Biological Resources Assessment

Quarry Park Improvements Project
City of Rocklin, California

Prepared for:

City of Rocklin

Date:

March 26, 2015

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1.0 EXECUTIVE SUMMARY

Foothill Associates' biologists conducted a biological resources assessment for the Quarry Park Improvements Project, located in the City of Rocklin, Placer County, California. The purpose of this document is to summarize the general biological resources on the Project Site, to assess the suitability of the Project Site to support special-status species and sensitive habitat types, and to provide recommendations for regulatory permitting or further analysis that may be required prior to development activities occurring on the site.

Potential sensitive biological resources that could be associated with the Project Site include:

- Potential habitat for special-status plants including: Hispid bird's beak (*Chloropyron molle* ssp. *hispidum*), Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*), Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), and Sanford's arrowhead (*Sagittaria sanfordii*);
- Potential nesting habitat for nesting migratory birds and other birds of prey including: purple martin (*Progne subis*), white-tailed kite (*Elanus leucurus*), burrowing owl (*Athene cunicularia*), and grasshopper sparrow (*Ammodramus savannarum*);
- Potential habitat for special-status western pond turtle (*Emys marmorata*);
- Potential roosting habitat for special-status bat species; and
- Sensitive habitat (native oak trees protected by the City of Rocklin General Plan).

Below is a summary of avoidance and minimization measures that recommendation prior to project implementation:

- Conduct two (2) botanical surveys for special-status plants (one in May and one in June);
- Conduct clearing and tree and shrub removal operations between September 1 and February 14 to minimize potential impacts to nesting birds;
- If construction begins or trees are anticipated for removal during the nesting season (February 15 – August 31), conduct a pre-construction survey for active bird nests within the Project Site;
- Within 14 days prior to the initiation of construction activities, conduct a pre-construction survey for western pond turtle, and special-status bat species;
- If any oak (*Quercus* sp.) trees are anticipated for removal, conduct an arborist survey and prepare an arborist report for protected oak trees.

2.0 INTRODUCTION

This report summarizes the findings of a Biological Resources Assessment (BRA) completed for the ±9-acre Quarry Park Improvements Project (Project Site) located in the City of Rocklin, Placer County, California. This document addresses the onsite physical features, as well as plant communities present and the common plant and wildlife species occurring, or potentially occurring, within the Project Site. Furthermore, the suitability of habitats to support special-status species and sensitive habitats are analyzed and recommendations for any regulatory permitting or further analysis that may be required prior to development activities occurring on the site are provided.

3.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. The CEQA significance criteria are also included in this section.

3.1 Federal Endangered Species Act

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3)(19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

FESA and Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. The U.S. Army Corps of Engineers (Corps) must consult with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, FESA would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

3.2 Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

3.3 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Wildlife (CDFW), formerly California Department of Fish and Game, when preparing California Environmental Quality Act (CEQA) documents. The purpose is to ensure that the state lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

3.4 CDFW Species of Concern

In addition to formal listing under FESA and CESA, species receive additional consideration by CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

3.5 California Native Plant Society

The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review. The following identifies the definitions of the CNPS listings:

- List 1A: Plants presumed Extinct in California
- List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- List 3: Plants about which we need more information – A Review List
- List 4: Plants of limited distribution – A Watch List

3.6 Jurisdictional Waters of the United States

3.6.1 Federal Jurisdiction

The Corps regulates discharge of dredge or fill material into waters of the United States under Section 404 of the CWA. "Discharges of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the "normal circumstances" for the site.
- The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. §328.4(c) (1)]. The OHWM is defined by the Corps as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

3.6.2 State Jurisdiction

CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq*. of the California Fish and Game Code. Under Section 1602, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds…except when the department has been notified pursuant to Section 1601." If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures.

3.7 The California Porter-Cologne Water Quality Control Act

Water quality in California is governed by the Porter-Cologne Water Quality Control Act (Porter Cologne; Ca. Water Code, Div. 7, §13000 et seq.). Under the California Porter-Cologne Water Quality Control Act, discharges to wetlands and other "waters of the state" have been and remain subject to state regulation. Under California State law, "waters of the state" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." This law assigns overall responsibility for water rights and water quality protection to the State Water Resource Control Board (SWRCB) and directs the nine statewide Regional Water Quality Control Boards to develop and enforce water quality standards within their boundaries.

After the Supreme Court decision in *Solid Waste Agency of Northern Cook County v. the U.S. Army Corps of Engineers* the Office of Chief Counsel of the SWRCB released a legal memorandum confirming the State's jurisdiction over isolated wetlands. The memorandum stated that under the California Porter-Cologne Water Quality Control Act, discharges to wetlands and other waters of the state are subject to State regulation, including isolated wetlands.

In general, the Regional Water Quality Control Boards regulate discharges to isolated waters in much the same way as they do for Federal-jurisdictional waters, using the Porter-Cologne Act rather than CWA authority.

3.8 CEQA Significance Criteria

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

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

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

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

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

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

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

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

3.9 City of Rocklin General Plan Policies

In addition to federal and State regulations, the *City of Rocklin General Plan* identifies goals, objectives, and policies to provide further protection to biological resources within the City's limits (City of Rocklin 2012a).

Open Space, Conservation, and Recreation Element Goals and Policies

Goal for the Preservation of Open Space Land for Natural Resources: To designate, protect, and conserve open space land in a manner that protects natural resources and balances needs for the economic, physical, and social development of the City.

Policies for the Preservation of Open Space for Natural Resources

OCR-1 To encourage the protection of open space areas, natural resource areas, hilltops, and hillsides from encroachment or destruction through the use of conservation easements, natural resource buffers, building setbacks, or other measures.

OCR-5 To utilize CEQA as the primary regulatory tool for identifying and mitigating, where feasible, impacts to open space and natural resources when reviewing proposed development projects.

OCR-6 To look for opportunities to interconnect open space and natural areas to accommodate wildlife movement and sustain ecosystems and biodiversity.

OCR-7 To consult with other jurisdictions concerning open space planning programs, including the County's Placer Legacy program and other similar regional programs, to the extent feasible.

Goal for the Conservation, Development, and Utilization of Natural Resources: Conserve and protect natural resources while permitting their managed use, consistent with city, state, and federal requirements.

Policies for the Conservation, Development, and Utilization of Natural Resources

OCR-39 To require the protection of wetlands, vernal pools, and rare, threatened, and endangered species of both plants and animals through avoidance of these resources, or implementation of appropriate mitigation measures where avoidance is not feasible, as determined by the City of Rocklin.

OCR-40 To require compliance with the State and Federal Endangered Species Acts and the Clean Water Act as conditions of development project approval.

OCR-41 To recognize that onsite protection of natural resources may not always be feasible and that offsite methods, such as use of mitigation banks, may be used.

OCR-42 To encourage projects to be designed in a manner that protects heritage oak trees and other botanically unique vegetation designated to be retained.

OCR-43 To mitigate for removal of oak trees in accordance with the City of Rocklin's Oak Tree Preservation Ordinance, or for projects located in zones not directly addressed by the Oak Tree Preservation Ordinance mitigation measures, on a project-by-project basis through the planning review and entitlement process.

OCR-45 To encourage development projects to incorporate natural resources such as creeks, steep hillside, and quarries in private but restricted ownership that provides the protection of the natural resource and also allows for access by the public, where appropriate.

OCR-46 To participate as appropriate in regional approach to the management of drainage basins and flood plains with regional agencies such as the Placer County Flood Control and Water Conservation District.

OCR-48 To promote, where appropriate, the joint use of creeks for flood control, open space, conservation of natural resources, and limited recreation activities.

OCR-49 To minimize the degradation of water quality through use of erosion control plans and Best Management Practices.

OCR-50 To maintain a grading ordinance that minimizes erosion and siltation of creeks and other watercourses.

OCR-51 Evaluate development along stream channels to ensure that it does not create any of the following effects in a significant manner: reduced stream capacity, increased erosion or deterioration of the channel.

OCR-57 To encourage urban design and form that conserves land and other resources.

OCR-60 To work with the Placer County Water Agency to ensure that available methods and techniques to conserve potable water supplies are applied in Rocklin.

3.10 City of Rocklin Final General Plan Environmental Impact Report

The *City of Rocklin Final General Plan Environmental Impact Report* (2012b) recognizes the following special-status species:

- Listed or proposed for listing as threatened or endangered under the Endangered Species Act (ESA) (50 Code of Federal Regulations (50 CFR 17-12 [listed plants] and various notices in the Federal Register [proposed species]).

- Candidates for possible future listing as threatened or endangered under the FESA.

- Listed or candidates for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 CCR 670.5).

- Listed as rare under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 *et seq.*).

- Considered by CNPS to be rare, threatened, or endangered in California (CNPS Lists 1B and 2). The City of Rocklin does not recognize List 3 and List 4 plants.

4.0 METHODS

Available information pertaining to the natural resources of the region was reviewed. All references reviewed for this assessment are listed in the References section. Site-specific information was reviewed including:

- California Department of Fish and Wildlife (CDFW). 2015. California Natural Diversity Data Base (CNDDB) (CNDDB: *Lincoln, Gold Hill, Auburn, Roseville, Rocklin, Pilot Hill, Citrus Heights, Folsom,* and *Clarksville* 7.5-minute Series Topographic Quadrangles (quadrangles)), Sacramento, CA.;
- California Native Plant Society (CNPS). 2015. Inventory of Rare and Endangered Plants (online edition, v8-01a), (CNPS: *Lincoln, Gold Hill, Auburn, Roseville, Rocklin, Pilot Hill, Citrus Heights, Folsom,* and *Clarksville* quadrangles);
- U.S. Department of Agriculture, Natural Resource Conservation Service (USDA, NRCS). 2015. *Hydric Soils List of Placer County, California*;
- USDA, NRCS. 1980. *Soil Survey of Placer County, California, Western Part*. USDA, NRCS, in cooperation with the Regents of the University of California (Agricultural Experiment Station);
- U.S. Fish and Wildlife Service (USFWS). 2015. *Federal Endangered and Threatened Species That May Be Affected by Projects in the Rocklin 7.5-minute Series Topographic Quadrangle.* Sacramento, California; and
- U.S. Geological Survey. 1967 (Photorevised 1981). *Rocklin, California*. 7.5 -minute series topographic quadrangle. U.S. Department of the Interior.

Foothill Associates' biologists conducted biological surveys of the Project Site on February 19, 2015 and March 9 and 20, 2015. The Project Site was systematically surveyed on foot with binoculars to ensure total search coverage, with special attention given to identifying those portions of the site with the potential for supporting special-status species and sensitive habitats, including sensitive habitats. During the biological surveys, the biologists recorded plant and animal species observed (**Appendix A**), and biological communities were categorized and assessed for the potential to support special-status species.

5.0 RESULTS

5.1 Site Location and Description

The approximately 9-acre Project Site is located within the City of Rocklin, California. The Project Site is bordered by the City of Rocklin's Memorial Park and Rocklin Civic Center to the north, the City of Rocklin Police Department to the east, residential development to the south, and terminates approximately 345 feet from Pacific Street to the west. The Project Site is located within Township 11 North, Range 7 East, Section 19 of the USGS 7.5-minute series *Rocklin, California* topographic quadrangle (**Figure 1**).

5.2 Physical Features

5.2.1 Topography and Drainage

The topography within the Project Site is relatively flat, except in the man-made quarry ponds where they were excavated for granite mining operations. The elevation ranges from 240 to 270 feet above mean sea level (MSL), except within Big Gun Quarry where it is approximately 180 feet above MSL at the bottom.

Water drains into the two man-made quarry ponds within the Project Site following storm events. A man-made rip-rap drainage drains the overflow of water within the southern quarry pond (Quinn Quarry) to a culvert that transports the water to the northern quarry pond (Big Gun Quarry). Features within the Project Site are isolated. Water is pumped underground by the City of Rocklin to the Rocklin Road Drainage System to the north of the Project Site. The two man-made quarry ponds are shown as ponded features on the *Rocklin, California* topographic quadrangle.

5.2.2 Soils

The Natural Resources Conservation Service (NRCS 1980) has identified and mapped two soil types occurring within the Project Site (**Figure 2**). These soil types include: **Cometa-Ramona Sandy Loams**, **1 to 5 Percent Slopes** and **Pits and Dumps**.

- **Cometa-Ramona Sandy Loams, 1 to 5 Percent Slopes**: This soil type consists of approximately 50 percent Cometa soil, 30 percent Ramona soil, 10 percent San Joaquin sandy loam, 5 percent Fiddyment loam, 5 percent Alamo clay and areas of Xerofluvents in narrow drainageways. This unit occurs on low terraces in the Roseville area and west of Lincoln at elevations of 75 to 200 feet above MSL. The Cometa and Ramona soils both formed in alluviums, predominantly from granitic sources. Cometa is a deep, well-drained claypan soil with very slow permeability, slow runoff, an available water capacity of 4 to 6 inches, and slight erosion hazard. Ramona is a very deep, well-drained soil with moderately slow permeability, medium runoff, an available water capacity of 6.5 to 9.5 inches, and slight erosion hazard. This soil unit has fair potential for rangeland and provides an amount of wildlife habitat that positively correlates with the amount of shrub cover. The natural

vegetation is typically annual grasses, forbs, and scattered oak trees. The hydric soils list of Placer County identifies this soil type as hydric (NRCS 2015).

- **Pits and Dumps**: This soil material consists of areas from which soil and parent material have been removed and areas of uneven accumulation of waste material. These areas are rock quarries; sand and gravel borrow pits; old, abandoned, dissected sloughs; refuse disposal sites; and mines. The hydric soils list of Placer County identifies this soil type as hydric (NRCS 2015).

5.3 Biological Communities

Where possible and unless otherwise noted, the vegetation classifications herein follow the *Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995) (MCV). The biological communities within the Project Site include: oak woodland, non-native annual grassland, disturbed areas, and developed areas. Wetland features identified within the Project Site include: depressional seasonal wetland, man-made quarry ponds, and a man-made ditch. This wetland features are discussed in further detail within **Section 5.3.5**. Dominant vegetation within these biological communities is described below.

5.3.1 Oak Woodland

The Project Site is comprised of a total of 2.77 acres of oak woodland (**Figure 3**). Dominant vegetation includes an overstory of interior live oak (*Quercus wizlizeni*) and gray pine (*Pinus sabiniana*) and an understory of wall barley (*Hordeum murinum*), geranium (*Geranium molle*), tall sock-destroyer (*Torilis arvensis*), soaproot (*Chlorogalum pomeridianum*), western poison oak (*Toxicodendron diversilobum*), and English plantain.

Oak woodland habitat supports breeding, foraging, and shelter habitat for many wildlife species including acorn woodpecker (*Melanerpes formicivorus*).

5.3.2 Non-Native Annual Grassland

A total of 1.84 acres of non-native annual grassland occurs within the Project Site (**Figure 3**). Dominant vegetation includes wall barley, geranium (*Geranium dissectum*), common chickweed (*Stellaria media*), English plantain (*Plantago lanceolata*), bristly ox-tongue (*Helminthotheca echioides),* slender wild oat (*Avena barbata*), filaree (*Erodium* sp.), curly dock (*Rumex crispus*), winter vetch (*Vicia villosa),* narrow tarplant (*Holocarpha virgata*), prickly lettuce (*Lactuca serriola*), and common groundsel (*Senecio vulgaris*).

Annual grassland habitat supports breeding, foraging, and shelter habitat for several species of wildlife. Wildlife species observed in this habitat during field surveys include killdeer (*Charadrius vociferus*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), western meadowlark (*Sturnella neglecta*), and turkey vulture (*Cathartes aura*).

5.3.3 Disturbed Areas

A total of 1.35 acres of disturbed areas occur along the northwestern portion of the Project Site (**Figure 3**). Disturbed areas include graded areas, fenced areas surrounding Big Gun Quarry, and areas where substantial ground modification has occurred. Dominant vegetation includes wall barley, slender wild oat, winter vetch, geranium, and filaree and isolated interior live oak and gray pine.

Wildlife species are limited in this habitat, but may include wildlife mentioned within the non-native annual grassland and oak woodland habitat.

5.3.4 Developed Areas

A total of 1.41 acres of developed areas occur along the eastern portion of the Project Site (**Figure 3**). Developed areas include paved parking lots, a playground, and commercial development. Developed areas lack vegetation aside from the turf associated with the playground.

Wildlife species are limited in this habitat, but may include wildlife mentioned within the other biological communities.

5.3.5 Wetlands and Waterways

Depressional Seasonal Wetland

A total of 0.15 acres of depressional seasonal wetland occurs within the Project Site (**Figure 3**). Depressional seasonal wetlands exhibit a hydrologic regime dominated by saturation, rather than inundation. Depressional seasonal wetlands occur as depressions within the topography with a hydrologic regime dominated by saturation and capable of supporting hydrophytic plant species and hydric soils. Dominant vegetation includes curly dock (*Rumex crispus*), spikerush (*Eleocharis macrostachya*), nutsedge (*Cyperus eragrostis*), Bermuda grass (*Cynodon dactylon*), and knotweed (*Polygonum* sp.).

Man-Made Quarry Ponds

Two man-made quarry ponds totaling 1.62 acres occur within the Project Site: Big Gun Quarry and Quinn Quarry (**Figure 3**). Dominant overstory vegetation includes gray pine and interior live oak. Himalayan blackberry (*Rubus armeniacus*), willow (*Salix* sp.), western poison oak, and cattail (*Typha* sp.) occur in isolated areas within or along the banks of Quinn Quarry. Winter vetch, geranium, nutsedge, and curly dock occur along the perimeter of the water in Big Gun Quarry.

Man-Made Ditch

A man-made ditch totaling 0.02 acres lined with rip-rap occurs within the Project Site (**Figure 3**). It is approximately 5 feet wide and lacks vegetation. The manmade ditch initiates at Quinn Quarry and drains to the north to a culvert where it drains to Big Gun Quarry.

5.4 Special-Status Species

Special-status species are plant and animal species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Listed and special-status species are defined as:

- Listed or proposed for listing under CESA and/or FESA;
- Protected under other regulations (e.g. Migratory Bird Treaty Act);
- CDFW Species of Special Concern;
- Listed by CDFW as a Species of Special Concern or on the CDFW Special Animals list;
- Listed as 1A, 1B, or 2 by the California Native Plant Society (CNPS); or
- Any other species that would receive consideration according to the CEQA Guidelines.

Special-status species considered for this analysis are based on field survey results, review of the CNDDB occurrence records of species, USFWS lists for special-status species occurring in the region, and CNPS literature (**Appendix B**). The locations of special-status species occurrences in the project vicinity are shown in **Figure 4**, which is from a search of the CNDDB. **Appendix C** includes the common and scientific names for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence on the Project Site. The following set of criteria has been used to determine each species potential for occurrence within the Project Site:

- **Present**: Species known to occur in the Project Site, based on CNDDB records, and/or was observed on the site during the field survey(s).
- **High**: Species known to occur on or near the Project Site (based on CNDDB records within five miles, and/or based on professional expertise specific to the Project Site or species) and there is suitable habitat on the Project Site.
- **Low**: Species known to occur in the vicinity of the Project Site, and there is marginal habitat on the site. -**OR**- Species is not known to occur in the vicinity of the Project Site; however there is suitable habitat on the site.
- **None**: Species is not known to occur on or in the vicinity of the Project Site and there is no suitable habitat for the species on the site. -**OR**- Species was surveyed for during the appropriate season with negative results.

Appendix C includes the common name and scientific name for each species, regulatory status, habitat descriptions, and potential for occurrence in the Project Site. **Figure 4** depicts the locations of special-status species recorded in the CNDDB within five miles

of the Project Site. Only those species that are known to be present or have a high or low potential for occurrence are discussed in further detail in this BRA.

5.4.1 Listed and Special-Status Plants

Records search identified 30 special-status plant species with the potential to occur in the Project Site. Based on field observations and literature review specific to the special-status plants listed in **Appendix C**, Hispid bird's-beak has a *high* potential to occur within the Project Site. Two special-status plants have a *low* potential to occur within the Project Site and include: Humboldt lily, and Sanford's arrowhead. These species are discussed in detail below.

Plant Species with a High Potential to Occur

Hispid Salty Bird's-Beak

Hispid salty bird's-beak is an annual parasitic herb that occurs in meadows and seeps, playas, and valley and foothill grassland habitats, especially on alkaline soils, from 3 to 509 feet above MSL (1 to 155 meters). The blooming period is from June through September (CNPS 2015). One CNDDB record is documented within five miles of the Project Site (**Figure 4**) (CDFW 2015). The non-native annual grassland and disturbed areas provide habitat for this species. This species was not observed during the biological surveys of the Project Site; however, the February 19, 2015 and March 9 and 20, 2015 biological surveys were conducted outside of the evident and identifiable blooming period for this species. Therefore, this species is considered to have a *high* potential for occurrence within the Project Site.

Plant Species with a Low Potential to Occur

Humboldt Lily

Humboldt lily is a perennial bulbiferous herb found in openings within chaparral, cismontane woodland, and lower montane coniferous forest from 295 to 4,199 feet above MSL (90 to 1,280 meters). The blooming period is from May through July (CNPS 2015). There are no documented occurrences for this species within five miles of the Project Site (CDFW 2015). The oak woodland within the Project Site provides suitable habitat for this species. This species was not observed during the biological surveys of the Project Site; however, the February 19, 2015 and March 9 and 20, 2015 biological surveys were conducted outside of the evident and identifiable blooming period for this species. Therefore, this species is considered to have a *low* potential for occurrence within the Project Site.

Sanford's Arrowhead

Sanford's arrowhead is a perennial rhizomatous herb found in marshes and swamps in assorted shallow freshwater areas from 0 to 2,133 feet above MSL (0 to 650 meters). The blooming period is from May through October (CNPS 2015). There are no documented

occurrences for this species within five miles of the Project Site (CDFW 2015). The man-made quarry ponds within the Project Site provide habitat for this species. This species was not observed during the biological surveys of the Project Site; however, the February 19, 2015 and March 9 and 20, 2015 biological surveys were conducted outside of the evident and identifiable blooming period for this species. Therefore, this species is considered to have a *low* potential for occurrence within the Project Site.

5.4.2 Listed and Special-Status Wildlife

The following special-status wildlife species have a *high* potential to occur within the Project Site: purple martin, white-tailed kite, and other migratory birds and birds of prey. The following special-status wildlife species have a *low* potential to occur within the Project Site: western pond turtle, burrowing owl, grasshopper sparrow, pallid bat, and Townsend's big-eared bat. These species are discussed in detail below.

Wildlife Species with a High Potential to Occur

Purple Martin

Purple martin breeds in North America and winters in South America. It is widely distributed throughout the eastern United States, and patchily distributed throughout the western U.S. In California, the species is locally distributed, with the highest concentration of populations occurring along the western Cascade and Sierra Nevada Ranges; North Coast and northern Central Coast Ranges; and in extreme southwest California. The purple martin is a cavity-nester. In California, it is generally restricted to areas with dead trees containing woodpecker holes. Breeding season extends from April to August (Sibley 2000). There is one CNDDB record of purple martin listed within five miles of the Project Site (**Figure 4**) (CDFW 2015). This species was not observed during the biological surveys conducted within the Project Site. The trees within the oak woodland and disturbed areas provide nesting habitat for this species. Therefore, this species is considered to have a *high* potential for occurrence within the Project Site.

White-Tailed Kite

White-tailed kite is a year-long resident in coastal and valley lowlands in California. White-tailed kite breed from February to October, peaking from May to August (Zeiner *et. al.* 1990). This species nests near the top of dense oaks, willows, or other large trees. There are three CNDDB records of white-tailed kite listed within five miles of the Project Site (**Figure 4**) (CDFW 2015). This species was not observed during the biological surveys conducted within the Project Site. The trees within the oak woodland and disturbed areas provide nesting habitat for this species. Therefore, this species is considered to have a *high* potential for occurrence within the Project Site.

Migratory Birds and Other Birds of Prey

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code, have the potential to nest in the

annual grassland and within the trees and shrubs within the oak woodland and disturbed areas. Several birds protected under the MBTA and/or Section 3503 of the California Fish and Game Code were observed foraging within the Project Site including: western scrub jay (*Aphelocoma californica*), Canada goose (*Branta canadensis*), acorn woodpecker, western meadowlark, black phoebe (*Sayornis nigricans*), northern mockingbird, oak titmouse (*Baelophys inornatus*), and house finch (*Carpodacus mexicanus*). Migratory birds and other birds of prey have a high potential to nest within annual grassland and within the trees within the oak woodland and disturbed areas during the nesting season. Consequently, raptors and other migratory birds have a *high* potential to occur on the Project Site.

The generally accepted nesting season is from February 15 through August 31.

Wildlife Species with a Low Potential to Occur

Western Pond Turtle

Western pond turtles require slow moving perennial aquatic habitats and ponds with suitable basking sites. Western pond turtles mate in April and May where adults climb onto land to dig a nest, usually along stream or pond margins (Californiaherps 2015). Western pond turtles occasionally inhabit irrigation ditches. Suitable aquatic habitat typically has a muddy or rocky bottom and has emergent aquatic vegetation for cover (Stebbins 2003). There are no CNDDB records for this species within five miles of the Project Site (CDFW 2015). The man-made quarry ponds and uplands bordering the quarry ponds provide suitable habitat for this species. No western pond turtles were observed during the biological surveys of the Project Site. Therefore, this species is considered to have a *low* potential for occurrence within the Project Site.

Burrowing Owl

Burrowing owl is a small ground-dwelling owl that occurs in western North America from Canada to Mexico and east to Texas and Louisiana. Although in certain areas of its range burrowing owls are migratory, these owls are predominantly non-migratory in California. The breeding season for burrowing owls occurs from March to August, peaking in April and May (Zeiner *et. al*. 1990). Burrowing owls nest in burrows in the ground, often in old ground squirrel burrows. Burrowing owl is also known to use artificial burrows including pipes, culverts, and nest boxes. There are no CNDDB records for this species within five miles of the Project Site (CDFW 2015). The disturbed non-native grassland provides habitat for this species. Small mammal burrows were observed within the non-native annual grassland and the disturbed areas that could be utilized by burrowing owl. No burrowing owl or their sign were observed during the biological surveys of the Project Site. Therefore, this species is considered to have a *low* potential for occurrence within the Project Site.

Grasshopper Sparrow

Grasshopper sparrow frequents dense, dry, or well drained grassland, especially native grassland. This species nests at base of overhanging clump of grass. The breeding range occurs in portions of western California, including most coastal counties south to extreme northwest Baja California (where resident). The wintering range occurs in Southern California and Baja. There are no CNDDB records for this species within five miles of the Project Site (CDFW 2015). The non-native annual grassland within the Project Site provides suitable habitat for this species. No grasshopper sparrows were observed during the biological surveys of the Project Site. Therefore, this species is considered to have a *low* potential for occurrence within the Project Site.

Special-Status Bat Species

California is home to several special-status bat species. Bat numbers are in decline throughout the U.S. due to loss of roosting habitat and habitat conversion and habitat alteration. There are no CNDDB records for special-status bat species within five miles of the Project Site (CDFW 2015). The trees within the oak woodland and disturbed areas provide roosting habitat for bats. Additionally, the crevices within the Big Gun Quarry provide roosting habitat for bats. No roosting bat species were observed during the biological surveys of the Project Site. Therefore, this species is considered to have a *low* potential for occurrence within the Project Site.

5.5 Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Additionally, sensitive habitats are protected under the specific policies outlined in the City of Rocklin General Plan (City of Rocklin 2012) (see **Section 3.9)**. Sensitive habitats that occur within the Project Site include potential jurisdictional waters of the U.S. and protected native oak trees (**Figure 3**).

5.5.1 Potential Jurisdictional Waters of the U.S.

The man-made ditch transfers overflow from Quinn Quarry northward to a culvert where it drains to Big Gun Quarry. Water from Quinn Quarry gets pumped through an underground pipe to the existing Rocklin Road Storm Drainage System located to the north of the Project Site. The two man-made quarry ponds, man-made ditch, and depressional wetland are isolated features, which are not subject to Clean Water Act jurisdiction based on the *SWANCC* decision (Solid Waste Agency of Northern Cook County vs. U.S. Army Corps of Engineers, No. 99-1178, January 9, 2001). Therefore, there are no jurisdictional waters of the U.S. within the Project Site.

5.5.2 Oak Trees

The oak woodland within the Project Site contains several interior live oak trees. Oak trees are regulated under the City of Rocklin's *Oak Tree Preservation Ordinance* and

Oak Tree Preservation Guidelines. The City of Rocklin regulates removal and construction within the dripline of all native oak trees with a trunk that is at least six inches diameter at breast height. A Tree Permit is required prior to removal of any protected tree. Mitigation, in the form of on-site replacement planting or contribution to the City's Oak Tree Preservation Fund, may be required for removal of protected trees.

6.0 DISCUSSION AND RECOMMENDATIONS

As discussed, the Project Site consists of ±9 acres of land that supports primarily non-native annual grassland and oak woodland habitats. Potential sensitive biological resources that could be associated with the Project Site include:

- Potential habitat for special-status plants including Hispid bird's beak (*Chloropyron molle* ssp. *hispidum*), Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*), Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), and Sanford's arrowhead (*Sagittaria sanfordii*);
- Potential nesting habitat for nesting migratory birds and other birds of prey including purple martin (*Progne subis*), white-tailed kite (*Elanus leucurus*), burrowing owl (*Athene cunicularia*), and grasshopper sparrow (*Ammodramus savannarum*);
- Potential habitat for special-status western pond turtle (*Emys marmorata*);
- Potential roosting habitat for special-status bat species; and
- Sensitive habitat (native oak trees protected by the City of Rocklin General Plan).

6.1 Special-Status Plants

A qualified botanist should conduct botanical surveys within the evident and identifiable blooming periods for Hispid salty bird's beak (blooms June through September) within the non-native annual grassland, Humboldt lily (blooms May through July) within the oak woodland, and Sanford's arrowhead (blooms May through October) within the man-made quarry ponds. A botanical survey could be conducted within the oak woodland for Humboldt lily and within the man-made quarry ponds for Sanford's arrowhead in May. If no special-status plants are observed, the botanist should email the results to the City of Rocklin within two days of the survey, and work can occur within the oak woodland and the man-made quarry ponds. A botanical survey should be conducted within the non-native annual grassland for Hispid salty bird's beak in June. If no special-status plants are observed, the botanist should email the findings to the City of Rocklin within two days of the survey, and work can occur within the non-native annual grassland. The botanist should document the findings in a letter report to the City of Rocklin within two weeks of the final survey, and no further measures are recommended.

If any special-status plants are observed, a qualified botanist should establish an approximately 10-foot buffer around the individuals. The project should avoid impacts to the plants. If avoidance is not feasible, a mitigation and monitoring plan (MMP) should be developed prior to commencement of construction activities. The MMP should include measures such as preserving and enhancing existing populations, creating off-site populations on project mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. The MMP should also include monitoring and reporting

requirements for populations to be preserved on Project Site or protected or enhanced off site. The MMP should be approved by the CDFW.

6.2 Migratory Birds and Other Birds of Prey

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code, including purple martin, white-tailed kite, burrowing owl, and grasshopper sparrow have the potential to nest within the annual grassland, within the burrows within the disturbed areas, and within the trees within the oak woodland and disturbed areas. Vegetation clearing operations, including pruning or removal of trees and shrubs, if any are anticipated for removal, should be completed between September 1 and February 14, if feasible. If vegetation removal begins during the nesting season (February 15 to August 31), a qualified biologist should conduct a pre-construction survey for active nests. The pre-construction survey should be conducted within 14 days prior to commencement of ground-disturbing activities. If the pre-construction survey shows that there is no evidence of active nests, a letter report should be submitted to the City of Rocklin documenting the results, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey is recommended.

If any active nests are located within the Project Site, an appropriate buffer zone should be established around the nests, as determined by the biologist. The biologist should mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 250 feet for a raptor nest. If the buffer zones are not feasible, the biologist should determine whether a reduced buffer is appropriate depending on the species and the construction activities. If a reduced buffer is established, the biologist should monitor the nests daily for the first week of construction to evaluate potential nesting disturbance by construction activities. If the biologist determines that the reduced buffer is not disturbing the nest after the first week, then the biologist should conduct weekly site visits until the nestlings have successfully fledged and the nests are no longer occupied.

6.3 Special-Status Reptiles

The man-made quarry ponds provide habitat for the western pond turtle, a species of special concern. A pre-construction survey for western pond turtle is recommended within 14 days prior to the start of ground disturbance. If no western pond turtle is observed, a letter report should be submitted to the City of Rocklin for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey or halts for more than 14 days, a new survey is recommended.

If western pond turtles are found, the biologist should recommend avoidance measures including, but not limited to, having a qualified biologist on site during grading activities

for the purpose of relocating any species found within the construction footprint to suitable habitat away from the construction zone, but within the Project Site.

6.4 Special-Status Bats

The trees within the oak woodland and disturbed areas and the crevices within the rocks of Big Gun Quarry provide roosting habitat for special-status bats. A pre-construction survey for special-status bat species is recommended within 14 days prior to the start of ground disturbance. If no bats are observed, a letter report documenting the results of the survey should be submitted to the City of Rocklin for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey or halts for more than 14 days a new survey is recommended.

If bats are found, a biologist should establish a buffer around the roost tree until it is no longer occupied. Once the bat leaves the roosting tree, exclusion measures should be immediately implemented to ensure that the bat does not return to the roost tree. Exclusion measures include may exclusion netting. The tree should not be removed until a biologist has determined that the tree is no longer occupied by the bats.

6.5 Protected Trees

The oak trees within the Project Site are protected by the City of Rocklin's Oak Tree Preservation Ordinance (City of Rocklin 2012). If the proposed project involves the removal of any oak trees, an arborist survey should be conducted by an International Society of Arboriculture (ISA) Certified Arborist. The arborist should perform a complete inventory of all protected oak trees that occur on the Project Site. An arborist report should be prepared that identifies impacts and mitigation associated with the project, in accordance with the City's Ordinance

6.6 Summary of Avoidance and Minimization Measures

- Conduct two botanical surveys for special-status plants (one in May and one in June);
- Conduct clearing and tree and shrub removal operations between September 1 and February 14 to minimize potential impacts to nesting birds;
- If construction begins or trees are anticipated for removal during the nesting season (February 15 – August 31), conduct a pre-construction survey for active bird nests within the Project Site;
- Within 14 days prior to the initiation of construction activities, conduct a pre-construction survey for western pond turtle, and special-status bat species;
- If any oak trees are anticipated for removal, conduct an arborist survey and prepare an arborist report for protected oak trees.

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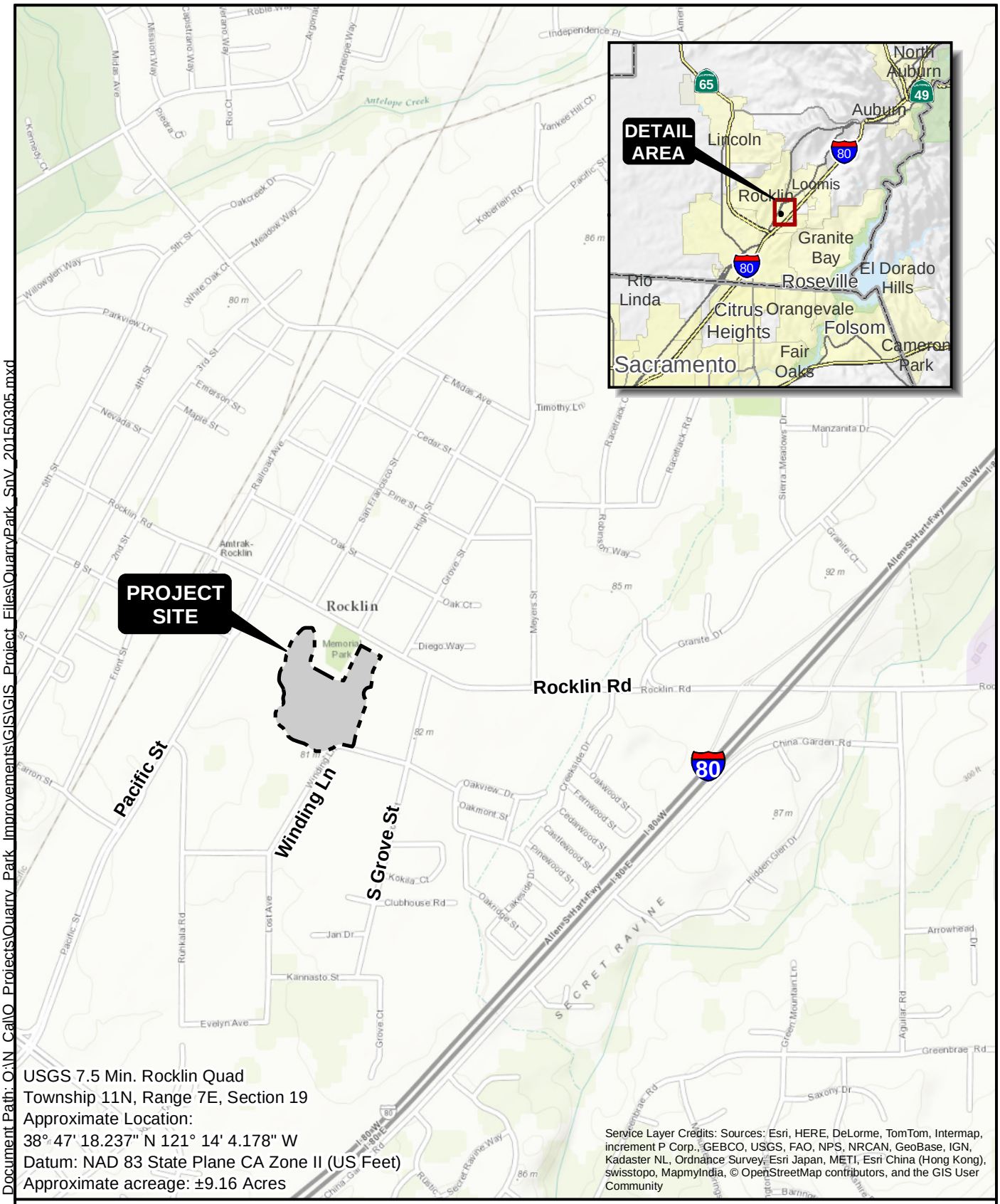

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USGS 7.5 Min. Rocklin Quad
Township 11N, Range 7E, Section 19
Approximate Location:
38° 47' 18.237" N 121° 14' 4.178" W
Datum: NAD 83 State Plane CA Zone II (US Feet)
Approximate acreage: ±9.16 Acres

Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

SITE AND VICINITY

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

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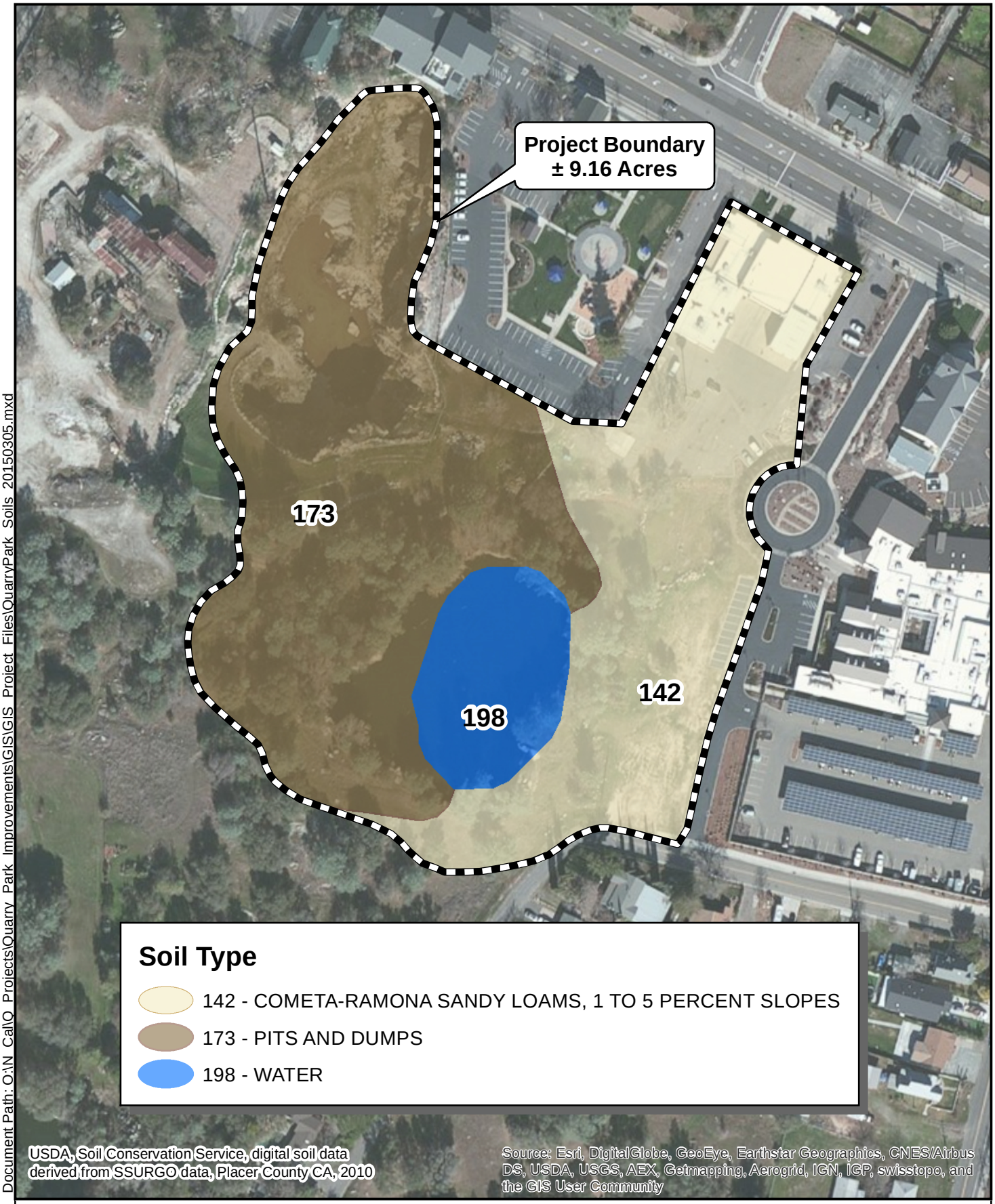
Drawn By: MUB
Date: 03/11/2015

FIGURE 1



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SOILS

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

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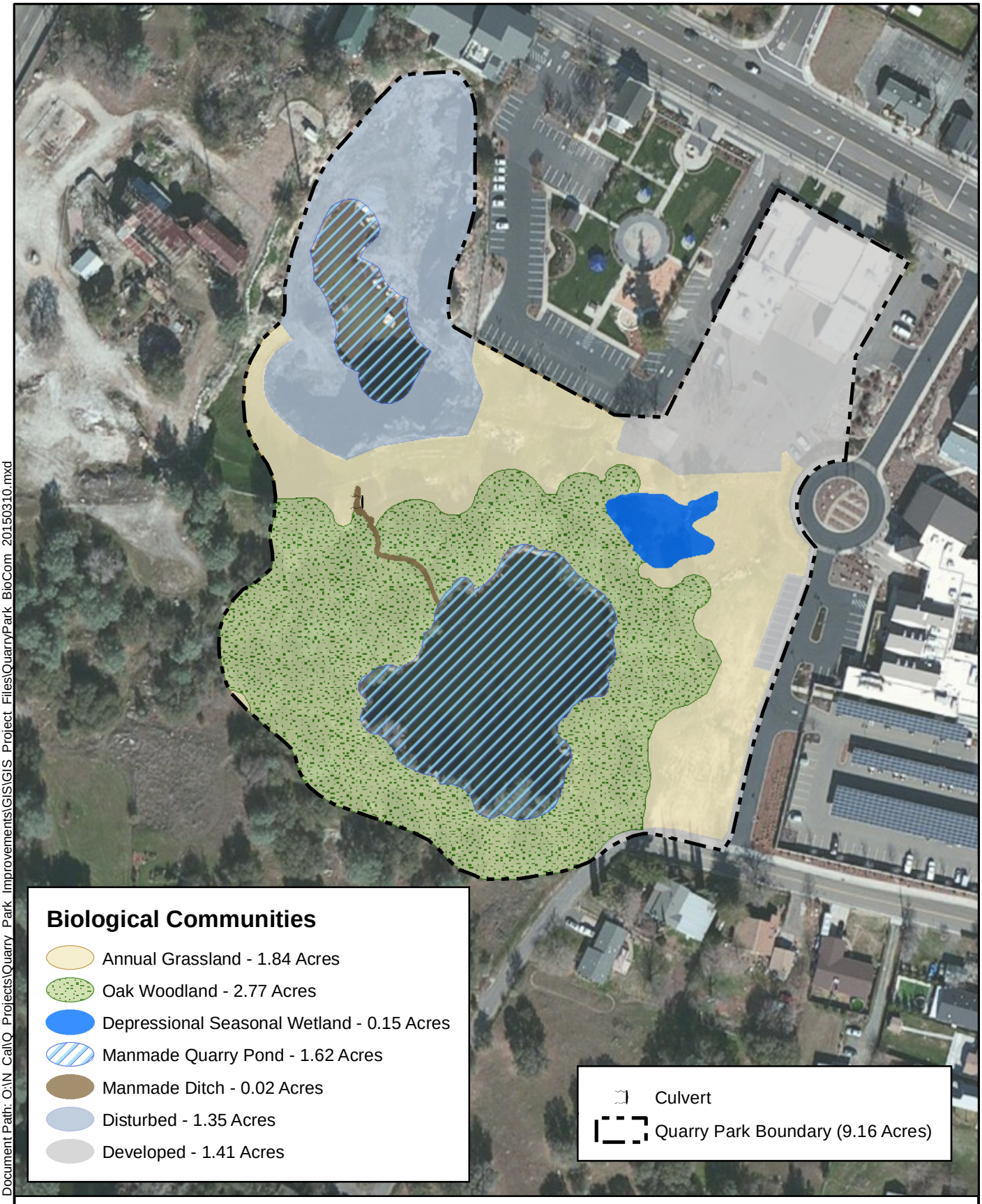
1 inch = 150 feet

Drawn By: MUB
Date: 03/11/2015

FIGURE 2



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BIOLOGICAL COMMUNITIES AND CONSTRAINTS

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

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FIGURE 3

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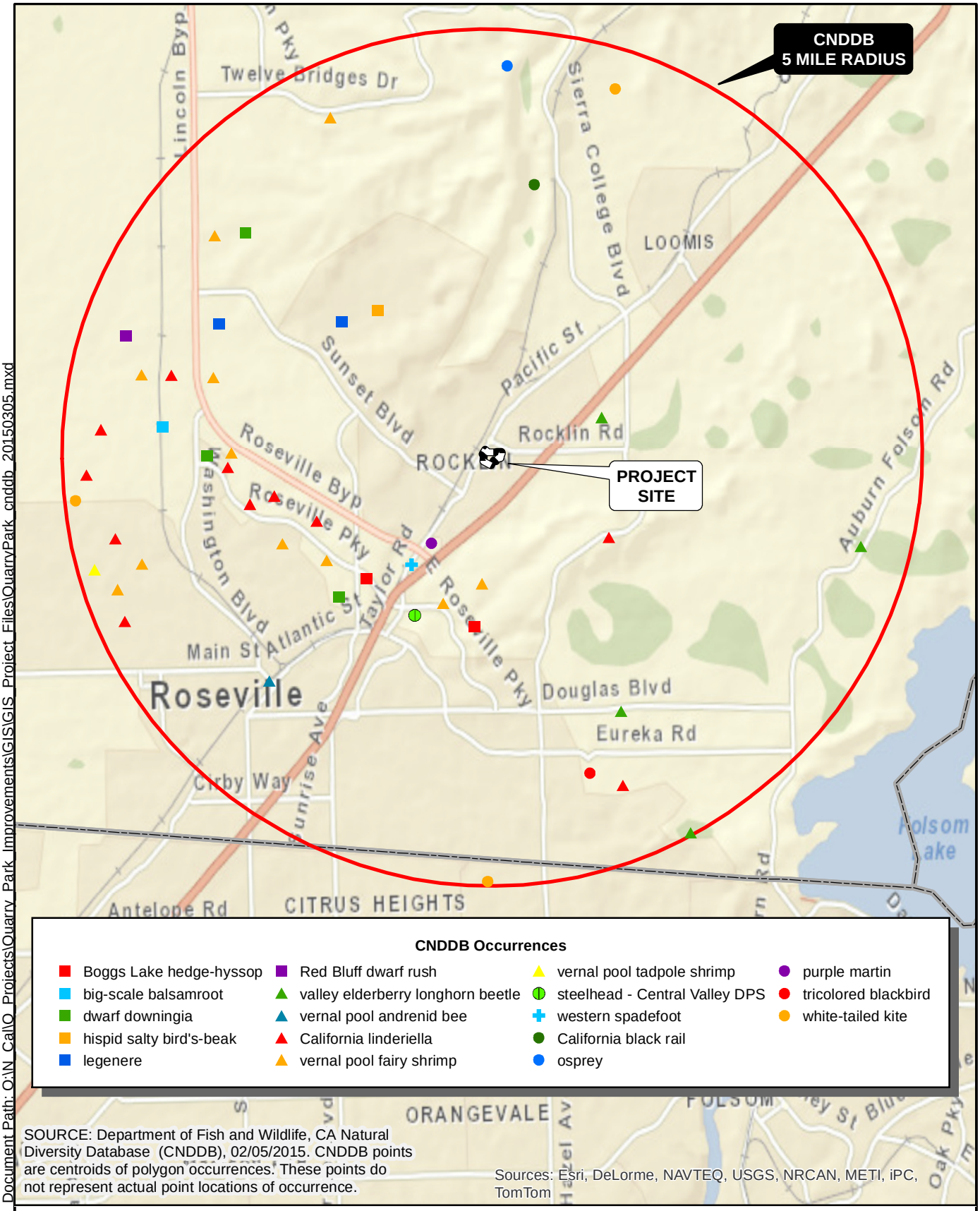

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CNDDB

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

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Date: 03/18/2015

FIGURE 4

Appendix A — Plant Species Observed within the Quarry Park Improvements Project

Table 1 — Plants and Wildlife Observed within the Quarry Park Improvements Project Site

Family	Scientific Name	Common Name
Plants		
Agavaceae	*Chlorogalum pomeridianum*	Soaproot
Anacardiaceae	*Toxicodendron diversilobum*	Western poison oak
Apiaceae	*Torilis arvensis*	Tall sock-destroyer
Asteraceae	*Albizia julibrissin* *Baccharis pilularis* *Conyza* sp. *Helminthotheca echioides* *Holocarpha virgata* *Lactuca serriola* *Senecio vulgaris* *Sonchus oleraceus*	Mimosa tree Coyote brush Horseweed Bristly ox-tongue Tarplant, tarweed Prickly lettuce Common groundsel Common sow thistle
Boraginaceae	*Eriodictyon crassifolium*	Yerba Santa
Brassicaceae	*Raphanus sativus*	Radish
Caprifoliaceae	*Symphoricarpos albus*	Snowberry
Caryophyllaceae	*Stellaria media*	Common chickweed
Cyperaceae	*Cyperus eragrostis* *Eleocharis macrostachya*	Nutsedge Spikerush
Fabaceae	*Cytisus scoparius* *Lupinus bicolor* *Medicago polymorpha* *Vicia villosa* *Vicia sativa*	Scotch broom Miniature lupine California burclover Hairy vetch, winter vetch Vetch
Fagaceae	*Quercus wizlizeni*	Interior live oak
Geraniaceae	*Erodium botrys* *Geranium dissectum* *Geranium molle*	Filaree storksbill Geranium, cranesbill Geranium, cranesbill
Lamiaceae	*Lamium amplexicaule*	Henbit
Marvaceae	*Malva parviflora*	Cheeseweed, little mallow
Moraceae	*Ficus carica*	Edible fig
Pinaceae	*Pinus sabiniana*	Gray pine
Plantaginaceae	*Plantago lanceolata*	English plantain
Poaceae	*Aira caryphyllea* *Avena barbata* *Bromus diandrus* *Cynodon dactylon* *Cynosurus echinatus* *Festuca myuros* *Festuca perennis* *Hordeum murinum* *Cortaderia* sp.	Silver hair grass Slender wild oat Ripgut grass Bermuda grass Bristly dogtail grass Rattail sixweeks grass Rye grass Wall barley Pampas grass

Polygonaceae	*Polygonum* sp. *Rumex crispus*	Knotweed Curly dock
Potamogetomaceae	*Potamogeton* sp.	Pondweed
Rhamnaceae	*Ceanothus cuneatus*	California lilac
Rosaceae	*Rubus armeniacus*	Himalayan blackberry
Rubiaceae	*Galium parisiense*	Wall bedstraw
Salicaceae	*Salix* sp.	Willow
Themidaceae	*Dichelostemma capitatum* *Dichelostemma volubile*	Blue dicks Twining brodiaea
Typhaceae	*Typha latifolia*	Broad-leaved cattail
Mammals		
Leporidae	*Lepus californicus*	Black-tailed jackrabbit
Amphibians		
Ranidae	*Rana castebiana*	Bullfrog
Birds		
Anatidae	*Branta canadensis*	Canada goose
Picidae	*Melanerpes formicivorus*	Acorn woodpecker
Corvidae	*Aphelocoma californica*	Western scrub jay
Icteridae	*Sturnella neglecta*	Western meadowlark
Mimidae	*Mimus polyglottos*	Northern mockingbird
Fringillidae	*Carpodacus mexicanus*	House finch
Paridae	*Baelophys inornatus*	Oak titmouse
Tyrannidae	*Sayornis nigricans*	Black phoebe

Appendix B — Special-Status Species Lists (USFWS, CDFW, and CNPS)

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the ROCKLIN (527C) U.S.G.S. 7 1/2 Minute Quad

Report Date: March 5, 2015

Listed Species

Invertebrates

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana draytonii
California red-legged frog (T)

Reptiles

Thamnophis gigas
giant garter snake (T)

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Rocklin (3812172) OR Lincoln (3812183) OR Gold Hill (3812182) OR Auburn (3812181) OR Roseville (3812173) OR Pilot Hill (3812171) OR Citrus Heights (3812163) OR Folsom (3812162) OR Clarksville (3812161))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Accipiter cooperii	Cooper's hawk	Birds	ABNKC12040	103	1	None	None	G5	S4	null	CDFW_WL-Watch List | IUCN_LC-Least Concern	Cismontane woodland | Riparian forest | Riparian woodland | Upper montane coniferous forest
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	431	8	None	Endangered	G2G3	S1S2	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Freshwater marsh | Marsh & swamp | Swamp | Wetland
Alkali Meadow	Alkali Meadow	Herbaceous	CTT45310CA	8	1	None	None	G3	S2.1	null	null	Meadow & seep | Wetland
Alkali Seep	Alkali Seep	Herbaceous	CTT45320CA	10	1	None	None	G3	S2.1	null	null	Meadow & seep | Wetland
Allium jepsonii	Jepson's onion	Monocots	PMLIL022V0	27	1	None	None	G1	S1	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	Cismontane woodland | Lower montane coniferous forest | Ultramafic
Ammodramus savannarum	grasshopper sparrow	Birds	ABPBXA0020	16	1	None	None	G5	S2	null	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Valley & foothill grassland
Ammonitella yatesii	tight coin (=Yates' snail)	Mollusks	IMGASB0010	6	1	None	None	G1	S1	null	IUCN_VU-Vulnerable	Limestone
Andrena blennospermatis	Blennosperma vernal pool andrenid bee	Insects	IIHYM35030	15	1	None	None	G2	S2	null	null	Vernal pool
Andrena subapasta	an andrenid bee	Insects	IIHYM35210	5	4	None	None	G1G2	S1S2	null	null	null
Antrozous pallidus	pallid bat	Mammals	AMACC10010	402	1	None	None	G5	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland
Aquila chrysaetos	golden eagle	Birds	ABNKC22010	309	2	None	None	G5	S3	null	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | CDFW_WL-Watch List |	Broadleaved upland forest | Cismontane woodland | Coastal prairie | Great Basin grassland | Great Basin scrub | Lower

											IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	montane coniferous forest | Pinon & juniper woodlands | Upper montane coniferous forest | Valley & foothill grassland
Ardea alba	great egret	Birds	ABNGA04040	35	2	None	None	G5	S4	null	CDF_S-Sensitive | IUCN_LC-Least Concern	Brackish marsh | Estuary | Freshwater marsh | Marsh & swamp | Riparian forest | Wetland
Ardea herodias	great blue heron	Birds	ABNGA04010	133	6	None	None	G5	S4	null	CDF_S-Sensitive | IUCN_LC-Least Concern	Brackish marsh | Estuary | Freshwater marsh | Marsh & swamp | Riparian forest | Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	1862	5	None	None	G4	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland
Balsamorhiza macrolepis	big-scale balsamroot	Dicots	PDAST11061	43	3	None	None	G2	S2	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	Chaparral | Cismontane woodland | Ultramafic | Valley & foothill grassland
Banksula californica	Alabaster Cave harvestman	Arachnids	ILARA14020	1	1	None	None	GH	SH	null	null	Limestone
Banksula galilei	Galile's cave harvestman	Arachnids	ILARA14040	1	1	None	None	G1	S1	null	null	Limestone
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	751	47	Threatened	None	G3	S2S3	null	IUCN_VU-Vulnerable	Valley & foothill grassland | Vernal pool | Wetland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2394	8	None	Threatened	G5	S3	null	BLM_S-Sensitive | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Great Basin grassland | Riparian forest | Riparian woodland | Valley & foothill grassland
Calystegia stebbinsii	Stebbins' morning-glory	Dicots	PDCON040H0	13	1	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic
Ceanothus roderickii	Pine Hill ceanothus	Dicots	PDRHA04190	8	4	Endangered	Rare	G1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic
Chlorogalum grandiflorum	Red Hills soaproot	Monocots	PMLIL0G020	82	3	None	None	G3	S3	1B.2	BLM_S-Sensitive	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic
Chloropyron molle ssp. hispidum	hispid salty bird's-beak	Dicots	PDSCR0J0D1	35	1	None	None	G2T2	S2	1B.1	BLM_S-Sensitive	Alkali playa | Meadow & seep | Wetland
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Dicots	PDONA05053	89	16	None	None	G4G5T4	S4	4.2	BLM_S-Sensitive	Chaparral | Cismontane woodland | Lower montane coniferous forest
											BLM_S-Sensitive | CDFW_SSC-	Broadleaved upland forest | Chaparral | Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua

Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	619	3	None	Candidate Threatened	G3G4	S2	null	Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scrub | Sonoran thorn woodland | Upper montane coniferous forest | Valley & foothill grassland
Cosumnoperla hypocrena	Cosumnes stripetail	Insects	IIPLE23020	12	5	None	None	G2	S2	null	null	Aquatic
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Dicots	PDCIS020F0	31	9	None	None	G2Q	S2	3.2	null	Chaparral | Ione formation | Ultramafic
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	IICOL48011	216	11	Threatened	None	G3T2	S2	null	null	Riparian scrub
Downingia pusilla	dwarf downingia	Dicots	PDCAM060C0	127	15	None	None	GU	S2	2B.2	null	Valley & foothill grassland | Vernal pool | Wetland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	158	10	None	None	G5	S3S4	null	BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern	Cismontane woodland | Marsh & swamp | Riparian woodland | Valley & foothill grassland | Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1137	9	None	None	G3G4	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Falco columbarius	merlin	Birds	ABNKD06030	34	1	None	None	G5	S3S4	null	CDFW_WL-Watch List | IUCN_LC-Least Concern	Estuary | Great Basin grassland | Valley & foothill grassland
Fremontodendron decumbens	Pine Hill flannelbush	Dicots	PDSTE03030	10	3	Endangered	Rare	G1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_UCBBG-UC Berkeley Botanical Garden	Chaparral | Cismontane woodland | Ultramafic
Fritillaria agrestis	stinkbells	Monocots	PMLIL0V010	32	2	None	None	G3	S3	4.2	null	Chaparral | Cismontane woodland | Ultramafic | Valley & foothill grassland
Fritillaria eastwoodiae	Butte County fritillary	Monocots	PMLIL0V060	235	1	None	None	G3Q	S3	3.2	USFS_S-Sensitive	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic
Galium californicum ssp. sierrae	El Dorado bedstraw	Dicots	PDRUB0N0E7	16	4	Endangered	Rare	G5T1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic

Gratiola heterosepala	Boggs Lake hedge-hyssop	Dicots	PDSCR0R060	94	3	None	Endangered	G2	S2	1B.2	BLM_S-Sensitive	Freshwater marsh | Marsh & swamp | Vernal pool | Wetland
Haliaeetus leucocephalus	bald eagle	Birds	ABNKC10010	317	3	Delisted	Endangered	G5	S2	null	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	Lower montane coniferous forest | Oldgrowth
Hydrochara rickseckeri	Ricksecker's water scavenger beetle	Insects	IICOL5V010	13	2	None	None	G2?	S2?	null	null	Aquatic | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Monocots	PMJUN011L1	13	1	None	None	G2T1	S1	1B.2	null	Valley & foothill grassland | Vernal pool | Wetland
Juncus leiospermus var. leiospermus	Red Bluff dwarf rush	Monocots	PMJUN011L2	56	1	None	None	G2T2	S2	1B.1	BLM_S-Sensitive | USFS_S-Sensitive	Chaparral | Cismontane woodland | Meadow & seep | Valley & foothill grassland | Vernal pool | Wetland
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	138	2	None	None	G5	S3S4	null	IUCN_LC-Least Concern | WBWG_M-Medium Priority	Lower montane coniferous forest | Oldgrowth | Riparian forest
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	241	2	None	Threatened	G3G4T1	S1	null	BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_NT-Near Threatened | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Brackish marsh | Freshwater marsh | Marsh & swamp | Salt marsh | Wetland
Lathyrus sulphureus var. argillaceus	dubious pea	Dicots	PDFAB25101	7	1	None	None	G5T1T2	S1S2	3	null	Cismontane woodland | Lower montane coniferous forest | Upper montane coniferous forest
Legenere limosa	legenere	Dicots	PDCAM0C010	78	3	None	None	G2	S2	1B.1	BLM_S-Sensitive	Vernal pool | Wetland
Lepidurus packardi	vernal pool tadpole shrimp	Crustaceans	ICBRA10010	273	3	Endangered	None	G3	S2S3	null	IUCN_EN-Endangered	Valley & foothill grassland | Vernal pool | Wetland
Linderiella occidentalis	California linderiella	Crustaceans	ICBRA06010	416	31	None	None	G2G3	S2S3	null	IUCN_NT-Near Threatened	Vernal pool
Melospiza melodia	song sparrow ("Modesto" population)	Birds	ABPBXA3010	92	1	None	None	G5	S3?	null	CDFW_SSC-Species of Special Concern	null
Navarretia myersii ssp. myersii	pincushion navarretia	Dicots	PDPLM0C0X1	14	2	None	None	G1T1	S1	1B.1	null	Vernal pool | Wetland
Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	Herbaceous	CTT44110CA	126	7	None	None	G3	S3.1	null	null	Vernal pool | Wetland
Northern Volcanic Mud Flow Vernal Pool	Northern Volcanic Mud Flow Vernal Pool	Herbaceous	CTT44132CA	7	5	None	None	G1	S1.1	null	null	Vernal pool | Wetland

Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	Fish	AFCHA0209K	31	3	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic | Sacramento/San Joaquin flowing waters
Orcuttia viscida	Sacramento Orcutt grass	Monocots	PMPOA4G070	12	3	Endangered	Endangered	G1	S1	1B.1	null	Vernal pool | Wetland
Packera layneae	Layne's ragwort	Dicots	PDAST8H1V0	48	10	Threatened	Rare	G2	S2	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic
Pandion haliaetus	osprey	Birds	ABNKC01010	482	1	None	None	G5	S4	null	CDF_S-Sensitive | CDFW_WL-Watch List | IUCN_LC-Least Concern	Riparian forest
Phalacrocorax auritus	double-crested cormorant	Birds	ABNFD01020	37	1	None	None	G5	S4	null	CDFW_WL-Watch List | IUCN_LC-Least Concern	Riparian forest | Riparian scrub | Riparian woodland
Progne subis	purple martin	Birds	ABPAU01010	61	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Broadleaved upland forest | Lower montane coniferous forest
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1340	1	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Aquatic | Artificial flowing waters | Artificial standing waters | Freshwater marsh | Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Riparia riparia	bank swallow	Birds	ABPAU08010	296	2	None	Threatened	G5	S2	null	BLM_S-Sensitive | IUCN_LC-Least Concern	Riparian scrub | Riparian woodland
Sagittaria sanfordii	Sanford's arrowhead	Monocots	PMALI040Q0	93	4	None	None	G3	S3	1B.2	BLM_S-Sensitive	Marsh & swamp | Wetland
Spea hammondii	western spadefoot	Amphibians	AAABF02020	426	5	None	None	G3	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	Cismontane woodland | Coastal scrub | Valley & foothill grassland | Vernal pool | Wetland
Valley Needlegrass Grassland	Valley Needlegrass Grassland	Herbaceous	CTT42110CA	45	1	None	None	G3	S3.1	null	null	Valley & foothill grassland
Viburnum ellipticum	oval-leaved viburnum	Dicots	PDCPR07080	29	2	None	None	G5	S3	2B.3	null	Chaparral | Cismontane woodland | Lower montane coniferous forest
Wyethia reticulata	El Dorado County mule ears	Dicots	PDAST9X0D0	25	13	None	None	G2	S2	1B.2	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic

CNPS California Native Plant Society Rare and Endangered Plant Inventory

Plant List

30 matches found. *Click on scientific name for details*

Search Criteria

Found in 9 Quads around 38121G2

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	1B.2	S1	G1
Allium sanbornii var. sanbornii	Sanborn's onion	Alliaceae	perennial bulbiferous herb	4.2	S4?	G3T4?
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	1B.2	S2	G2
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	4.2	S34	G4
Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.1	S1	G1
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	1B.1	S1	G1
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	1B.2	S3	G3
Chloropyron molle ssp. hispidum	hispid bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1	S2	G2T2
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	4.2	S3	G5T3
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	3.2	S2	G2Q
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	2B.2	S2	GU
Eriophyllum jepsonii	Jepson's woolly sunflower	Asteraceae	perennial herb	4.3	S3	G3
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	1B.2	S1	G1
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	4.2	S3	G3
Fritillaria eastwoodiae	Butte County fritillary	Liliaceae	perennial bulbiferous herb	3.2	S3	G3Q
Galium californicum ssp. sierrae	El Dorado bedstraw	Rubiaceae	perennial herb	1B.2	S1	G5T1
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Juncaceae	annual herb	1B.2	S1	G2T1

Juncus leiospermus var. leiospermus	Red Bluff dwarf rush	Juncaceae	annual herb	1B.1	S2	G2T2
Lathyrus sulphureus var. argillaceus	dubious pea	Fabaceae	perennial herb	3	S1S2	G5T1T2
Legenere limosa	legenere	Campanulaceae	annual herb	1B.1	S2	G2
Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	S3	G4T3
Navarretia myersii ssp. myersii	pincushion navarretia	Polemoniaceae	annual herb	1B.1	S1	G1T1
Navarretia nigelliformis ssp. nigelliformis	adobe navarretia	Polemoniaceae	annual herb	4.2	S3	G4T3
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	1B.1	S1	G1
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	1B.2	S2	G2
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb	1B.2	S3	G3
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	2B.3	S3	G5
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	1B.2	S2	G2

Suggested Citation

CNPS, Rare Plant Program. 2015. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed 05 March 2015].

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Appendix C — Listed and Special-Status Species Potentially Occurring on the Project Site or in the Vicinity

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Ahart's dwarf rush *Juncus leiospermus* var. *ahartii*	--; --; --; 1B	Annual herb found on mesic soils in valley and foothill grassland from 30 to 100 meters.	Blooming period: March - May	**None**; although the annual grassland within the Project Site provides habitat, this species was not observed during the biological survey conducted within the evident and identifiable blooming period.
Big-scale balsamroot *Balsamorhiza macrolepis*	--; --; --; 1B	Perennial herb found in chaparral, cismontane woodland, valley and foothill grassland, which are sometimes on serpentinite soils, from 90 to 1, 555 meters.	Blooming period: March - June	**None**; although the annual grassland within the Project Site provides habitat, this species was not observed during the biological survey conducted within the evident and identifiable blooming period. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Boggs Lake hedge-hyssop *Gratiola heterosepala*	--; CE; --; 1B	Annual herb found on clay soils in vernal pools and along the lake margins of marshes and swamps from 10 to 2,375 meters.	Blooming period: April - August	**None**; the Project Site does not provide suitable habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Dwarf downingia *Downingia pusilla*	--; --; --; 2	Annual herb found in valley and foothill grassland occasionally on mesic soils, and vernal pools from 1 to 445 meters.	Blooming period: March - May	**None**; although the annual grassland within the Project Site provides suitable habitat, this species was not observed during the biological survey conducted within the evident and identifiable blooming period. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
El Dorado bedstraw *Galium californicum* ssp. *sierrae*	FE; CR; --; 1B	Perennial herb found on gabbroic soils within chaparral, cismontane woodland, and lower coniferous forest from 100 to 585 meters.	Blooming period: May - June.	**None**; the Project Site occurs outside of the elevation range required for this species.
El Dorado mule ears *Wyethia reticulata*	--; -- ;--; 1B	Perennial herb found on clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 185 to 630 meters.	Blooming period: April - August.	**None**; the Project Site does not provide the soils required for this species.
Hispid bird's-beak *Cloropyron molle* ssp. *parryi*	--; --; --; 1B	Annual hemiparasitic herb found on alkaline soils in meadows and seeps, playas, and valley and foothill grassland from 1 to 155 meters.	Blooming period: June - September	**High**; the annual grassland and disturbed areas within the Project Site provide suitable habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Jepson's onion *Allium jepsonii*	--; --; --; 1B	Perennial bulbiferous herb found on serpentinite or volcanic substrate in chaparral, cismontane woodland, and lower montane coniferous forest from 300 to 1,320 meters.	Blooming period: April - August	**None**; the Project Site does not provide suitable soils and occurs outside of the elevation range for this species.
Layne's butterweed (=ragwort) *Packera layneae*	FT; CR; --; 1B	Perennial herb found on serpentine or gabbroic, rocky soils in cismontane woodland and chaparral from 200 to 1,085 meters.	Blooming period: April - August.	**None**; the Project Site does not provide suitable soils and occurs outside of the elevation range for this species.
Legenere *Legenere limosa*	--; --; --; 1B	Annual herb found in vernal pools from 1 to 880 meters.	Blooming period: April - June	**None**; the Project Site does not provide suitable habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Oval-leaved viburnum *Viburnum ellipticum*	--; --; --; 2	Perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 215 to 1,400 meters.	Blooming period: May - June	**None**; the Project Site occurs outside of the elevation range required for this species.
Pincushion navarretia *Navarretia myersii* ssp. *myersii*	--; --; --; 1B	Annual herb often found in vernal pools from 20 to 330 meters.	Blooming period: May	**None**; the Project Site does not provide suitable habitat for this species.
Pine Hill ceanothus *Ceanothus roderickii*	FE; CR; --; 1B	Perennial evergreen shrub found in chaparral or cismontane woodland on serpentine or gabbro soils from 245 to 630 meters.	Blooming period: April - June.	**None**; the Project Site occurs outside of the elevation range required for this species.
Pine Hill flannelbush *Fremontodendron decumbens*	FE; CR; --; 1B	Perennial evergreen shrub found in chaparral and cismontane woodland on rocky gabbroic or serpentinite soils, from 425 to 760 meters.	Blooming period: April - July.	**None**; the Project Site does not provide suitable soils and occurs outside of the elevation range for this species.
Red Bluff dwarf rush *Juncus leiospermus* var. *leospermus*	--; --; --; 1B	Annual herb usually found in vernally mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools from 35 to 1,250 meters.	Blooming period: March - June	**None**; although the annual grassland within the Project Site provides suitable habitat, this species was not observed during the biological survey conducted within the evident and identifiable blooming period. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Red Hills soaproot *Chlorogalum grandiflorum*	--; --; --; 1B	Perennial bulbiferous herb found gabbro, serpentine, or other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 245 to 1,240 meters.	Blooming period: May - June.	**None**; the Project Site does not provide suitable soils and occurs outside of the elevation range for this species.
Sacramento Orcutt grass *Orcuttia viscida*	FE; CH; CE; 1B	Annual herb found in vernal pools from 30 to 100 meters.	Blooming period: April - July	**None**; the Project Site does not suitable provide habitat for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Sanford's arrowhead *Sagittaria sanfordii*	--; --; --; 1B	Perennial rhizomatous herb found in marshes and swamps in assorted shallow freshwater areas from 0 to 650 meters.	Blooming period: May - October.	**Low**; the man-made quarry ponds within the Project Site provide suitable habitat for this species.
Stebbins' morning glory *Calystegia stebbinsii*	FE; CE; --; 1B	Perennial rhizomatous herb found in openings of chaparral and cismontane woodland on gabbro or serpentinite soils from 185 to 1,090 meters.	Blooming period: April - July.	**None**; the Project Site does not provide suitable soils and occurs outside of the elevation range for this species.
Wildlife				
Invertebrates				
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT; --; --; --	Blue elderberry shrubs usually associated with riparian areas.	Adults emerge in spring until June. Exit holes visible year - round.	**None**; the Project Site does not contain elderberry shrubs, which are the sole hosts for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Vernal pool fairy shrimp *Branchinecta lynchi*	FT; --; --; --	Vernal pools, swales, and ephemeral freshwater habitat.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	**None**; the Project Site does not provide suitable habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Vernal pool tadpole shrimp *Lepidurus packardi*	FE; --; --; --	Vernal pools, swales, and ephemeral freshwater habitat.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	**None**; the Project Site does not provide suitable habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Amphibians/Reptiles				
California red-legged frog (CRLF) *Rana draytonii*	FT; CSC; --; --	Inhabits ponds, slow-moving creeks, and streams with deep pools that are lined with dense emergent marsh or shrubby riparian vegetation. Submerged root masses and undercut banks are important habitat features for this species. Although CRLF historically occurred throughout much of the Central Valley, it is widely accepted that they have been extirpated from there for more than 50 years. All of the extant records for CRLF in the Sierras are over 800 feet above MSL. Below this elevation, aquatic habitat generally supports stronger populations of non-native predators associated with warm water habitats such as bullfrogs (*Lithobates catesbeiana*) and Centrarchid fish (Rana Resources 2013). The Project Site occurs between approximately 188 to 270 feet above MSL.	Aquatic surveys of breeding sites between January and September. Optimally after April 15.	**None**; although the man-made quarry ponds provide low quality habitat given the minimal amount of emergent riparian vegetation and extensive numbers of bullfrogs present, the Project Site is surrounded by development, is outside of the known extant elevation range inhabited by CRLF, and there are no known extant CNDDB occurrences within 24.9 miles of the Project Site. No CNDDB occurrences are within 5 miles of the Project Site. There is a CNDDB occurrence approximately 8.9 miles west of the Project Site along a small drainage feeding directly into the east side of Folsom Lake (Occurrence Number 814), however, the validity of this record is highly questionable due to the low elevation (approximately 500 feet above MSL), the proximity to urban development and to Folsom Lake, and the abundant nonnative predators that it supports (Rana Resources 2013). The record states that a juvenile frog was sighted on a small footbridge crossing a drainage leading into Folsom Lake from an adjacent residential development. This frog was most likely a juvenile bullfrog, which, to the untrained eye, can be easily confused with a juvenile CRLF (Rana Resources 2013). Even if this were a valid record, this location is separated from the Project Site by a number of impassible barriers including major roadways and urban development. The nearest valid CNDDB occurrences (Occurrence Numbers 1284 and 1317) are over 24.9 miles north of the Project Site.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
California tiger salamander *Ambystoma californiense*	FT; CT; --; --	Ponded vernal pools and seasonal wetlands required for breeding. Adults spend summer in small mammal burrows. The central population of this species is not known to occur north of Highway 16.	Drift fence studies during fall and winter for upland habitats.	**None**; the Project Site occurs outside of the known geographic range for this species.
Giant garter snake *Thamnophis gigas*	FT; CT; --; --	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November – mid March). This species is known from Sacramento, Sutter, Butte, Colusa, and Glenn counties. In Sacramento County, this species is known along the valley floor, west of Highway 99.	Active outside of dormancy period November-mid March.	**None**; the Project Site occurs outside of the known geographic range for this species.
Western spadefoot toad *Spea hammondi*	--; CSC; --; --	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains from 0 to 1,200 meters. Rainpools containing minimal numbers of bullfrogs, fish, or crayfish are necessary for breeding.	Year-round	**None**; although the annual grassland provides suitable upland habitat, there is no breeding habitat in the vicinity of the Project Site. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Western pond turtle *Emys marmorata*	--; CSC; --; --	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	Active outside of dormancy period November - February	**Low**; the man-made quarry ponds provide aquatic habitat for this species.
Fish				
Central Valley spring-run Chinook salmon *Oncorhynchus tshawytscha*	FT; CT; --; --	Spawn in Mill, Deer, and Butte Creeks and in Yuba River and Feather River watersheds. Juveniles may journey up to 5 miles upstream in Sacramento River tributaries.	Migrate from late March – September. Spawn in mid-August – early October.	**None**; the Project Site does not provide suitable habitat for this species.
Central Valley winter-run Chinook salmon *Oncorhynchus tshawytscha*	FE; CE; --; --	Spawn in northern Sacramento River (Redding to Red Bluff) and its tributaries. Juveniles may journey up to 5 miles upstream in other tributaries.	Migrate from late December - August. Spawn April - August	**None**; the Project Site does not provide suitable habitat for this species.
Central Valley steelhead *Oncorhynchus mykiss*	FT; --; --; --	Rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	Spawn in winter and spring.	**None**; the Project Site does not provide suitable habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Delta smelt *Hypomesus transpacificus*	FT; CE; --; --	Shallow fresh or brackish water tributary to the Delta ecosystem; spawns in freshwater sloughs and channel edgewaters. Known almost exclusively in the Fresno-San Joaquin estuary.	Spawn December – July. Present year-round in delta.	**None**; the Project Site does not provide suitable habitat for this species.
Birds				
Bald eagle *Haliaeetus leucocephalus*	FD; CFP; --; --	Nesting restricted to the mountainous habitats near permanent water sources in the northernmost counties of California, the Central Coast Region, and on Santa Catalina Island. Winters throughout most of California at lakes, reservoirs, river systems, and coastal wetlands.	Winter	**None**; the Project Site does not provide suitable habitat for this species.
Burrowing owl *Athene cunicularia*	--; CSC; --; -- (burrowing sites and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows, within open dry grassland and desert habitat.	Year-round; Breeding season surveys between March and August.	**Low**; the ground squirrel burrows within the non-native annual grassland and disturbed areas provide nesting habitat for this species.
California black rail *Laterallus jamaicensis coturniculus*	--; CT; --; --	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation. Uses sites with shallower water than other North American rails. Most breeding areas vegetated by fine-stemmed emergent plants, rushes, grasses, or sedges. Sites used in coastal California characterized by taller vegetation, greater coverage and height of alkali heath (*Frankenia grandifolia*).	Year-round	**None**; the Project Site does not provide suitable habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Golden eagle *Aquila chrysaetos*	--; CFP; --; -- (nesting and wintering)	Open and semi-open areas up to 12,000 feet in elevation. Builds stick nests on cliffs, in trees, or on man-made structures.	Year-round	**None**; the Project Site does not provide suitable habitat for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Grasshopper sparrow *Ammodramus savannarum*	--; CSC; --; --	Breeding range occurs in portions of western California, including most coastal counties south to extreme northwest Baja California (where resident). Also, the western Sacramento Valley and along the western edge of the Sierra Nevada. Wintering range is extreme Southern California and Baja. Consists of moderately open grasslands and prairies with patchy bare ground. Selects different components of vegetation depending on grassland ecosystem. In the southwest and west, occupies more lush areas with shrub cover in arid grasslands.	April - July	**Low**; the non-native annual grassland provides nesting habitat for this species.
Purple martin *Progne subis*	--; CSC; --; --	Found in a variety of wooded, low-elevations habitats. Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas-fir, and redwood. Inhabits more open areas in winter.	Year-round	**High**; the trees within the oak woodland and disturbed areas provide nesting habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Suisun song sparrow *Melospiza melodia maxillaris*	--; CSC; --; --	Resident in California within 3 kilometers west of Suisun, Solano County within Suisun Bay (Marshall 1948).	Year-round	**None**; the Project Site does not provide suitable habitat for this species.
Tricolored blackbird *Agelaius tricolor*	--; CSC (temporarily endangered); --; -- (nesting colony)	Nests in dense blackberry, cattail, tules, willow, or wild rose within emergent wetlands throughout the Central Valley and foothills surrounding the valley.	Year-round	**None**; the Project Site does not provide suitable nesting habitat for this species.
White-tailed kite *Elanus leucurus*	--; CFP; --; -- (nesting)	Nests in isolated trees or woodland areas with suitable open foraging habitat.	February 15 – August 31	**High**; the trees within the oak woodland and disturbed areas provide nesting habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW2015).
Other Raptors (Hawks, Owls and Vultures) and Migratory Birds	MBTA and §3503.5 Department of Fish and Game Code	Nests in a variety of communities including cismontane woodland, mixed coniferous forest, chaparral, montane meadow, riparian, annual grassland, and urban communities.	February 15 – August 31	**High**; the trees within the oak woodland and disturbed areas and the non-native annual grassland provide nesting habitat for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Mammals				
Pallid bat *Antrozous pallidus*	--; CSC; --; --	Found in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests from 0 to 2,000 meters. The species is most common in open, dry habitats with rocky areas for roosting. Roosts also include cliffs, abandoned buildings, bird boxes, and under bridges.	Year-round	**Low**; the trees within the oak woodland and disturbed areas and the crevices within Big Gun Quarry provide roosting habitat for this species.
Townsend's big-eared bat *Corynorhinus townsendii*	--; CCT; --; --	Uses caves, buildings, and tree cavities for night roosts. Maternity and hibernation colonies typically are in caves and mine tunnels.	Year-round	**Low**; the trees within the oak woodland and disturbed areas and the crevices within Big Gun Quarry provide roosting habitat for this species.

Federally-Listed Species:
FE = federal endangered
FT = federal threatened
FC = candidate
PT = proposed threatened
FPD = proposed for delisting
FD = delisted

California State Ranked Species:
CE = California state endangered
CT = California state threatened
CR = California state rare
CSC = California species of special Concern
CSA = California Special Animals List
CCT = California state threatened candidate

CNPS* Rank Categories:
1A = plants presumed extinct in California
1B = plants rare, threatened, or endangered in California and elsewhere
2 = plants rare, threatened, or endangered in California, but common elsewhere
3 = plants about which we need more information
4 = plants of limited distribution

Other Special-Status Listing:
SLC – species of local or regional concern or conservation significance

Source: Foothill Associates

Species list generated from queries of the USFWS, CNPS, and CNDDB databases for the *Rocklin* quadrangle and eight surrounding quadrangles.