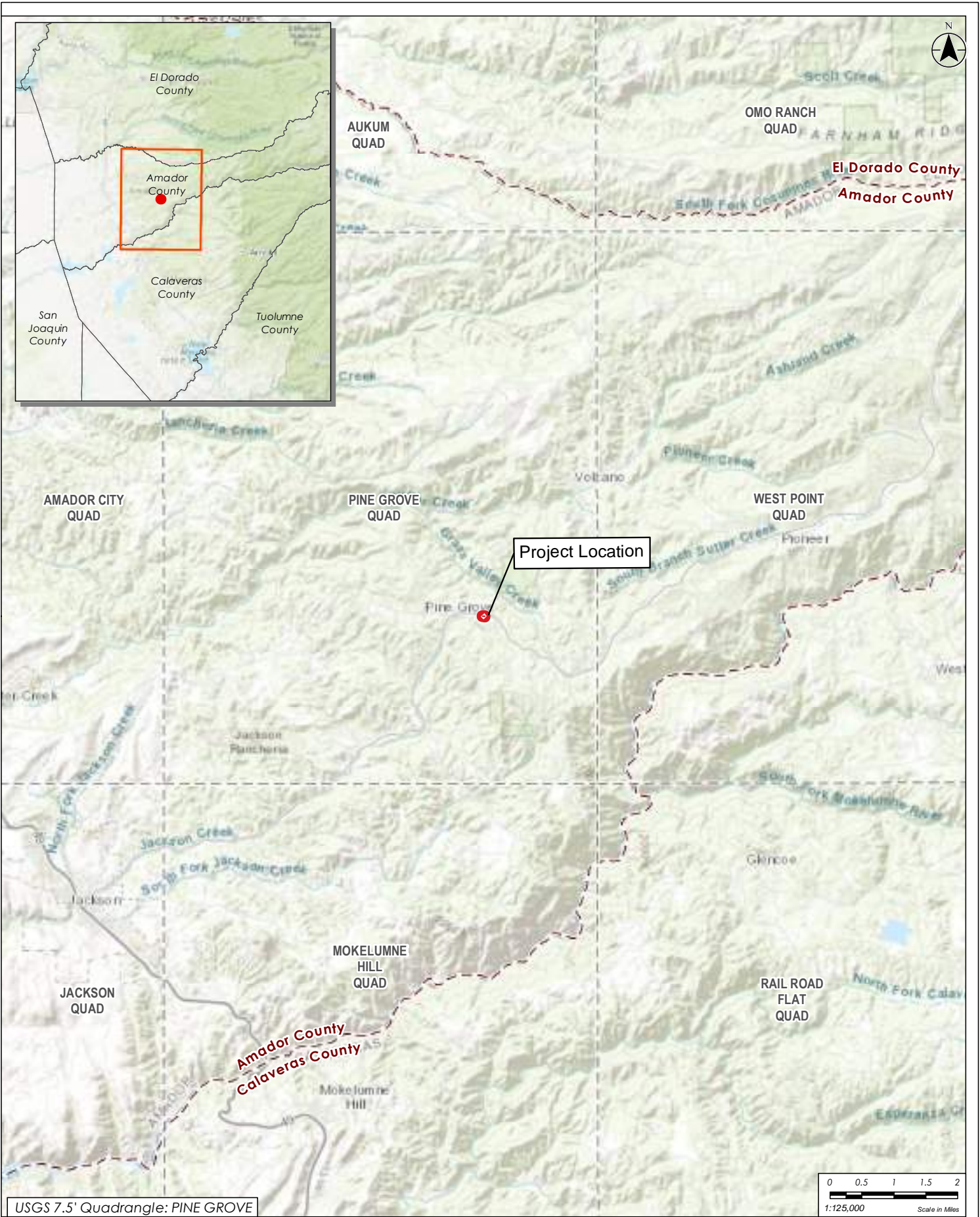
- Environmental Protection Agency (EPA). 1972. Summary of the Clean Water (CWA) Act- 33 U.S.C. §1251 et seq. (1972). EPA Laws and Regulations.
- Jennings, M.R.; Hayes, M.P. Amphibian and Reptile Species of Special Concern in California. 1994. Inland Fisheries Division, California Department of Fish and Game. Rancho Cordova, California.
- Jepson Herbarium, The. (Jepson eFlora). 2019. The Jepson Herbarium, University of California, Berkeley. Berkeley, California.
- Legislative Counsel of California (LCC). 2004. Senate Bill 1334- Oak Woodlands Conservation Act. Official California Legislative Information. California.
- Mayer, K. E. and William F. Laudenslayer, Jr. 1988. A Guide to Wildlife Habitats of California. State of California, Resources Agency, Department of Fish and Game Sacramento, CA. 166 pp.
- Natural Resources Conservation Service. 2019. Hydric Soils List for Amador County.
- Sawyer, J.O., Keeler-Wolf, T., Evans, J.M. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society.
- Shuford, W. D., and T. Gardali, editors. 2008. California bird species of special concern: a ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Spautz, H., Nur, N., Stralberg, D. 2005. California Black Rail (*Laterallus jamaicensis coturniculus*): Distribution and Abundance in Relation to Habitat and Landscape Features in the San Francisco Bay Estuary. USDA Forest Service General Technical Report: PSW-GTR-191.
- U.S. Fish and Wildlife Service (USFWS). 1918. Migratory Bird Treaty Act of 1918. 1918.
- U.S. Fish and Wildlife Service (USFWS). 1940. The Bald and Golden Eagle Protection Act.
- U.S. Fish and Wildlife Service (USFWS). 1973. Endangered Species Act.
- U.S. Fish and Wildlife Service (USFWS). 2019. Federal Endangered and Threatened Species Information for Planning and Consultation (IPaC) for the Subject Parcel in Nevada City and Nevada County. Sacramento Fish and Wildlife Service.
- United States Department of Agriculture (USDA). 2019. National Resources Conservation District (NRCS) - Web Soil Survey.
- United States Climate Data. 2019. Climate Data for Pine Grove, California.

United States Fish and Wildlife Service (USFWS). 2019. National Wetland Inventory.

DRAFT

Appendix A

Project Vicinity and Project Area Figures




GREG MATUZAK
 Environmental Consulting LLC
 Nevada City, CA

Parcel No.: 030-200-074-000

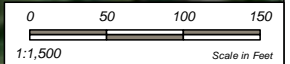
Figure 1. Vicinity Map



Legend

 Project Boundary

Aerial Imagery: NAIP 9/3/2016



GREG MATUZAK
Environmental Consulting LLC
Nevada City, CA

Parcel No.: 030-200-074-000

Figure 2. Project Location Map

Appendix B

Photo Log

Appendix C

Plants Observed During Biological Resources Surveys

Photo Log of Project Area During Site Surveys on June 26th, 2019



Photo 1: Entrance to project area at corner of SR 88 and Church Street looking east.



Photo 2: Project area looking south with Church Street to the right.



Photo 3: Project area towards the southern area of the proposed Project looking west.



Photo 4: Project area looking east from the southern end of the Project area.



Photo 5: Southern section of proposed Project area looking east along access and parking within the Project area.



Photo 6: From the southwestern section of the Project area looking towards Church Street. Photo looking northwest.



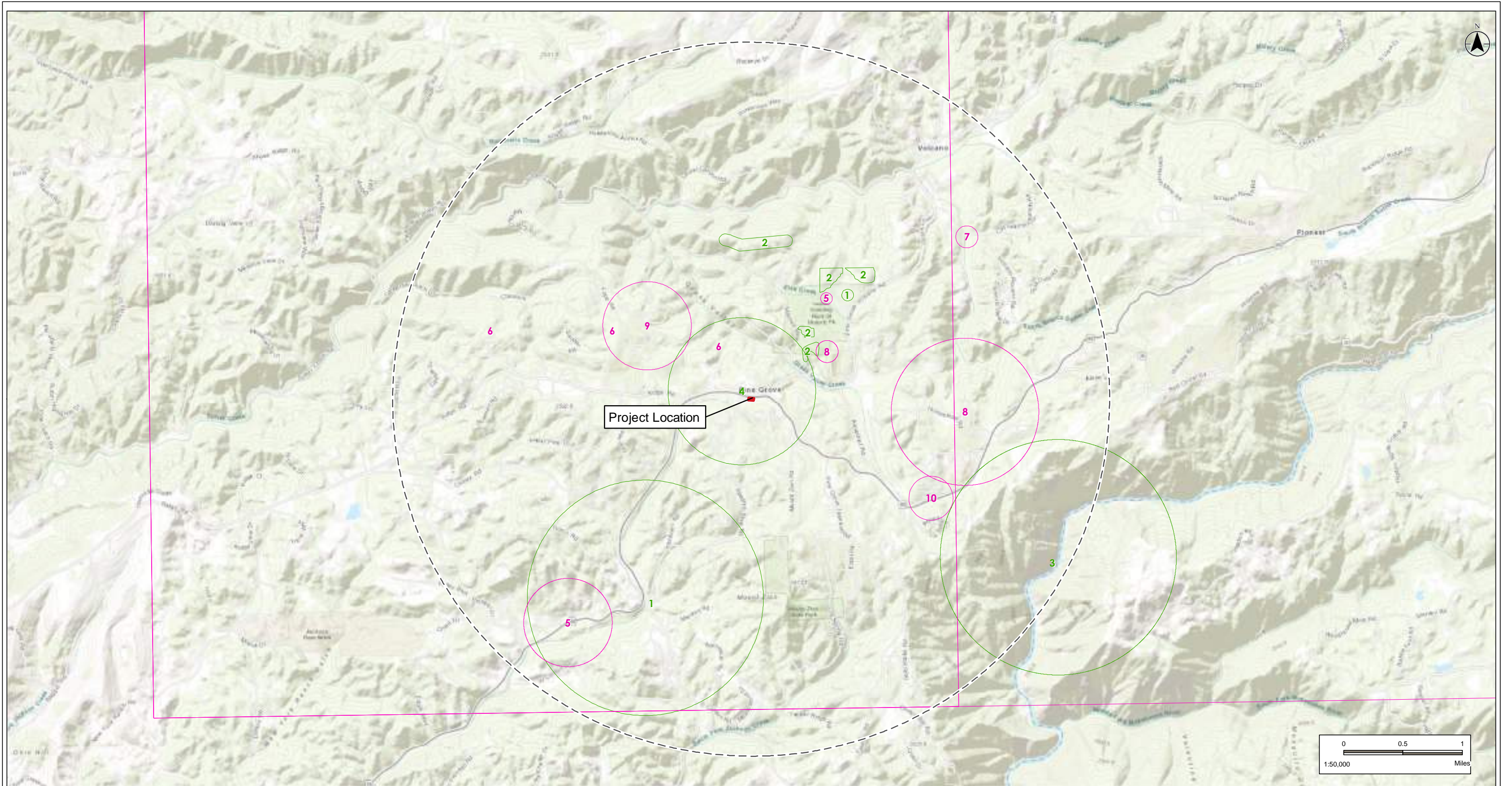
Photo 7: Project area along the frontage with SR 88 to the right. Photo looking west from the northeastern corner of the Project area.



Photo 8: northeastern section of Project area looking south with forested area behind the Project area. Access goes towards the southern section of the Project area.

Appendix D

CNDDDB 3-Mile Buffer Figure



Legend

- Project Location
- 3 mile Buffer on Project Area
- CNDDB Plant Occurrence*
- CNDDB Wildlife Occurrence*
- Critical Plant Habitat** (none)
- Critical Wildlife Habitat** (none)

CNDDB OCCURRENCES*

- Plant Species**
1. Prairie wedge grass
 2. Red Hills soaproot
 3. Stanislaus monkeyflower
 4. Tuolumne button-celery

Wildlife Species

5. Foothill yellow-legged frog
6. Grady's Cave amphipod
7. Grubbs' cave harvestman
8. North American porcupine
9. Townsend's big-eared bat
10. Western pond turtle

CRITICAL HABITAT OCCURRENCES**

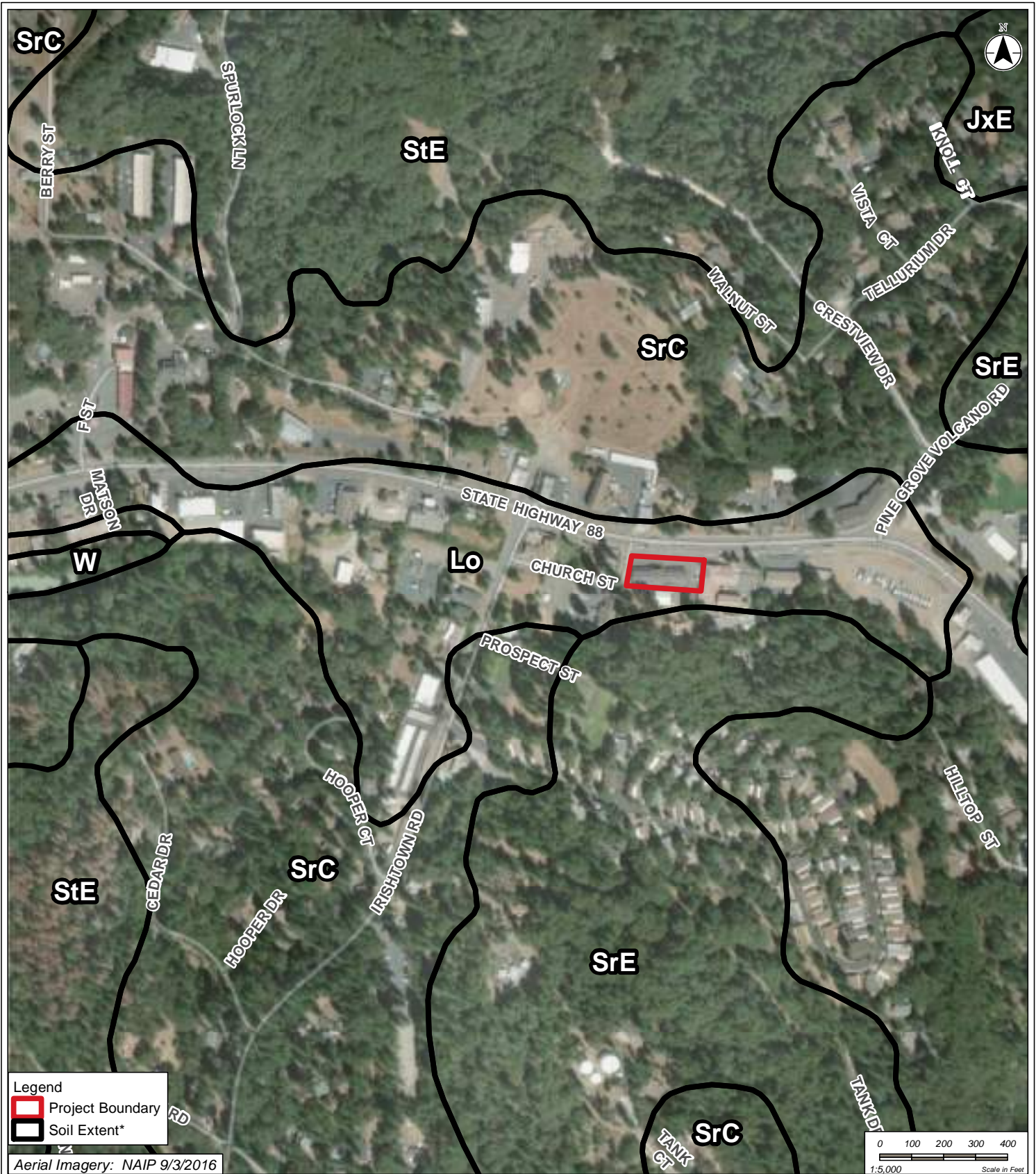
- Plant Habitat**
None
- Wildlife Habitat**
None



* California Natural Diversity Database (CNDDDB) Data: Downloaded March 2019, from the California Department of Fish and Wildlife
 ** United States Fish and Wildlife Service (USFWS) Critical Habitat Data: Downloaded April, 2019 from: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>

Figure 3. CNDDB and Critical Habitat Map

Appendix E

USDA Soils Map



Legend
 Project Boundary
 Soil Extent*

Aerial Imagery: NAIP 9/3/2016

SOIL TYPE*
 JxE - Josephine-Mariposa complex, 16 to 51 percent slopes
 Lo - Loamy alluvial land
 Pw - Placer diggings and Riverwash
 SrC - Sites very rocky loam, 3 to 16 percent slopes

SrE - Sites very rocky loam, 16 to 51 percent slopes
 StE - Sites-Mariposa complex, 16 to 51 percent slopes
 W - Water

* Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online. Accessed 03/06/2019

GREG MATUZAK
 Environmental Consulting LLC
 Nevada City, CA

Parcel No.: 030-200-074-000

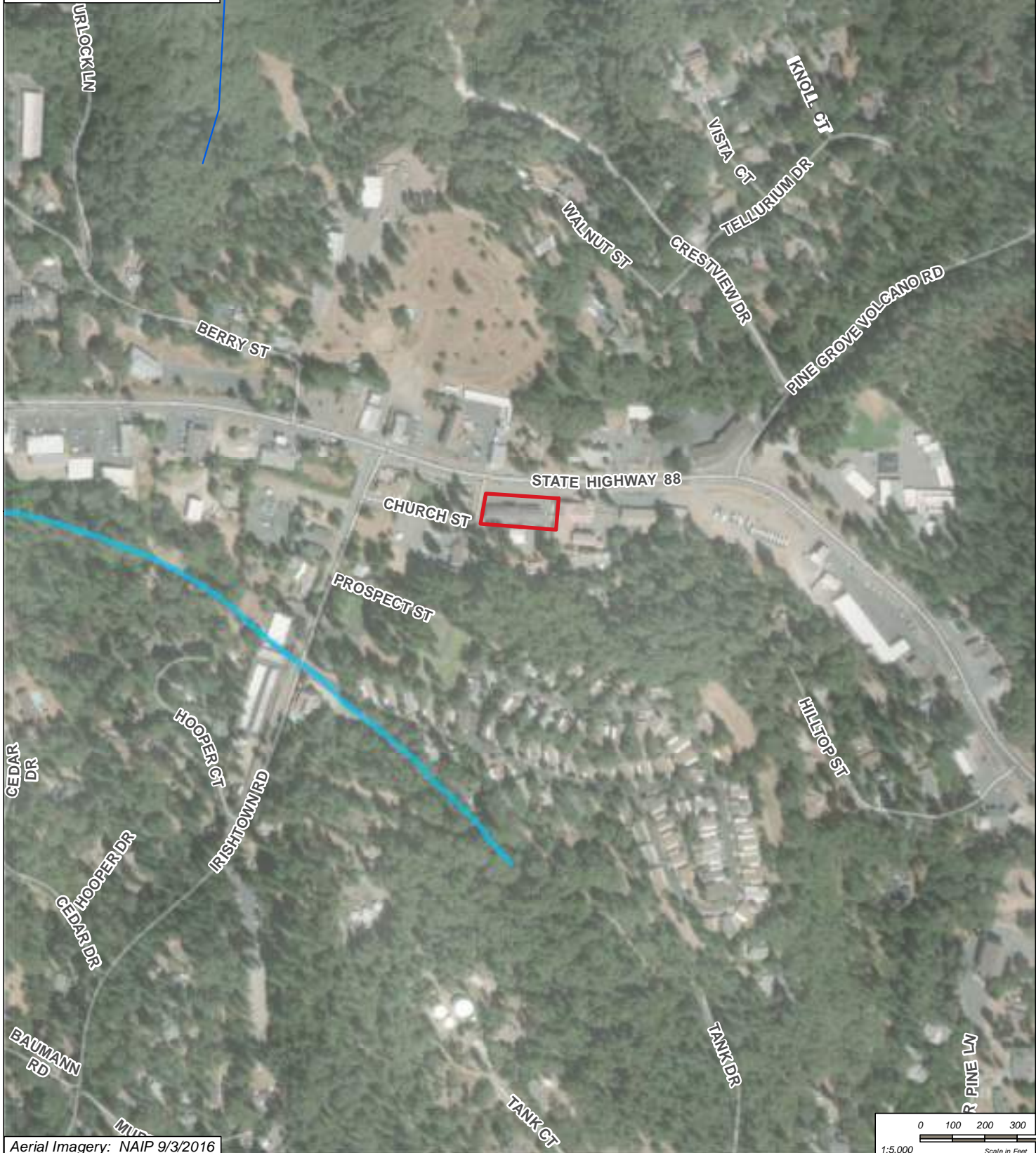
Figure 4. Soils Map

Appendix F

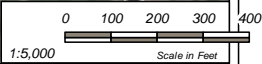
National Wetland Inventory (NWI) Map

Legend

- Project Boundary
- Wetlands*
- Riverine
- National Hydrography Data****
- Stream/River



Aerial Imagery: NAIP 9/3/2016



GREG MATUZAK
 Environmental Consulting LLC
 Nevada City, CA

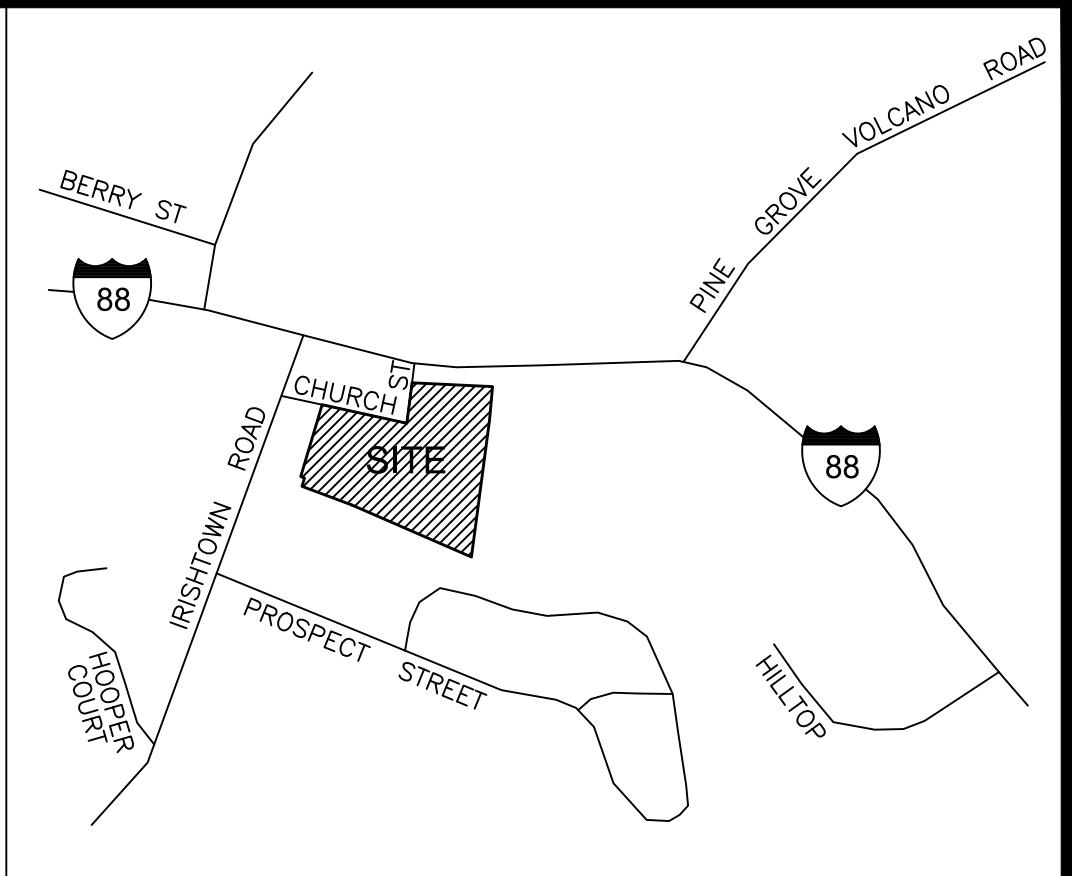
* Data downloaded from <https://www.fws.gov/wetlands/Data/Data-Download.html> 3/6/2019
 ** National Hydrography Dataset (NHD) downloaded from <http://nhd.usgs.gov> March, 2019

Parcel No.: 030-200-074-000

Figure 5. Wetlands and Water Features Map

Appendix G

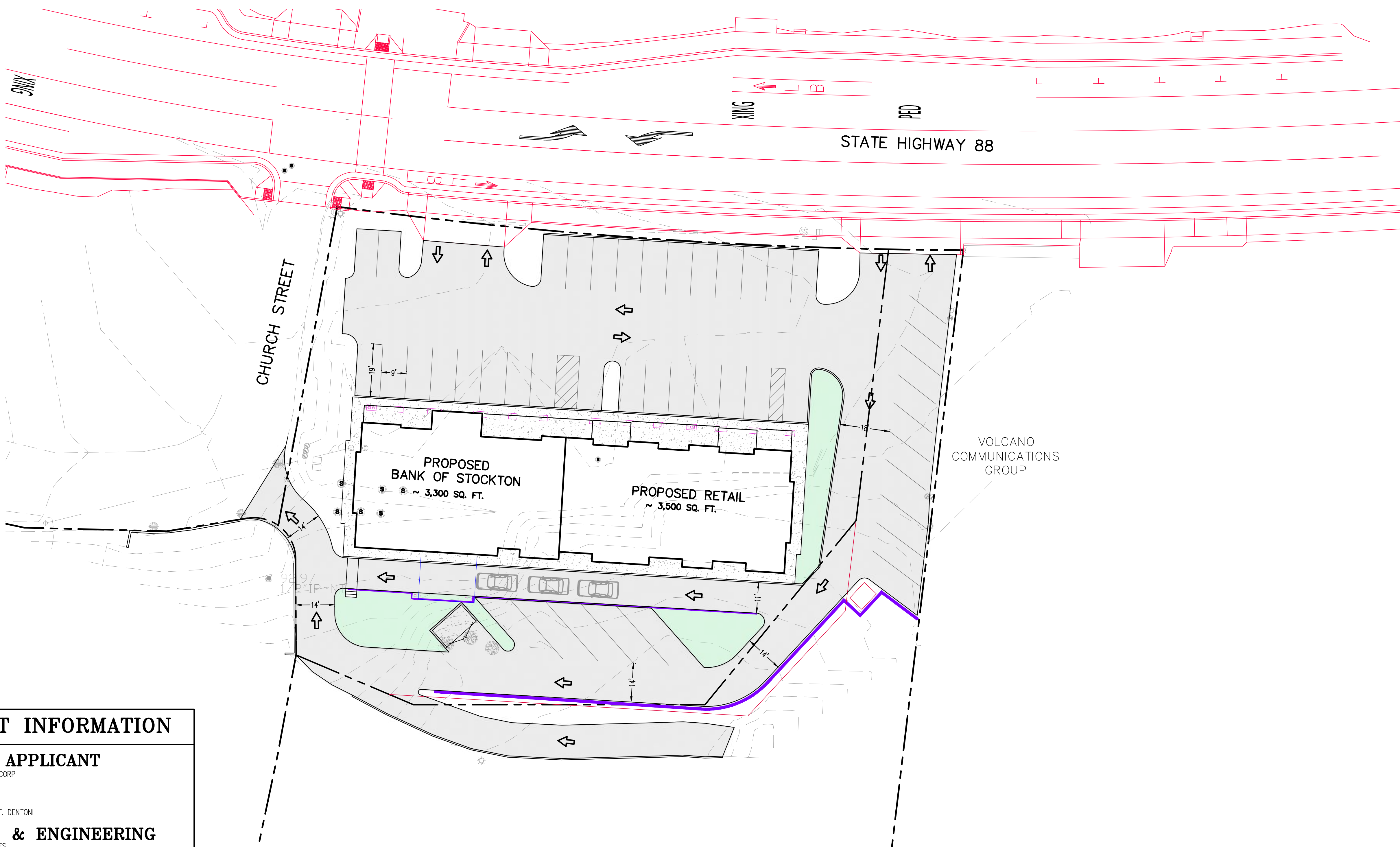
Development Area Analysis for the Proposed Project



VICINITY MAP
NOT TO SCALE



CALIFORNIA



VOLCANO COMMUNICATIONS GROUP

PARKING STATISTICS

	PROPOSED SPACES	REQUIRED SPACES
90'	25	-
45'	5	-
ADA	2	2
EV	2	2
TOTAL:	34 (1 STALL PER 200 SF)	34 (1 STALL PER 200 SF)

PROJECT INFORMATION

OWNER / APPLICANT

MINER JOAQUIN BUILDING CORP
P.O. BOX 1110
STOCKTON, CA 95201
(209) 929-1433
CONTACT PERSON: JOHN F. DENTONI

PLANNING & ENGINEERING

PRICE CONSULTING SERVICES
12144 BITNEY SPRINGS ROAD
NEVADA CITY, CA 95959
(530) 272-6434
CONTACT PERSON: GARY PRICE (GARY@PLANNERPRICE.COM)

MILLENNIUM PLANNING & ENGINEERING
471 SUTTON WAY, SUITE 210
GRASS VALLEY, CA 95945
(530) 446-6765
CONTACT PERSON: ROB WOOD (rob@milpe.com)

ARCHITECTURE

TR-ARCHITECTURE
13366 ORTON ROAD
GRASS VALLEY, CA 95945
(530) 205-8750
CONTACT PERSON: TOM ROMAN (TOM@TR-ARCHITECTURE.COM)

APN

030-200-074

SITE ADDRESS

19892 STATE HIGHWAY 88
PINE GROVE, CA 95665

BANK OF STOCKTON - PINE GROVE
19892 STATE HIGHWAY 88
OVERALL SITE PLAN

COUNTY OF AMADOR

REV.	DESCRIPTION	DATE

DESIGNED: DEC
DRAWN: DEC
PROJ. NO: 19-0606
DWG. SEE DAYSTAMP
DATE: SEPTEMBER, 2019

SHEET NUMBER
C1.0

Appendix H

CNDDDB Occurrence and USFWS IPaC Reports



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Mapndx IS (21874 OR 30918 OR 30919 OR 32821 OR 57563 OR 58626 OR 59223 OR 59576 OR 68745 OR 69718 OR 80358 OR 87849 OR 94382 OR A2154 OR A5770 OR A5779 OR A9437)

Map Index Number: 68745	EO Index: 69226
Key Quad: Pine Grove (3812046)	Element Code: AAABH01050
Occurrence Number: 450	Occurrence Last Updated: 2007-03-28

Scientific Name: <i>Rana boylei</i>	Common Name: foothill yellow-legged frog
Listing Status:	Rare Plant Rank:
Federal: None	
State: Candidate Threatened	
CNDDDB Element Ranks:	Other Lists: BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive
Global: G3	
State: S3	

General Habitat: PARTLY-SHADED, SHALLOW STREAMS AND RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.	Micro Habitat: NEEDS AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEEDS AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.
--	--

Last Date Observed: 2004-07-01	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-07-01	Occurrence Rank: Fair
Owner/Manager: DPR-INDIAN GRINDING ROCK SHP	Trend: Unknown
Presence: Presumed Extant	

Location:
ELSE CREEK, INDIAN GRINDING ROCK STATE HISTORIC PARK, 1.1 MILES NE OF PINE GROVE.

Detailed Location:

Ecological:
HABITAT SURROUNDING STREAM CONSISTS OF VALLEY OAK WOODLAND, DOMINATED BY QUERCUS LOBATA, ARBUTUS MENZIESII, CALOCEDRUS DECURRENS, ALNUS RHOMBIFOLIA, PSEUDOTSUGA MENZIESII, AND QUERCUS WISLIZENI.

Threats:
THREATENED BY BANK EROSION DUE TO FOOT TRAFFIC FROM THE PUBLIC AND NON-NATIVE PREDATORS (WILD TURKEYS).

General:
5 FROGS OBSERVED DURING A SURVEY CONDUCTED IN JUL 2000. 13 FROGS OBSERVED DURING A SURVEY CONDUCTED IN JUL 2001. 1 ADULT OBSERVED ON 1 JUL 2004.

PLSS: T07N, R12E, Sec. 27, SW (M)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-10 N4255596 E705519	Latitude/Longitude: 38.42500 / -120.64566	Elevation (feet): 2,323

County Summary:	Quad Summary:
Amador	Pine Grove (3812046)

Sources:
RAG04F0002 RAGGIO, P. (CALIFORNIA DEPARTMENT OF PARKS AND RECREATION) - FIELD SURVEY FORM FOR RANA BOYLII 2004-07-01



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A9437	EO Index: 111286
Key Quad: Pine Grove (3812046)	Element Code: AAABH01050
Occurrence Number: 1931	Occurrence Last Updated: 2018-10-11

Scientific Name: <i>Rana boylei</i>	Common Name: foothill yellow-legged frog
Listing Status:	Rare Plant Rank:
Federal: None	
State: Candidate Threatened	Other Lists:
CNDDB Element Ranks:	BLM_S-Sensitive
Global: G3	CDFW_SSC-Species of Special Concern
State: S3	IUCN_NT-Near Threatened
	USFS_S-Sensitive

General Habitat: PARTLY-SHADED, SHALLOW STREAMS AND RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.	Micro Habitat: NEEDS AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEEDS AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.
--	--

Last Date Observed: 1965-02-22	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1965-02-22	Occurrence Rank: None
Owner/Manager: PVT	Trend: Unknown
Presence: Extirpated	

Location:
HIGHWAY 88 NEAR CLINTON PEAK, 5.5 ROAD MILES NE OF JACKSON.

Detailed Location:
LOCALITY DESCRIBED AS HIGHWAY 88, 5.5 MILES EAST OF JACKSON, AT 2000 FOOT ELEVATION.

Ecological:

Threats:

General:

DETECTED ON 22 FEB 1965. ACCORDING TO JENNINGS, RANA BOYLII IS EXTIRPATED FROM THIS VICINITY.

PLSS: T06N, R12E, Sec. 8, SW (M)	Accuracy: 2/5 mile	Area (acres): 280
UTM: Zone-10 N4251163 E702058	Latitude/Longitude: 38.38586 / -120.68655	Elevation (feet): 1,784

County Summary: Amador	Quad Summary: Pine Grove (3812046)
----------------------------------	--

Sources:

- BRO80U0001 BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG) 1980-XX-XX
- JEN94R0001 JENNINGS, M. & M. HAYES - AMPHIBIAN AND REPTILE SPECIES OF SPECIAL CONCERN IN CALIFORNIA. FINAL REPORT SUBMITTED TO DFG, INLAND FISHERIES DIVISION, RANCHO CORDOVA. 255 PP. 1994-11-01
- JEN96R0001 JENNINGS, M. - CHAPTER 31: STATUS OF AMPHIBIANS, PP 921-944 IN: SIERRA NEVADA ECOSYSTEM PROJECT: FINAL REPORT TO CONGRESS, VOL II. 1996-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 94382	EO Index: 95500
Key Quad: Pine Grove (3812046)	Element Code: AMACC08010
Occurrence Number: 621	Occurrence Last Updated: 2014-11-04

Scientific Name: <i>Corynorhinus townsendii</i>	Common Name: Townsend's big-eared bat
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	BLM_S-Sensitive
Global: G3G4	CDFW_SSC-Species of Special Concern
State: S2	IUCN_LC-Least Concern
	USFS_S-Sensitive
	WBWG_H-High Priority

General Habitat: THROUGHOUT CALIFORNIA IN A WIDE VARIETY OF HABITATS. MOST COMMON IN MESIC SITES.	Micro Habitat: ROOSTS IN THE OPEN, HANGING FROM WALLS AND CEILINGS. ROOSTING SITES LIMITING. EXTREMELY SENSITIVE TO HUMAN DISTURBANCE.
---	--

Last Date Observed: 1957-08-07	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1957-08-07	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
MINE SAFTS ALONG PONDEROSA WAY ABOUT 1 MILE NW OF PINE GROVE & 1 MILE SOUTH OF SUTTER CREEK, 2.75 AIR MI SE OF VOLCANO.

Detailed Location:
EXACT LOCATION UNKNOWN. MAPPED TO LOCALITY OF "HORIZONTAL MINE SHAFTS ON THE LEFT SIDE OF SUTTER CREEK, VOLCANO ROAD, 0.8 MI AND 1 MI S OF VOLCANO." CENTERED AROUND MINES NEAREST TO VOLCANO; CURRENT ROAD NAMES RAINBOW MINE & RED HILL MINE.

Ecological:
HABITAT CONSISTED OF 2 HORIZONTAL MINE SHAFTS. AREA APPEARS TO BE DEVELOPED WITH SCATTERED HOMES; MINE SHAFTS LIKELY CLOSED. NEEDS FIELD WORK.

Threats:

General:

1 ADULT FEMALE AND 1 ADULT MALE OBSERVED ON 7 AUG 1957.

PLSS: T07N, R12E, Sec. 32, NE (M)	Accuracy: 2/5 mile	Area (acres): 0
UTM: Zone-10 N4255200 E703089	Latitude/Longitude: 38.42199 / -120.67359	Elevation (feet): 2,460

County Summary: Amador	Quad Summary: Pine Grove (3812046)
----------------------------------	--

Sources:
BEC57U0001 BECK, A. - CARD CATALOG OF BAT RECORDS FOM LITERATURE SURVEY AND FIELD NOTES COMPILED BY ALBERT J. BECK, 1955-1956 1957-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A5770	EO Index: 107514
Key Quad: Pine Grove (3812046)	Element Code: AMAFJ01010
Occurrence Number: 353	Occurrence Last Updated: 2017-08-07

Scientific Name: <i>Erethizon dorsatum</i>	Common Name: North American porcupine
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: IUCN_LC-Least Concern
CNDDB Element Ranks:	
Global: G5	
State: S3	

General Habitat: FORESTED HABITATS IN THE SIERRA NEVADA, CASCADE, AND COAST RANGES, WITH SCATTERED OBSERVATIONS FROM FORESTED AREAS IN THE TRANSVERSE RANGES.	Micro Habitat: WIDE VARIETY OF CONIFEROUS AND MIXED WOODLAND HABITAT.
---	---

Last Date Observed: 2014-11-20	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2014-11-20	Occurrence Rank: Unknown
Owner/Manager: DPR-INDIAN GRINDING ROCK SHP	Trend: Unknown
Presence: Presumed Extant	

Location:
ABOUT 0.2 MI W OF PINE GROVE VOLCANO RD AT WARNER RD, 0.6 MI NE OF HWY 88 AT PINE GROVE VOLCANO RD, PINE GROVE.

Detailed Location:
MAPPED ACCORDING TO THE PROVIDED COORDINATES AND LOCATION DESCRIPTION OF "INDIAN GRINDING ROCK STATE HISTORIC PARK, SOUTH TRAIL, PINE GROVE, CA."

Ecological:

Threats:

General:

1 JUVENILE FOUND DEAD ON 20 NOV 2014; BODY ABOUT 5 INCHES IN LENGTH, NO SIGNS OF TRAUMA, DESICCATED.

PLSS: T07N, R12E, Sec. 34, NW (M)	Accuracy: 1/10 mile	Area (acres): 18
UTM: Zone-10 N4254877 E705536	Latitude/Longitude: 38.41852 / -120.64568	Elevation (feet): 2,478

County Summary: Amador	Quad Summary: Pine Grove (3812046)
----------------------------------	--

Sources:
FIS17D0001 FISKE, M. (CENTRAL SIERRA ENVIRONMENTAL RESOURCE CENTER) - PORCUPINE SIGHTING DATA FROM THE CENTRAL SIERRA ENVIRONMENTAL RESOURCE CENTER (2001-2017) 2017-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A5779	EO Index: 107548
Key Quad: West Point (3812045)	Element Code: AMAFJ01010
Occurrence Number: 354	Occurrence Last Updated: 2017-08-08

Scientific Name: <i>Erethizon dorsatum</i>	Common Name: North American porcupine
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: IUCN_LC-Least Concern
CNDDDB Element Ranks:	
Global: G5	
State: S3	

General Habitat: FORESTED HABITATS IN THE SIERRA NEVADA, CASCADE, AND COAST RANGES, WITH SCATTERED OBSERVATIONS FROM FORESTED AREAS IN THE TRANSVERSE RANGES.	Micro Habitat: WIDE VARIETY OF CONIFEROUS AND MIXED WOODLAND HABITAT.
---	---

Last Date Observed: 2013-02-15	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2013-02-15	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
ABOUT 0.9 MI WSW OF HWY 88 AT HWY 104, 1.7 MI E OF HWY 88 AT PINE GROVE VOLCANO RD, PINE GROVE.

Detailed Location:
MAPPED TO INCLUDE THE PROVIDED COORDINATES AND LOCATION DESCRIPTION OF "1 MILE WEST OF RED CORRAL, CA NEAR HWY 88 IN AMADOR COUNTY," HOWEVER, RED CORRAL TOWN IS IN SAN BENITO COUNTY. LOCATION LIKELY REFERENCING RED CORRAL RD (HWY 104).

Ecological:
PORCUPINE WAS ON A THICKLY WOODED HILL.

Threats:
General:
1 PORCUPINE OBSERVED ON 15 FEB 2013.

PLSS: T07N, R12E, Sec. 35 (M)	Accuracy: 3/5 mile	Area (acres): 776
UTM: Zone-10 N4254079 E707416	Latitude/Longitude: 38.4109 / -120.6244	Elevation (feet): 2,587

County Summary: Amador	Quad Summary: West Point (3812045), Pine Grove (3812046)
----------------------------------	--

Sources:
FIS17D0001 FISKE, M. (CENTRAL SIERRA ENVIRONMENTAL RESOURCE CENTER) - PORCUPINE SIGHTING DATA FROM THE CENTRAL SIERRA ENVIRONMENTAL RESOURCE CENTER (2001-2017) 2017-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	32821	EO Index:	1425
Key Quad:	Pine Grove (3812046)	Element Code:	ARAAD02030
Occurrence Number:	443	Occurrence Last Updated:	1996-01-17

Scientific Name:	<i>Emys marmorata</i>	Common Name:	western pond turtle
Listing Status:	Federal: None State: None	Rare Plant Rank:	
CNDDDB Element Ranks:	Global: G3G4 State: S3	Other Lists:	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive

General Habitat:

A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS AND IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

Micro Habitat:

NEEDS BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

Last Date Observed:	1988-08-16	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1988-08-16	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:

GRASS VALLEY CREEK, 2.1 MILES EAST OF PINE GROVE ON HIGHWAY 88.

Detailed Location:**Ecological:****Threats:****General:**

3 CAPTURED AND RETAINED BY D.C. HOLLAND ON 16 AUGUST 1988.

PLSS: T06N, R12E, Sec. 02, SW (M)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-10 N4252901 E706966	Latitude/Longitude: 38.40040 / -120.62989	Elevation (feet): 2,410

County Summary:

Amador

Quad Summary:

Pine Grove (3812046)

Sources:

HOL88U0003 HOLLAND, D.C. - ANNUAL REPORT OF SPECIMENS TAKEN UNDER SCIENTIFIC COLLECTING PERMITS #2169 AND 2169A. 1988-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 59223	EO Index: 59259
Key Quad: Pine Grove (3812046)	Element Code: ICMAL05460
Occurrence Number: 2	Occurrence Last Updated: 2013-01-09

Scientific Name: <i>Stygobromus gradyi</i>	Common Name: Grady's Cave amphipod
Listing Status: Federal: None	Rare Plant Rank:
* SENSITIVE *	Other Lists: IUCN_VU-Vulnerable
CNDDB Element Ranks: Global: G1	
State: S1	

General Habitat: KNOWN ONLY FROM CENTRAL CALIFORNIA.	Micro Habitat: KNOWN ONLY FROM SPRINGS AND CAVES IN THE MOTHER LODE KARST REGION.
--	---

Last Date Observed: 1987-10-17	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1987-10-17	Occurrence Rank: Unknown
Owner/Manager:	Trend: Unknown
Presence: Presumed Extant	

Location:
SENSITIVE LOCATION INFORMATION SUPPRESSED.

Detailed Location:
PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:
Threats:
CAVE IS A TOURIST ATTRACTION.

General:

PLSS:	Accuracy: 80 meters	Area (acres): 0
UTM:	Latitude/Longitude:	Elevation (feet): 2,040

County Summary: Amador	Quad Summary: Pine Grove (3812046)
----------------------------------	--

Sources:

GRA12A0001 GRAENING, G.O. ET AL. (CALIFORNIA STATE UNIVERSITY, SACRAMENTO) - CHECKLIST OF INLAND AQUATIC AMPHIPODA (CRUSTACEA: MALACOSTRACA) OF CALIFORNIA. ZOOTAXA 3544: 1-27. 2012-XX-XX

HAL62B0001 HALLIDAY, W. - CAVES OF CALIFORNIA - A SPECIAL REPORT OF THE WESTERN SPELEOLOGICAL SOCIETY, SEATTLE, WA. 1962-06-XX

HOL05U0001 HOLSINGER, J. (OLD DOMINION UNIVERSITY) - EMAIL TO SANDY SHANKS (DFG) GIVING SPECIFIC LOCALITY DATA FOR MAPPED DISTRIBUTIONS OF STYGOBROMUS IN TAXONOMIC PAPER, WAN01A0001 (CO-AUTHORED WITH HOLSINGER). 2005-01-09

WAN01A0001 WANG, D. & J. HOLSINGER (OLD DOMINION UNIVERSITY) - SYSTEMATICS OF THE SUBTERRANEAN AMPHIPOD GENUS STYGOBROMUS (CRANGONYCTIDAE) IN WESTERN NORTH AMERICA, WITH EMPHASIS ON SPECIES OF THE HUBBSI GROUP. AMPHIPACIFICA 3(2). PARTIAL COPY 2001-10-15



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	59576	EO Index:	59612
Key Quad:	Pine Grove (3812046)	Element Code:	ICMAL05460
Occurrence Number:	3	Occurrence Last Updated:	2013-01-09

Scientific Name:	<i>Stygobromus gradyi</i>	Common Name:	Grady's Cave amphipod
Listing Status:	Federal: None	Rare Plant Rank:	
* SENSITIVE *	State: None	Other Lists:	IUCN_VU-Vulnerable
CNDDDB Element Ranks:	Global: G1		
	State: S1		

General Habitat:	Micro Habitat:
KNOWN ONLY FROM CENTRAL CALIFORNIA.	KNOWN ONLY FROM SPRINGS AND CAVES IN THE MOTHER LODE KARST REGION.

Last Date Observed:	1979-04-15	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1979-04-15	Occurrence Rank:	Unknown
Owner/Manager:		Trend:	Unknown
Presence:	Presumed Extant		

Location:
 SENSITIVE LOCATION INFORMATION SUPPRESSED.

Detailed Location:
 PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:
Threats:
General:

PLSS:	Accuracy:	1 mile	Area (acres):	0
UTM:	Latitude/Longitude:		Elevation (feet):	1,800

County Summary:	Quad Summary:
Amador	Pine Grove (3812046)

Sources:

GRA12A0001 GRAENING, G.O. ET AL. (CALIFORNIA STATE UNIVERSITY, SACRAMENTO) - CHECKLIST OF INLAND AQUATIC AMPHIPODA (CRUSTACEA: MALACOSTRACA) OF CALIFORNIA. ZOOTAXA 3544: 1-27. 2012-XX-XX

HOL05U0001 HOLSINGER, J. (OLD DOMINION UNIVERSITY) - EMAIL TO SANDY SHANKS (DFG) GIVING SPECIFIC LOCALITY DATA FOR MAPPED DISTRIBUTIONS OF STYGOBROMUS IN TAXONOMIC PAPER, WAN01A0001 (CO-AUTHORED WITH HOLSINGER). 2005-01-09

WAN01A0001 WANG, D. & J. HOLSINGER (OLD DOMINION UNIVERSITY) - SYSTEMATICS OF THE SUBTERRANEAN AMPHIPOD GENUS STYGOBROMUS (CRANGONYCTIDAE) IN WESTERN NORTH AMERICA, WITH EMPHASIS ON SPECIES OF THE HUBBSI GROUP. AMPHIPACIFICA 3(2). PARTIAL COPY 2001-10-15



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 87849	EO Index: 88840
Key Quad: Pine Grove (3812046)	Element Code: ICMAL05460
Occurrence Number: 5	Occurrence Last Updated: 2013-01-10

Scientific Name: <i>Stygobromus gradyi</i>	Common Name: Grady's Cave amphipod
Listing Status: Federal: None	Rare Plant Rank:
* SENSITIVE *	Other Lists: IUCN_VU-Vulnerable
CNDDB Element Ranks: Global: G1	
State: S1	

General Habitat: KNOWN ONLY FROM CENTRAL CALIFORNIA.	Micro Habitat: KNOWN ONLY FROM SPRINGS AND CAVES IN THE MOTHER LODE KARST REGION.
--	---

Last Date Observed: 2010-12-23	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2010-12-23	Occurrence Rank: Unknown
Owner/Manager:	Trend: Unknown
Presence: Presumed Extant	

Location:
SENSITIVE LOCATION INFORMATION SUPPRESSED.

Detailed Location:
PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:
Threats:

General:

PLSS:	Accuracy: 2/5 mile	Area (acres): 0
UTM:	Latitude/Longitude:	Elevation (feet): 2,400

County Summary: Amador	Quad Summary: West Point (3812045), Pine Grove (3812046)
----------------------------------	--

Sources:

GRA10S0001	GRAENING, G.O. & G. GRAENING (CALIFORNIA STATE UNIVERSITY, SACRAMENTO) - CAS-IZ 184781 2010-12-23
GRA12A0001	GRAENING, G.O. ET AL. (CALIFORNIA STATE UNIVERSITY, SACRAMENTO) - CHECKLIST OF INLAND AQUATIC AMPHIPODA (CRUSTACEA: MALACOSTRACA) OF CALIFORNIA. ZOOTAXA 3544: 1-27. 2012-XX-XX
WAN01A0001	WANG, D. & J. HOLSINGER (OLD DOMINION UNIVERSITY) - SYSTEMATICS OF THE SUBTERRANEAN AMPHIPOD GENUS STYGOBROMUS (CRANGONYCTIDAE) IN WESTERN NORTH AMERICA, WITH EMPHASIS ON SPECIES OF THE HUBBSI GROUP. AMPHIPACIFICA 3(2). PARTIAL COPY 2001-10-15



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 58626

EO Index: 58662

Key Quad: West Point (3812045)

Element Code: ILARA14060

Occurrence Number: 1

Occurrence Last Updated: 2004-12-15

Scientific Name: *Banksula grubbsi*

Common Name: Grubbs' cave harvestman

Listing Status: **Federal:** None

Rare Plant Rank:

State: None

Other Lists:

CNDDDB Element Ranks: **Global:** G1

State: S1

General Habitat:

KNOWN ONLY FROM THE TYPE LOCALITY, BLACK CHASM CAVE, VOLCANO, AMADOR COUNTY.

Micro Habitat:

SPECIES IS TROGLOBITIC.

Last Date Observed: 1978-02-19

Occurrence Type: Natural/Native occurrence

Last Survey Date: 1978-02-19

Occurrence Rank: Unknown

Owner/Manager: PVT

Trend: Unknown

Presence: Presumed Extant

Location:

BLACK CHASM CAVERN, ABOUT 0.75 MILE SOUTHEAST OF VOLCANO.

Detailed Location:

Ecological:

DESIGNATED A NATIONAL NATURAL LANDMARK IN 1986. OPEN FOR PUBLIC TOURS SINCE 1998.

Threats:

General:

HOLOTYPE MALE, COLLECTED BY A.G. GRUBBS; DEPOSITED IN THE CALIFORNIA ACADEMY OF SCIENCES, TYPE #14018.

PLSS: T07N, R12E, Sec. 26 (M)

Accuracy: 1/10 mile

Area (acres): 0

UTM: Zone-10 N4256453 E707415

Latitude/Longitude: 38.43227 / -120.62370

Elevation (feet): 2,100

County Summary:

Amador

Quad Summary:

West Point (3812045)

Sources:

- BRI81A0002 BRIGGS, T.S. & D. UBICK - STUDIES ON CAVE HARVESTMEN OF THE CENTRAL SIERRA NEVADA WITH DESCRIPTIONS OF NEW SPECIES OF BANKSULA. PROCEEDINGS OF THE CALIFORNIA ACADEMY OF SCIENCES 42(11):315-322, 5 FIGURES. 1981-06-24
- UBI02A0001 UBICK, D. & T.J. BRIGGS (CALIFORNIA ACADEMY OF SCIENCES) - THE HARVESTMAN FAMILY PHALANGODIDAE. 4. A REVIEW OF THE GENUS BANKSULA (OPILIONES: LANIATORES). JOURNAL OF ARACHNOLOGY: 30(2):435-451. 2002-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 57563	EO Index: 57579
Key Quad: Pine Grove (3812046)	Element Code: PDAPI0Z0P0
Occurrence Number: 15	Occurrence Last Updated: 2004-10-21

Scientific Name: <i>Eryngium pinnatisectum</i>	Common Name: Tuolumne button-celery
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists:
State: None	
CNDDDB Element Ranks:	
Global: G2	
State: S2	

General Habitat: VERNAL POOLS, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: VOLCANIC SOILS; VERNAL POOLS AND MESIC SITES WITHIN OTHER NATURAL COMMUNITIES. 65-915 M.
--	---

Last Date Observed: 1892-06-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1892-06-XX	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
PINE GROVE; AMADOR COUNTY.

Detailed Location:

Ecological:

Threats:

General:

1892 COLLECTION BY HANSEN IS ONLY SOURCE. NEEDS FIELDWORK.

PLSS: T07N, R12E, Sec. 33 (M)	Accuracy: 3/5 mile	Area (acres): 0
UTM: Zone-10 N4254326 E704384	Latitude/Longitude: 38.41382 / -120.65902	Elevation (feet): 2,550

County Summary:

Amador

Quad Summary:

Pine Grove (3812046)

Sources:

HAN92S0004 HANSEN, G. - HANSEN #391 UC #193669 1892-06-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A2154	EO Index: 103748
Key Quad: West Point (3812045)	Element Code: PDPHR01130
Occurrence Number: 8	Occurrence Last Updated: 2016-10-14

Scientific Name: <i>Erythranthe marmorata</i>	Common Name: Stanislaus monkeyflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: None	
CNDDB Element Ranks:	
Global: G2?	
State: S2?	

General Habitat: CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: 300-1435 M.
--	--------------------------------------

Last Date Observed: 1892-04-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1892-04-XX	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
FISCHER'S CABIN, MOKELUMNE RIVER AND TRIBUTARIES REGION.

Detailed Location:
EXACT LOCATION UNKNOWN. CANNOT LOCATE "FISCHER'S CABIN". MAPPED AS BEST GUESS AROUND GIVEN ELEVATION OF 1200 FT ALONG THE NORTH FORK MOKELUMNE RIVER.

Ecological:
Threats:

General:
ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1892 HANSEN COLLECTION. NEEDS FIELDWORK.

PLSS: T06N, R12E, Sec. 12 (M)	Accuracy: 1 mile	Area (acres): 1,987
UTM: Zone-10 N4252119 E708703	Latitude/Longitude: 38.39295 / -120.61025	Elevation (feet): 1,200

County Summary: Amador, Calaveras	Quad Summary: West Point (3812045), Pine Grove (3812046)
---	--

Sources:

HAN92S0035	HANSEN, G. - HANSEN #473 UC #103735 & #193097, ND-G (ALSO CITED IN NES12A0002) 1892-04-XX
NES12A0002	NESON, G. - TAXONOMY OF ERYTHRANTHE SECT. SIMIOLA (PHRYMACEAE) IN THE USA AND MEXICO. PHYTONEURON 40: 1-123. 2012-05-16



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 30918	EO Index: 3921
Key Quad: Pine Grove (3812046)	Element Code: PMLIL0G020
Occurrence Number: 36	Occurrence Last Updated: 2015-01-21

Scientific Name: <i>Chlorogalum grandiflorum</i>	Common Name: Red Hills soaproot
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists: BLM_S-Sensitive
State: None	
CNDDB Element Ranks:	
Global: G3	
State: S3	

General Habitat:

CISMONTANE WOODLAND, CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.

Micro Habitat:

OCCURS FREQUENTLY ON SERPENTINE OR GABBRO, BUT ALSO ON NON-ULTRAMAFIC SUBSTRATES; OFTEN ON "HISTORICALLY DISTURBED" SITES. 265-1695 M.

Last Date Observed: 2011-06-24	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2011-06-24	Occurrence Rank: Good
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:

RIDGE ABOUT 1.25 MILE NORTH OF PINE GROVE.

Detailed Location:

POP. IS ~0.6 MI LONG, STARTING AT CENTER OF THE EASTERN SECTION LINE, EXTENDING TO CENTER OF SEC 28. POP. MAY CONTINUE FURTHER TO THE EAST. UNUSUAL SITE; RARELY FOUND IN FORESTED AREAS AND ALMOST ALWAYS OCCURS ON SERPENTINE OR GABBRO SOILS.

Ecological:

WESTSIDE PONDEROSA PINE FOREST WITH PINUS LAMBERTIANA, CALOCEDRUS, PSEUDOTSUGA, QUERCUS CHRYSOLEPIS, ARBUTUS, CHAMAEBATIA FOLIOLOSA, TOXICODENDRON, ELYMUS GLAUCUS, AND ARCTOSTAPHYLOS VISCIDA MARIPOSA. SOILS ARE JOSEPHINE-MARIPOSA COMPLEX.

Threats:

LOGGING, PROPOSED FIRE BREAK, EXCHANGE FROM BLM OWNERSHIP TO PRIVATE OWNERSHIP, SOIL DISTURBANCE THAT REMOVES BULBS.

General:

1000 PLANTS OBSERVED BETWEEN THIS SITE AND OCCURRENCE #37 (ABOUT 1 MILE SOUTH) IN 1993. 200 PLANTS OBSERVED AT WESTERN END OF OCCURRENCE IN 2011. PENDING FUELS TREATMENT PROJECT IS MASTICATION ONLY; WILL LIKELY IMPROVE HABITAT.

PLSS: T07N, R12E, Sec. 28, E (M)	Accuracy: specific area	Area (acres): 39
UTM: Zone-10 N4256327 E704509	Latitude/Longitude: 38.43181 / -120.65700	Elevation (feet): 2,400

County Summary:

Amador

Quad Summary:

Pine Grove (3812046)

Sources:

DOB11F0002	DOBROVOLNY, L. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR CHLOROGALUM GRANDIFLORUM 2011-06-24
FRA93F0005	FRANKLIN, A. - FIELD SURVEY FORM FOR CHLOROGALUM GRANDIFLORUM 1993-07-08



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 30919	EO Index: 3920	
Key Quad: Pine Grove (3812046)	Element Code: PML10G020	
Occurrence Number: 37	Occurrence Last Updated: 2007-08-02	

Scientific Name: <i>Chlorogalum grandiflorum</i>	Common Name: Red Hills soaproot
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists: BLM_S-Sensitive
State: None	
CNDDB Element Ranks:	
Global: G3	
State: S3	

General Habitat: CISMONTANE WOODLAND, CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS FREQUENTLY ON SERPENTINE OR GABBRO, BUT ALSO ON NON-ULTRAMAFIC SUBSTRATES; OFTEN ON "HISTORICALLY DISTURBED" SITES. 265-1695 M.
---	---

Last Date Observed: 2005-06-15	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2005-06-15	Occurrence Rank: Good
Owner/Manager: BLM, DPR, PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
0.5 MILE NORTHEAST OF PINE GROVE.

Detailed Location:
TWO COLONIES IN THE WESTERN HALF OF THE NW 1/4 OF SECTION 34.

Ecological:
WESTSIDE PONDEROSA PINE FOREST WITH PINUS LAMBERTIANA, CALOCEDRUS, PSEUDOTSUGA, QUERCUS CHRYSOLEPIS, ARBUTUS, CHAMAEBATIA FOLIOLOSA, TOXICODENDRON, ELYMUS GLAUCUS, AND ARCTOSTAPHYLOS VISCIDA MARIPOSA. SOILS ARE JOSEPHINE-MARIPOSA COMPLEX.

Threats:
LOGGING, TRANSFER FROM PUBLIC PROPERTY (BLM) TO PRIVATE.

General:
1000 PLANTS OBSERVED BETWEEN SOUTHERN COLONY AND OCCURRENCE #36 IN 1993. 2500+ PLANTS BETWEEN NORTHERN COLONY AND OCCURRENCE #60 IN 2005. UNUSUAL SITE; RARELY FOUND IN FORESTED AREAS AND ALMOST ALWAYS OCCURS ON SERPENTINE OR GABBRO SOILS.

PLSS: T07N, R12E, Sec. 34, NW (M)	Accuracy: specific area	Area (acres): 14
UTM: Zone-10 N4254967 E705327	Latitude/Longitude: 38.41938 / -120.64803	Elevation (feet): 2,500

County Summary: Amador	Quad Summary: Pine Grove (3812046)
----------------------------------	--

Sources:

FRA93F0005	FRANKLIN, A. - FIELD SURVEY FORM FOR CHLOROGALUM GRANDIFLORUM 1993-07-08
RAG05F0001	RAGGIO, P. & G. HARTWELL - FIELD SURVEY FORM FOR CHLOROGALUM GRANDIFLORUM 2005-06-15



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 69718	EO Index: 70505
Key Quad: Pine Grove (3812046)	Element Code: PMLIL0G020
Occurrence Number: 60	Occurrence Last Updated: 2007-08-02

Scientific Name: <i>Chlorogalum grandiflorum</i>	Common Name: Red Hills soaproot
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists: BLM_S-Sensitive
State: None	
CNDDB Element Ranks:	
Global: G3	
State: S3	

General Habitat: CISMONTANE WOODLAND, CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS FREQUENTLY ON SERPENTINE OR GABBRO, BUT ALSO ON NON-ULTRAMAFIC SUBSTRATES; OFTEN ON "HISTORICALLY DISTURBED" SITES. 265-1695 M.
---	---

Last Date Observed: 2005-06-15	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2005-06-15	Occurrence Rank: Good
Owner/Manager: DPR-INDIAN GRINDING ROCK SHP	Trend: Unknown
Presence: Presumed Extant	

Location:
NORTHERN EDGE OF INDIAN GRINDING ROCK STATE HISTORIC PARK.

Detailed Location:
TWO POLYGONS MAPPED IN THE SE 1/4 OF THE SW 1/4 AND THE SW 1/4 OF THE SE 1/4 OF SECTION 27.

Ecological:
IN OPEN AREAS AND UNDER MANZANITA IN FOOTHILL WOODLAND. ASSOCIATED WITH BRODIAEA ELEGANS, GALIUM, PLANTAGO LANCEOLATA, CHAMAEBATIA FOLIOLOSA, GENTIANA, AND HYPERICUM CONCINNUM. ON JOSEPHINE, MARIPOSA, AND SITE SERIES SOILS.

Threats:
General:
2500+ PLANTS OBSERVED IN 2005 BETWEEN THIS OCCURRENCE AND THE NORTHERN PORTION OF OCCURRENCE #37.

PLSS: T07N, R12E, Sec. 27, S (M)	Accuracy: specific area	Area (acres): 32
UTM: Zone-10 N4255902 E705645	Latitude/Longitude: 38.42772 / -120.64412	Elevation (feet): 2,400

County Summary: Amador	Quad Summary: Pine Grove (3812046)
----------------------------------	--

Sources:
RAG05F0001 RAGGIO, P. & G. HARTWELL - FIELD SURVEY FORM FOR CHLOROGALUM GRANDIFLORUM 2005-06-15



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 21874	EO Index: 14252
Key Quad: Pine Grove (3812046)	Element Code: PMPOA5T030
Occurrence Number: 9	Occurrence Last Updated: 1992-10-13

Scientific Name: <i>Sphenopholis obtusata</i>	Common Name: prairie wedge grass
Listing Status:	Rare Plant Rank: 2B.2
Federal: None	Other Lists:
State: None	
CNDDDB Element Ranks:	
Global: G5	
State: S2	

General Habitat: CISMONTANE WOODLAND, MEADOWS AND SEEPS.	Micro Habitat: OPEN MOIST SITES, ALONG RIVERS AND SPRINGS, ALKALINE DESERT SEEPS. 15-2625 M.
--	--

Last Date Observed: 1983-06-23	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1983-06-23	Occurrence Rank: Unknown
Owner/Manager: DPR-INDIAN GRINDING ROCK SHP	Trend: Unknown
Presence: Presumed Extant	

Location:
INDIAN GRINDING ROCK STATE HISTORIC PARK, 2 KM NE OF PINE GROVE.

Detailed Location:

Ecological:
GROWING IN A MOIST MEADOW ON VERY ROCKY LOAMY ALLUVIAL SOILS. ASSOCIATES INCLUDE JUNCUS, AGROSTIS, HOLCUS LENTUS, ELYMUS, AND POLYPOGON.

Threats:

General:

1983 SURVEY REVEALED THREE POCKETS WITHIN THE PARK, EACH WITH NO MORE THAN 100 PLANTS.

PLSS: T07N, R12E, Sec. 27, S (M)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-10 N4255645 E705806	Latitude/Longitude: 38.42537 / -120.64236	Elevation (feet): 2,360

County Summary: Amador	Quad Summary: Pine Grove (3812046)
----------------------------------	--

Sources:
FER83F0006 FERREIRA, J. - FIELD SURVEY FORM FOR SPHENOPHOLIS OBTUSATA 1983-06-23



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	80358	EO Index:	81346
Key Quad:	Pine Grove (3812046)	Element Code:	PMPOA5T030
Occurrence Number:	17	Occurrence Last Updated:	2010-10-11

Scientific Name:	<i>Sphenopholis obtusata</i>	Common Name:	prairie wedge grass
Listing Status:	Federal: None State: None	Rare Plant Rank:	2B.2
CNDDDB Element Ranks:	Global: G5 State: S2	Other Lists:	

General Habitat:	Micro Habitat:
CISMONTANE WOODLAND, MEADOWS AND SEEPS.	OPEN MOIST SITES, ALONG RIVERS AND SPRINGS, ALKALINE DESERT SEEPS. 15-2625 M.

Last Date Observed:	1895-05-20	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1895-05-20	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
IRISHTOWN, AMADOR COUNTY.

Detailed Location:
EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB IN GENERAL VICINITY OF HISTORICAL LOCATION OF IRISHTOWN.

Ecological:

Threats:

General:

ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1895 COLLECTION BY HANSEN. NEEDS FIELDWORK.

PLSS: T06N, R12E, Sec. 08 (M)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-10 N4251509 E703104	Latitude/Longitude: 38.38875 / -120.67448	Elevation (feet): 1,500

County Summary:	Quad Summary:
Amador	Mokelumne Hill (3812036), Pine Grove (3812046)

Sources:
HAN95S0002 HANSEN, G. - HANSEN #615 POM #113387 1895-05-20

IPaC resource list

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

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

Location

Amador County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Endangered species

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

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

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

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

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

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

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

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/2891>

Fishes

NAME

STATUS

Delta Smelt *Hypomesus transpacificus*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/321>

Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ

[below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Rufous Hummingbird *selasphorus rufus*

Breeds elsewhere

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

<https://ecos.fws.gov/ecp/species/8002>

Probability of Presence Summary

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

Probability of Presence (■)

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

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

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

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

Breeding Season (■)

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

Survey Effort (|)

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

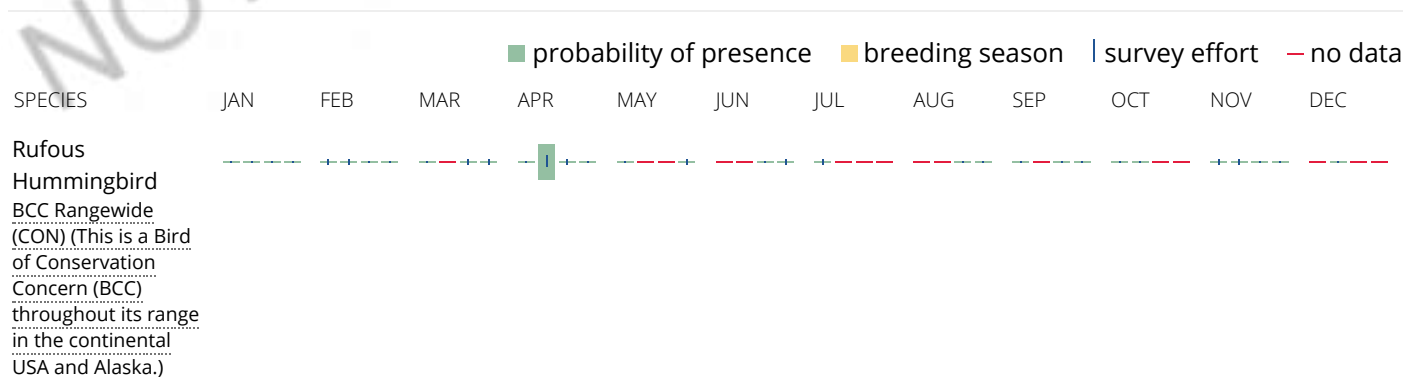
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

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

Survey Timeframe

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



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

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to

occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

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

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

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

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

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

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

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

Facilities

National Wildlife Refuge lands

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

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

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

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

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

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

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