“G”

Biological Resource Analysis

Gardiner Horse Facility P15-00394
Planning Commission Hearing July 19, 2017

BIOLOGICAL RESOURCE ANALYSIS
2002 JAMES CREEK ROAD
NAPA COUNTY, CALIFORNIA

September 14, 2015

Prepared for

Planning, Building and Environmental Services
County of Napa
1195 Third Street, 2nd Floor
Napa, CA 94558

Prepared by

Monk & Associates, Inc.
1136 Saranap Avenue, Suite Q
Walnut Creek, CA 94595

Contact: Mr. Geoff Monk

TABLE OF CONTENTS

FIGURES

[Attached at back of report]

TABLES

[Attached at back of report]

1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this biological resource analysis for the proposed 2002 James Creek Road project located in Napa County, California (Figures 1 and 2)(herein referred to as the "project site"). The purpose of our analysis is to provide a description of existing biological resources on the project site and to identify potentially significant impacts that could occur to sensitive biological resources from the use of the project site for horse boarding, training, and rescue (the proposed project).

Biological resources include common plant and animal species, and special-status plants and animals designated by the U.S. Fish and Wildlife Service (Service), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations including the California Native Plant Society (CNPS). Biological resources also include waters of the United States, as regulated by the U.S. Army Corps of Engineers (Corps), and waters of the State as regulated by the California Regional Water Quality Control Board (RWQCB) and the CDFW.

Where warranted, this biological resources analysis also provides mitigation measures for "potentially significant" and "significant" impacts that could occur to biological resources. When implemented, the mitigation measures would reduce impacts to levels considered less than significant pursuant to the California Environmental Quality Act (CEQA). Accordingly, this report is suitable for review and inclusion in any review being conducted by Napa County for the proposed project pursuant to the CEQA.

2. PROPERTY LOCATION AND SETTING

The approximately 46-acre project site is located at the intersection of James Creek Road and Butts Canyon Road in Pope Valley, Napa County, California (Figures 1 and 2). James Creek Road borders the southwest edge of the project site while Butts Canyon Road borders the southeast edge (Figure 3). The project site is surrounded by rural lands with a few sprawling rural ranch homes, some that are planted to vineyards. Pope Creek lies 0.6-mile west of the project site and flows from the northwest to the southeast where it eventually flows into Lake Berryessa.

The project site's lower elevations support a main house/residence, a barn with tack room, a storage building, a pump house, a hay barn, multiple stalls with paddocks, a mare motel with multiple stalls, a round pen, and multiple pastures with ancillary, small sheds (Figure 3). The immediate areas around these features are grazed by horses.

The lower elevations of the project site are dominated by valley oak (*Quercus lobata*) trees with a non-native annual grassland understory. The lower elevations of the project site are heavily grazed and otherwise disturbed. The slopes and ridgelines of the project site support blue oaks (*Quercus douglasii*) and an understory comprised of a dominant cover of non-native grasses. The ridges and slopes remain largely undeveloped, un-grazed or only lightly grazed, and are accessed on the property with only a dirt road leading to a water storage tank at the top of the property. The project site's soils consist of a gravelly loam soil. An ephemeral drainage flows from north

to south through the project site, intersecting three seasonally wet ponds before exiting the project site through a culvert underneath Butts Canyon Road.

3. PROPOSED PROJECT

The project site is owned by Mr. William Gardiner and Mrs. Deborah Gardiner and is called Rockridge Ranch. Currently, the project site is occupied by Ms. Gardiner's personal horses, many of which she has rescued from slaughter, euthanasia, and neglect. She readily agrees to own horses that persist in life-ending neglectful situations and provides them with the room to roam and the attention they need to live their lives in a humane way. Ms. Gardiner is looking to maximize the full potential of her property for the good of horses and the equestrian alike. She is proposing to use the property for boarding, training, and rescue (the proposed project). She is also proposing to upgrade the septic system and existing buildings to current building codes. Two ten foot by forty foot storage shipping containers will be used to house the hydroponic folder (sprouted grain) production for horse feed. The containers would be located near the tracker barn. Horse manure would be spread at the low elevations of the site in existing use areas and would be spread no closer than 50 feet from the primary ephemeral drainage on the project site. Use areas on the project site would not be expanded by the proposed project; rather uses would only be modified in already extensively used areas.

Boarding would include allowing outside horse owners to bring their own horses to Rockridge Ranch for general care. Boarding at Rockridge Ranch would be based on the owners' wants and needs including basic feeding, stall cleaning, blanketing, turning out boarded horses to paddocks, hand-walking, grooming, and organizing veterinary and farrier (shoeing) care. Boarders would be allowed access to the project site and could ride their horse(s) on or off the project site, and would have full access to provided facility amenities such as tack rooms and round pens.

Training at Rockridge Ranch would include lessons for horses and riders taught by Ms. Gardiner or outside trainers. Training may include instructive mounted or ground lessons for the rider and/or for boarded horses. Training may also include general horse maintenance such as blanketing, clipping, turnouts, administering medication, feeding grain, grooming, hand-walking, and organizing veterinary and farrier care.

Rescue at Rockridge Ranch would include rescuing horses from slaughter, euthanasia, and neglect. Rescued horses would be treated by veterinarians and farriers, and would be cared for by Ms. Gardiner and staff that would improve their quality of life. Depending on a horse's needs, rescued horses would receive care similar to a horse in boarding or training. Sometimes Ms. Gardiner is able to rehabilitate a horse to a point where it can be ridden and trained, while other times rescued horses will simply live out their lives in one of the many pastures without being ridden.

4. ANALYSIS METHODS

4.1 Background Research

Prior to preparing this biological resource analysis report, M&A reviewed applicable policies presented in Napa County's General Plan (2008). In addition, M&A reviewed the Biological Resources Section of Napa County's Baseline Data Report which is maintained by Napa County's Watershed Information Center and Conservancy (WICC). M&A also researched the most recent version of the CDFW's Natural Diversity Database, RareFind application (CNDDB 2015) for historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare) known to occur within 5 miles of the project site. Finally, M&A also searched the 2015 electronic version of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California* (CNPS 2001) for records of special-status plants known in the region of the project site. All special-status species records were compiled in tables and are attached. M&A examined all known record locations for special-status species to determine if special-status species could occur on the project site or within a zone of influence of the project site.

4.2 Field Surveys

4.2.1 Field Reconnaissance

M&A biologists Mr. Geoff Monk and Ms. Bridgett Downs conducted a general survey of the project site on October 27, 2014 to record biological resources and to assess the likelihood of agency regulated areas on the project site. The survey involved searching all habitats on the site and recording all plant and wildlife species observed. M&A cross-referenced habitats found on the project site with the habitat requirements of locally and regionally known special status species. Finally, during the site assessment, M&A included a cursory examination of the site to determine if there could be potential areas within the project site that would be regulated as waters of the United States and/or State (the level of analyses was not sufficient for a preliminary wetlands investigation report suitable for submittal to the U.S. Army Corps of Engineers).

4.2.2 Herpetofauna Surveys

M&A biologists Mr. Geoff Monk and Ms. Bridgett Downs conducted a California red-legged frog (*Rana draytonii*) and western pond turtle (*Emys marmorata*) diurnal and nocturnal survey on the project site on March 12, 2015, a diurnal survey on March 13, a diurnal and funnel trap survey on April 9, and a diurnal survey on April 10. M&A's principal biologist, Mr. Geoff Monk, is a federally permitted 10(A)(1)(a) California red-legged frog biologist with extensive experience with this frog. Mr. Monk has direct experience capturing and handling both larvae and adult California red-legged frogs, and has worked to establish and preserve well over 1,000 acres of occupied California red-legged frog habitats since this species was first listed under the Federal Endangered Species Act in 2006. Similarly, Monk & Associates has developed over 25 California red-legged frog breeding ponds in the last 10 years. Mr. Monk has identified the western pond turtle on numerous properties as well.

A visual diurnal survey of the manmade ponds and drainage channel was completed using high-powered (10 x 42) binoculars. A nocturnal survey of the ponds and drainage channel was also completed using high-powered binoculars and medium-powered spot lights. During the diurnal and nocturnal surveys the water column was searched for California red-legged frog eggs and larvae. In addition, all edges of the pond and vegetation and open water were systematically surveyed for adult California red-legged frogs and western pond turtles. This level of survey meets the standards of care required by the CEQA to address potential impacts to red-legged frogs and western pond turtles.

4.2.3 BAT SURVEYS

On March 12, 2015 M&A biologists, Mr. Geoff Monk and Ms. Bridgett Downs also conducted a diurnal bat roost/maternity site survey of all trees, buildings, and infrastructure on the project site. Mr. Geoff Monk, principal biologist at M&A, is a Certified Wildlife Biologists with over 20 years of experience surveying for roosting bats. As a company M&A has been preparing bat evaluations and conducting roosting/maternity site surveys for over 20 years.

M&A biologists used high-powered (10 x 42) binoculars to assist with the survey. To determine if bats could be using e trees or buildings M&A biologists looked for cavities in trees, loose bark that could serve as cover for/concealment of a bat, or the presence of a bat itself. Where ground conditions allowed, M&A also examined the ground for evidence of bat droppings and/or an accumulation of guano. All possible entry points and eves of buildings and infrastructure on the project site were also surveyed for evidence of use by bats.

4.2.4 SPECIAL-STATUS PLANT SURVEYS

M&A botanists Ms. Sarah Lynch and Ms. Christina Owens conducted special-status plant surveys on the property on March 17, May 6, and July 1, 2015. These surveys were timed to coincide with the flowering periods of all special-status plants known to occur in similar habitats in Pope Valley. These survey dates took into account the persistent drought conditions in California and the monthly temperatures. All surveys were conducted according to USFWS (2000), CDFW (2009), and CNPS (2001) published survey guidelines.

5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES

5.1 Hydrology and Topography

The project site ranges in elevations from 700 feet above sea level at the southwest corner to 850 feet above sea level along the ridgeline to the north. The majority of the project site drains to a minor, ephemeral drainage which flows during and shortly after large storm events in a north to south direction through the project site, intersecting three seasonally wet ponds, traveling through two corrugated plastic pipes under dirt roads, and continuing under Butts Canyon Road through a culvert. The three seasonally wet ponds are man-made and were created apparently many years ago by former property owners for livestock watering purposes. Today they function as sediment stilling basins (traps) and so treat storm water prior to its natural discharge from the project site.

5.2 Plant Communities and Associated Wildlife Habitats

Three plant communities were identified within the project site. These are non-native annual grassland, mixed oak woodland and seasonal wetlands. A complete list of plant species observed on the project site during 2014 and 2015 field surveys is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual* Second Edition (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (http://ucjeps.berkeley.edu/interchange/index.html). Table 2 is a list of wildlife species observed on the project site. Nomenclature for wildlife follows the CDFW's *Complete list of amphibian, reptile, bird, and mammal species in California* (California Department of Fish and Game 2008) and any known changes made to species nomenclature as published in scientific journals since the publication of the CDFW's list.

5.2.1 Mixed Oak Woodland

Oak woodlands are a characteristic vegetational cover in the foothills of the mountains of California. This plant community occurs at elevations from 30 to 5,000 feet where summers are warm and dry and winters are mild. Oak woodlands are a transitional plant community between the grasslands of the hot dry valleys and the montane forests of moist cool uplands. Oak woodlands are dominated by oak trees (*Quercus* spp.). The most common woodland type consists of scattered trees and shrubs with an understory of grasses and forbs. The shrubs, often species that also occur in chaparral or coastal scrub communities, may grow both under and between the trees (Holland & Keil 1995).

Mixed oak woodland covers the approximate eastern half of the project site. The mixed oak woodland starts at the eastern edge of the project site's ephemeral drainage and extends east and up slope to the eastern property boundary (Figure 3). The mixed oak woodland supports valley oak trees (*Quercus lobata*), blue oak trees (*Q. douglasii*), and to a lesser extent black oak trees (*Q. kelloggii*). Valley oak trees with a non-native annual grassland understory occur near the ephemeral drainage and extend into the eastern horse paddocks. Blue oaks densely cover the slopes and upper ridgeline and support an understory of manzanita shrubs (*Arctostaphylos* sp.) and non-native grasses, forbs (broad-leaved plants) and native wildflowers. Black oak and gray pine (*Pinus sabiniana*) trees are also found sporadically interspersed on the upper slopes and ridgeline. The understory is dominated by non-native grasses that include slender wild oats (*Avena barbata*), ripgut grass (*Bromus diandrus*), barbed goat grass (*Aegilops triuncialis*), purple falsebrome (*Brachypodium distachyon*), and soft chess (*Bromus hordeaceus*). Forbs species include non-natives such as sock destroyer (*Torilis arvensis*), yellow starthistle (*Centaurea solstitialis*), rose clover (*Trifolium hirtum*), common knotweed (*Polygonum aviculare*), cheeseweed (*Malva parviflora*), common vetch (*Vicia sativa*), broad-leaf filaree (*Erodium botrys*), and red-stem filaree (*Erodium cicutarium*), and native forbs and wildflowers such as virgate tarweed (*Holocarpha virgata* var. *virgata*), mule's ears (*Wyethia glabra*), fiddleneck (*Amsinckia intermedia*), vinegar weed (*Trichostema lanceolatum*), downy navarretia (*Navarretia pubescens*), grand hound's tongue (*Cynoglossum grande*), and climbing bedstraw (*Gallium porrigens* var. *porrigens*), among others.

Trees in the oak woodland community provide foraging, roosting and nesting habitat for a large variety of wildlife species observed on the project site including raptors such as the red

shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*), and American kestrel (*Falco sparverius*). A pair of red shouldered hawks was also observed nesting on the project site in March 2015. Common birds observed foraging and perching in the oak trees during the spring surveys included the acorn woodpecker (*Melanerpes formicivorus*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), white-breasted nuthatch (*Sitta carolinensis*), Steller's jay (*Cyanocitta stelleri*), mourning dove (*Zenaida macroura*), northern flicker (*Colaptes auratus*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), ruby-crowned kinglet (*Regulus calendula*), American pipet (*Anthus rubescens*), yellow warbler (*Dendroica petechia*), white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), dark-eyed junco (*Junco hyemalis*), western meadowlark (*Sturnella neglecta*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Spinus psaltria*).

California ground squirrel (*Spermophilus beecheyi*) and signs of Virginia opossum (*Didelphis virginiana*), Botta's pocket gopher (*Thomomys bottae*), California meadow vole (*Microtus californicus*), and coyote (*Canis latrans*) were also observed in the oak woodland on the project site. Table 2 provides a complete list of wildlife species observed on the project site during M&A's site investigations.

5.2.2 Non-Native Annual Grassland

Prior to the settlement of Europeans in California, the California landscape was dominated by native, perennial bunchgrasses. When the Europeans settled in California, a variety of Mediterranean grass and forb (broad-leaved plant) species were brought to California for use as crops or ornamentals, or inadvertently in the fur and digestive systems of livestock. Land use changes, such as domestic animal grazing, has resulted in highly palatable native plants being reduced or eliminated. Introduced species tolerant of grazing pressure, particularly annual grasses of Eurasian ancestry, have displaced the native grasses, creating a new kind of grassland community. Grasslands within the project site have been grazed by horses which has change the species composition.

Non-native annual grassland occurs on the western half of the project site covering the flatter valley floor and extending upslope onto a hilltop. Valley oak trees sporadically dot this community (Figure 3). Dominant grass and forb species are non-native species such as soft chess, Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), wild oats, rose clover and thistles (*Cirsium vulgare*). Native species also occur in this plant community; however, their total percent cover is much lower than the non-native species. Native species found include meadow barley (*Hordeum brachyantherum*), Fitch's spikeweed (*Centromadia fitchii*) and virgate tarweed (*Holocarpha virgata*).

The project site's grassland community provides foraging, denning, nesting, and migration habitat for a wide variety of common wildlife species. Bird species observed in the grassland community during M&A's 2014 and 2015 site visits include Says phoebe (*Sayornis saya*), western meadowlark (*Sturnella neglecta*), lesser goldfinch, and white crowned and golden crowned sparrows (*Zonotrichia leucophrys* and *Z. atricapilla*, respectively).

5.2.3 SEASONAL WETLAND

Seasonal wetlands are habitats that may appear dry in the summer and fall months, but by the first winter rains become saturated or inundated and hold water for a period of a few days to several weeks or months at a time. Seasonal wetlands are able to hold water for long duration typically due to the presence of impervious soils and/or confining topography such as topographic low areas. Owing to soils with high clay content or that otherwise are mostly or partially impervious, any time depressional topography occurs or is created through man's activities, such areas often trap seasonal rainfall over short to long durations of the winter and spring. Such areas eventually are dominated by seasonal wetland plants and otherwise persist as seasonal wetlands.

The majority of the project site drains to an ephemeral drainage which flows from north to south through the project site, intersecting three seasonally wet ponds, traveling through two corrugated plastic pipes under dirt roads, and continuing under Butts Canyon Road through a culvert to the adjacent agricultural property. The three seasonally wet ponds were originally made as stock watering ponds and now serve to treat stormwater runoff. The drainage is barren or sparsely vegetated primarily with upland herbaceous vegetation, while the ponds are dominated by hydrophytic (i.e., wetland) plant species that include cocklebur (*Xanthium strumarium*), pennyroyal (*Mentha pulegium*), water plantain (*Alisma triviale*), sedge (*Carex* sp.), tall flatsedge (*Cyperus eragrostis*), spikerush (*Eleocharis* sp.), Mediterranean barley (*Hordeum marinum* var. *gussoneanum*), and swamp pricklegrass (*Crypsis schoenoides*), annual beard grass (*Polypogon monspeliensis*). The drainage flows only during and shortly after large storm events, while the ponds inundate and hold water for several to many months. Accordingly, the ponds provide a longer term water source for wildlife. The ponds were dry during M&A's October 27, 2014 site visit. They held water during the March and May 2015 site visits and then two were dry in July 2015; only the middle pond held water in July.

6. SPECIAL-STATUS SPECIES DEFINITION

6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq*.; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);

- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);

- plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;

- Plants occurring on Lists 1A, 1B, 2, 3, and 4 of CNPS' *Electronic Inventory* (CNPS 2001). The CDFW recognizes that Lists 1A, 1B, and 2 of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and the CDFW requesting their inclusion in EIRs. Plants occurring on CNPS Lists 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information;

- migratory nongame birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);

- animals that are designated as "species of special concern" by the CDFW (2015);

- Animal species that are "fully protected" in California (Fish and Game Codes 3511, 4700, 5050, and 5515).

In the paragraphs below we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as Endangered or Threatened under the FESA is protected from unauthorized "take" (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a Federal listed Endangered or Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the Service prior to initiating the take.

State Threatened Species. A species listed as Threatened under the state Endangered Species Act (§2050 of California Fish and Game Code) is protected from unauthorized "take" (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to "take" a state listed Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the CDFW prior to initiating the "take."

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered "rare." Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a "significant effect on the environment" (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an "Inventory" of special status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federal listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the Fish and Game Code, and are eligible for state listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by CDFW and maintained on "watch lists."

Additionally, in 2006 CNPS updated their lists to include "threat code extensions" for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered "seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)";
- .2 is "fairly endangered in California (20-80% of occurrences threatened)";
- .3 is "not very endangered in California (less than 20% of occurrences threatened or no current threats known)."

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the white-tailed kite and golden eagle, are protected under California Fish and Game Code (§3511). Fully protected birds may not be "taken" or possessed (i.e., kept in captivity) at any time.

6.2 Potential Special-Status Plants on the Project Site

According to the CNPS *Inventory* and the CDFW's CNDDB, a total of 21 special-status plant species are known to occur within 5 miles of the project site (Table 3). Figure 4 provides a graphical illustration for CNDDB special-status species occurrences within 5 miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status plants have been mapped on the project site. Most of these plants occur in specialized habitats such as seeps, marshes, swamps, vernal pools, alkaline areas, serpentinite, chaparral, coniferous forest, or riparian forest. These specialized habitats do not occur within the project site. However, 8 special-status species have low to moderate potential of occurring on the project site in the grassland, wetlands, or mixed oak woodland habitat.

The areas that would be impacted by the proposed project are already grazed by horses and disturbed. Impact areas will not be expanded by the proposed project, uses will only change in already heavily impacted areas. Regardless, focused spring and summer surveys for special-status plants found that no special-status plant species occur onsite. These surveys, appropriately timed in March, May and July 2015 targeted all potentially occurring special-status species. No special-status plants were found hence, no project-related impacts to special-status plant species should occur from project implementation.

6.3 Potential Special-Status Animals on the Project Site

A search of the CNDDB found 9 special-status animal species occurring within 5 miles of the project site (Table 4). Figure 4 graphically depicts known CNDDB record locations within 5 miles of the project site. No special-status animal has ever been mapped on or adjacent to the project site. Animals listed in Table 4 that do not have potential to occur on the project were dismissed for the reasons provided in this table. Of the 9 special-status animals identified within 5 miles of the project site, we provide greater detail on 4 of these species owing to elevated regional concern for these species or because the project site provides "suitable habitat" conditions for these species. Suitability does not infer presence only that conditions are such that they could occur on the project site. After conducting focused surveys for all 4 of these species, M&A has concluded that they are absent from the project site. Thus, no impacts are expected. These 4 species are discussed below.

6.3.1 California Red-Legged Frog

The California red-legged frog (*Rana draytonii*) was federally listed as threatened on May 23, 1996 (Federal Register 61: 25813-25833) and as such is protected pursuant to the Federal Endangered Species Act. Critical habitat for this species was designated by USFWS. *The project site is located approximately 18.2 miles north of mapped Critical Habitat Unit SON-1, 19.9 miles northwest of mapped Critical Habitat Unit NAP-1, and 22.6 miles north of mapped Critical Habitat Unit SON-2* (Figure 5). *The project site is not within mapped critical habitat.*

The California red-legged frog is also a state "species of special concern." While the state designation "species of special concern" does not provide any legally mandated protection, species of special concern must be considered in any project undergoing a CEQA review.

The California red-legged frog is typically found in ponds, slow-flowing portions of ephemeral, perennial, and intermittent streams that maintain water in the summer months. This frog is also found in hillside seeps that maintain pool environments or saturated soils throughout the summer months (M&A personal observations). Populations probably cannot be maintained if all surface water disappears (i.e., no available surface water for egg laying and larval development habitat). Larval California red-legged frogs require 11-20 weeks of permanent water to reach metamorphosis (i.e., to change from a tadpole into a frog). Riparian vegetation such as willows and emergent vegetation such as cattails are preferred red-legged frog habitats, though not necessary for this species to be present. Populations of California red-legged frog will be reduced in size or eliminated from ponds supporting non-native species such as bullfrog, Centrarchid fish species (such as sunfish, bluegill, or large-mouth bass), and signal and red swamp crayfish

(*Pacifastacus leniusculus* and *Procambarus clarkii*, respectively), all of which are known California red-legged frog predators. However, the presence of these non-native species does not preclude the presence of the California red-legged frog.

California red-legged frogs also use upland habitats for migration and dispersal. The USFWS Recovery Plan for the California Red-Legged Frog states that frog overland excursions via uplands can vary between 0.25 mile up to 3 miles during the course of a wet season, and that frogs "have been observed to make long-distance movements that are straight-line, point to point migrations rather than using corridors for moving in between habitats" (USFWS 2002).

The CNDDB search resulted in a record for California red-legged frog 3.4 miles south of the project site (CNDDB Occurrence No. 738). Two juvenile California red-legged frogs were seen in 1979 at this occurrence which is located in a spring and its channel at the edge of riparian forest in open oak woodland. Since then the spring has been capped or is depleted and is dry by April. No California red-legged frogs have been seen at this location since it was reported in 1979. There are no other California red-legged frog occurrences within 5 miles of the project site.

While there is no habitat for California red-legged frog on the project site, Pope Creek lies 0.6-mile west of the project site and provides potentially suitable habitat. M&A's principal biologist Mr. Geoff Monk is a federally permitted 10(a)(1)(A) California red-legged frog biologist. Mr. Monk and Ms. Bridgett Downs, also a qualified California red-legged frog biologist, conducted surveys for the California red-legged frog in the man-made ponds and ephemeral drainage onsite and in Pope Creek adjacent to the project site. No California red-legged frogs were seen during diurnal and nocturnal surveys conducted on March 12 and 13, April 9, and April 10, 2015. These surveys included funnel trapping for larval California red-legged frogs in the ponds onsite. No larvae were trapped or observed. Accordingly, M&A concludes that the California red-legged frog does not occur on or within a zone of influence of the project site. Thus, impacts to California red-legged frog are regarded as less than significant pursuant to the CEQA. No mitigation for this species is warranted.

6.3.2 PURPLE MARTIN

Purple martin (*Progne subis*) is a California "species of special concern." It's a bird in the swallow family with no special federal status. The purple martin inhabits woodlands, low elevation coniferous forest of Douglas fir (*Pseudotsuga menziesii* var. *menziesii*), ponderosa pine (*Pinus ponderosa* var. *pacifica*), and Monterey pine (*Pinus radiata*). They nest in old woodpecker cavities mostly, but sometimes in human made structures. They often nest in tall, old trees near a body of water, occasionally nesting in residential areas. They feed on insects on long, gliding flights, occasionally foraging on the ground for ant and other insects (Zeiner et. al. 1990a).

The closest purple martin CNDDB record (Occurrence No. 12) is located approximately 4.6 miles south of the project site near Granite Lake. On the project site the purple martin could nest in the oak woodland in old woodpecker cavities. High levels of disturbance around the man-made structures on the project site likely preclude use of such structures by nesting purple martins. Regardless, nesting bird surveys should be conducted prior to project renovations/construction to determine if this species could be impacted by activities that are

implemented as part of the proposed project. Pursuant to the CEQA, impacts to the purple martin are regarded as potentially significant. The Impacts and Mitigation section of this document details survey and avoidance measures that will be implemented as part of the proposed project to prevent impacts to nesting birds.

6.3.3 TOWNSEND'S BIG-EARED BAT

Townsend's big-eared bat (*Corynorhinus townsendii*) is a California "species of special concern" and is also a candidate for state listing under the California Endangered Species Act (CESA) (July 2015 CDFW Special Animals List). As a candidate species for listing under the CESA, this bat species is provided with the legal protections provided in the CESA during a one year review period. After a one year review period it is then listed under the CESA as threatened or endangered, or dropped from consideration. Townsend's big-eared bat has no special federal status.

Once considered common in California, the Townsend's big-eared bat is found in all but subalpine and alpine habitats. It is believed that roosting sites are the most important limited resource for Townsend's big-eared bat. This species requires caves, mines, tunnels, buildings, or other human-made structures for roosting and for maternity sites, potentially using separate sites for day, night, hibernation, or maternity roosts. Although this species shows high site fidelity if undisturbed, *it is extremely sensitive to disturbance of roosting sites (a single visit may result in abandonment of the roost).* Although these bats eat a variety of beetles and other soft-bodied insects, small moths make up the principle food source for this species.

The closest CNDDB record (Occurrence No. 127) for the Townsend's big-eared bat is located approximately 1.7 miles west of the project site where they were originally observed in a mine tunnel in 1949 and most recently in 2007. At the same location in those years they were also found using day, night, and maternal roosts in buildings. Although it would be highly unlikely owing to high levels of human disturbance that have persisted at the project site for decades, Townsend's big-eared bat could roost or even reproduce in human made structures on the project site.

M&A conducted surveys for the Townsend's big-eared bat on March 12, 2015. No bats or evidence of bat occupation in any structure, or in any tree cavity were found during M&A's maternity/roost surveys (for example, no copious piles of bat guano, not guano streaking, and no flying bats). M&A concludes that this bat does not reside on the project site. Regardless, the Impacts and Mitigation section of this report details avoidance measures that would be implemented as part of the proposed project to ensure that this bat species is not impacted by the project. These avoidance measures will prevent impacts to this bat species and accordingly, impacts to this bat species are regarded as less than significant pursuant to the CEQA.

6.3.4 PALLID BAT

The pallid bat (*Antrozous pallidus*) is a California "species of special concern." It has no federal status. This bat is a locally common species of low elevations in California. It occurs throughout California except for the high Sierra Nevada from Shasta to Kern Counties, and the northwestern corner of the state from Del Norte and western Siskiyou counties to northern Mendocino County.

It occurs in a wide variety of habitats. It is most common in open, dry habitats with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Roosts must protect bats from high temperatures. Night roosts may be in more open sites such as porches and open buildings. They are a social bat, roosting in groups of 20 or more.

The closest CNDDB record (Occurrence No. 224) for the pallid bat, is from 1968 and is located approximately 2.9 miles south of the project site. This species may establish maternity sites in trees or human made structures on the project site. As this species is a gregarious species, typically there roost/maternity sites are not difficult to detect when present. No pallid bats or evidence that this occurs on the project site was found during a bat survey conducted by M&A on March 12, 2015.

M&A conducted surveys for the pallid bat on March 12, 2015. No bats or evidence of bat occupation in any structure, or in any tree cavity were found during M&A's maternity/roost surveys. M&A concludes that this bat does not reside on the project site. Regardless, the Impacts and Mitigation section of this report details avoidance measures that would be implemented as part of the proposed project to ensure that this bat species is not impacted by the project. These avoidance measures will prevent impacts to this bat species and accordingly, impacts to this bat species are regarded as less than significant pursuant to the CEQA.

7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS

This section provides a discussion of those laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law we discuss their pertinence to the proposed development.

7.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, they are as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The Service enforces all other cases. Below,

Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity) ruled that the Service must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. According to this ruling, the Service can no longer require mitigation based on the probability that a listed species could use a site. Rather they must show that it is actually present. In conversations that Mr. Monk had with the Chief of Endangered Species Mr. Chris Nagano at the Sacramento Endangered Species Office of the Service, the 9th circuit court case was narrowly focused on grazing practices and thus should not be applied to federal endangered species impacts that are not relevant to grazing practices.

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain an incidental take permit either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency), or requires preparation of a Habitat Conservation Plan (HCP) pursuant to Section 10 of FESA (for state and local agencies, or individuals, and projects without a federal "nexus").

Section 7(a)(2) of the Act requires that each federal agency consult with the Service to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process applies only to actions taken by federal agencies, or actions by private parties that require federal agency permits, approval, or funding (for example, a private landowner applying to the Corps for a permit). Section 7's consultation process is triggered by a determination of the "action agency" – that is, the federal agency that is carrying out, funding, or approving a project - that the project "may affect" a listed species or critical

habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation with the Service is required. As part of the formal consultation, the Service prepares a Biological Opinion assessing whether the proposed action is likely to result in jeopardy to a listed species or adversely modify designated critical habitat. If the Service finds "no jeopardy" or adverse modification, it provides an incidental take permit which allows for the taking of a limited number of listed species or critical habitat.

Federal actions include permitting, funding, and entitlements for both federal projects, as well as private projects facilitated by federal actions (for example, a private landowner applying to the Corps for a permit). As an example, if a federally listed endangered species is present in "waters of the United States" on a project site, prior to authorizing impacts to "waters of the United States," the U.S. Army Corps of Engineers (who administers the Clean Water Act) would be required to initiate "formal consultation" with the Service pursuant to Section 7 of FESA. As part of the formal consultation, the Service would then be required to prepare a Biological Opinion based on a review and analysis of the project applicant's avoidance and mitigation plan. The Biological Opinion will either state that the project will or will not result in "take" or threaten the continued existence of the species (not just that population). If an endangered species could be harmed by a proposed project, the Service has to be in complete concurrence with the proposed avoidance and mitigation plan. If the Service is not in complete concurrence with the mitigation plan, they will submit a Biological Opinion to the Corps containing a "jeopardy decision" and state that a Corps' permit should not be issued for the pending project. The applicant would then have an opportunity to submit a revised mitigation plan that provides greater protection for the species.

For non-federal entities, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, the applicant for an "incidental take permit" is required to submit a "conservation plan" to the Service or NMFS that specifies, among other things, the impacts that are likely to result from the taking, and the measures the permit applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the Service. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

7.1.1 Responsible Agency

FESA gives regulatory authority over terrestrial species and non-anadromous fish to the Service. The NMFS has authority over marine mammals and anadromous fish.

7.1.2 Applicability to the proposed project

Federally listed anadromous fish species do not occur on or near the project site. Pope Creek adjacent to the project site is not expected to be impacted and does not support listed anadromous fish. Lake Berryessa is a migratory impediment that blocks anadromous fish from getting upstream of this lake. As such, there will be no effects on listed anadromous species under the regulatory authority of the NMFS. Accordingly, consultation with the NMFS is not warranted for the proposed project.

No suitable habitat for federally listed plant species occurs in the impact areas. Special-status plant surveys conducted during the flowering period of all federally listed plant species known from the project site region were conducted by qualified botanists and no federally listed plants were identified during these surveys.

The proposed project will not impact habitat that would be expected to support regionally known federally listed animal species. M&A conducted surveys for the California red-legged frog. This frog is a federally listed threatened species known from the project site region. Diurnal and nocturnal surveys were conducted by a federally permitted California red-legged frog biologist. This frog was not found and the habitat onsite was deemed not suitable, thus, this frog is not believed to be present on or near the project site. Thus, no animal species that are protected pursuant to the FESA are known or expected to occur on the project site (Table 4).

7.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to "take" (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

Executive Order 13186 for conservation of migratory birds (January 11, 2001) requires that any project with federal involvement address impacts of federal actions on migratory birds. The order is designed to assist federal agencies in their efforts to comply with the MBTA and does not constitute any legal authorization to take migratory birds. The order also requires federal agencies to work with the Service to develop a memorandum of understanding (MOU). Protocols developed under the MOU must promote the conservation of migratory bird populations through the following means:

- avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

7.2.1 Applicability to The Proposed Project

The project site provides nesting habitat for raptors (birds of prey) and common passerine birds (song birds). These birds are protected pursuant to the Migratory Bird Treaty Act. In March 2015 a pair of red-shouldered hawks was identified nesting on the project site in an oak tree. As long as there is no direct mortality of species protected pursuant to this Act caused by the proposed project, there would be no constraints to the proposed project with respect to this Act. To comply with the Migratory Bird Treaty Act, and as necessary to ensure that the project will not result in "Take" of birds protected pursuant to this Act, all active nest sites would have to be protected while birds were nesting. Please review the "Impacts and Mitigation" Section of this report

below for specific requirements for avoidance of potentially occurring nesting birds. Without necessary precautions, any construction or demolition implemented as part of the proposed project could result in impacts to nesting birds. Impacts could include nest abandonment or nest inattentiveness that causes the death of eggs or young. Impacts to nesting birds are regarded as less than significant with mitigation pursuant to the CEQA (see the Impacts and Mitigation Measures section below.)

7.3 State Endangered Species Act

7.3.1 Section 2081 of the State Endangered Species Act

In 1984, the state legislated the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above), the CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If the CDFW determines that a proposed project could impact a State listed threatened or endangered species, the CDFW will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from the CDFW and/or Service (if it is a Federal listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a State listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for Federal listed species). The CDFW will issue an incidental take permit only if:

1) The authorized take is incidental to an otherwise lawful activity;
2) the impacts of the authorized take are minimized and fully mitigated;
3) measures required to minimize and fully mitigate the impacts of the authorized take:
    a) are roughly proportional in extent to the impact of the taking on the species;
    b) maintain the project applicant’s objectives to the greatest extent possible; and,
    c) capable of successful implementation; and,
4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing a habitat conservation plan (HCP) as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve the CDFW staff in development of the HCP. If a final

Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the federal Endangered Species Act, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of "take." These species are listed in several statutes that identify "fully protected" species and "specified birds." *See* Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a "fully protected" species or a "specified bird" occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a "non-jeopardy" federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal incidental take permit) pursuant to FESA, to submit the federal opinion or permit to the CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days the CDFW determines that the federal incidental take permit is consistent with state law, and that all state listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if the CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are state listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a state CESA permit under Section 2081(b). Section 2081 (b) is of no use if an affected species is state-listed, but not federally listed.

State and federal incidental take permits are issued on a discretionary basis, and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

7.3.2 Applicability to The Proposed Project

No state listed plant species would likely be impacted by the proposed project. Calistoga popcorn (*Plagiobothrys strictus*) is the only state listed rare plant species known to occur within 5 miles of the project site (Table 3). None were seen during M&A's March, May and July 2015 rare plant surveys. No suitable habitat for this species occurs on the project site. No impacts are expected to occur.

Nine state listed wildlife species are known to occur within 5 miles of the project site (Table 4). Of these nine, the California Species of Special Concern California: red-legged frog, purple martin, Townsend's big-eared bat, and pallid bat are the only species with any potential to occur on the project site. Diurnal and nocturnal California red-legged frog surveys conducted by M&A on March 12 and 13, 2015 and April 9 and April 10, 2015 ruled out any potential for their

occurrence on the site. M&A also conducted western pond turtle and nocturnal maternity/roost bat surveys on March 12, 2015 with negative findings, ruling out their potential for occurrence. Prior to any construction or demolition activities completed as part of the proposed project, pre-disturbance nesting bird surveys should be conducted to determine if there are active nests that could be impacted from such activities. The Impacts and Mitigation section of this document details the avoidance measures that should be implemented as part of the proposed project.

7.4 Applicable CEQA Regulations

Section 15380 of CEQA defines "endangered" species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. "Rare" species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will "substantially affect a rare or endangered species of animal or plant or the habitat of the species." The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat to that species despite its legal status or lack thereof.

7.4.1 Applicability to Proposed Project

This document addresses impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA. This document is suitable for use by the CEQA lead agency (in this case the County of Napa) for preparation of any CEQA review document prepared for the proposed project. This report has been prepared as a Biology Section that is suitable for incorporation into an initial study or the biology section of an Environmental Impact Report.

7.5 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503, 3503.5, 3511, and 3513 prohibit the "take, possession, or destruction of birds, their nests or eggs." Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "take." Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

7.5.1 Applicability to the Proposed Project

Common song birds and raptors could nest on the project site; a pair of red-shouldered hawks were observed nesting onsite in March 2015. Preconstruction surveys would have to be conducted for all nesting birds within 30 days of the commencement of construction or demolition activities to ensure that there is no direct take of nesting birds including their eggs or

young. Any active nests that are found during pre-disturbance surveys would have to be avoided by the project until active nests are no longer in use. Suitable non-disturbance buffers should be established by a qualified avian biologist that would protect nest sites from construction/ demolition activities until the nesting cycle is complete. Please see the Impacts and Mitigation Measures section for further details.

7.6 Napa County Ordinances

7.6.1 Stream Setbacks

Napa County Ordinance No. 18.108.025 details the setback requirements for intermittent and perennial streams as follows:

B. In addition to any requirements of the floodway and floodplain regulations set forth in Title 16, construction of main or accessory structures, earthmoving activity, grading or removal of vegetation or agricultural uses of land as defined by Section 18.08.040 shall be prohibited within the stream setback areas established below unless specifically permitted in subsection (E) of this section, exempt pursuant to Section 18.108.050, or authorized by the commission through the granting of an exception in the form of a use permit pursuant to Section 18.108.040

1. Setbacks for New Land Clearings for Agricultural Purposes. No clearing of land for new agricultural uses as defined by Section 18.08.040 shall take place within the following **setbacks** from streams:

Slope (Percent)	Required Setback
< 1	35 feet
1—5	45 feet
5—15	55 feet
15—30	65 feet
30—40	85 feet
40—50	105 feet
50—60	125 feet
60—70	150 feet

As detailed in subsection (E), uses permitted within required stream setbacks include construction of new public works projects such as drainage culverts, stream crossings when such projects are specifically authorized and permitted by existing state, federal or local law.

7.6.2 Applicability to the Project

The seasonal drainage and ponds that run through the middle of the site are subject to the County's stream setback requirements. As slopes are between 1 and 5 percent, a 45 foot setback for new construction would be required adjacent to the ephemeral drainage on the project site.

7.6.3 FLOODPLAIN AND RIPARIAN ZONE MANAGEMENT ORDINANCE

Napa County's Floodplain and Riparian Zone Management Ordinance No. 16.04.750 places restrictions on activities within riparian zones, as follows:

A. The proposed activity will not, with regard to the riparian zones along a channel, remove more than the following:

    1. A native tree eighteen inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or

    2. Three native trees twelve inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or

    3. Six native trees six inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or

    4. Five hundred square feet of vegetation in riparian zones beyond ten feet from the top of the bank, or

    5. The temporary removal of a portion of riparian vegetation not more than fifteen feet wide beyond ten feet from the top of the bank, where replanting of such strip is a part of the project; and

B. The proposed activity will not involve the locating of any facility or structure within ten feet from the top of the bank; and

C. Will not result in a cut or fill slope that would remain unprotected by slope reseeding and bank stabilization replanting at the end of the project, thereby making the slope susceptible to erosion.

7.6.4 APPLICABILITY TO THE PROJECT

The proposed project would not impact riparian vegetation.

7.7 Napa County General Plan

The Napa County General Plan was adopted in 2008. The Conservation Element of this Plan was updated in 2009; it provides goals, policies, and action items related to open space conservation as well as a wide range of other topics that together comprise the natural environment of Napa County, including its natural resources and its water resources. The pertinent goals and policies and their applicability to the project are itemized below.

7.7.1 POLICY CON-11

The County shall maintain and improve fisheries habitat through a variety of appropriate measures, including the following as well as best management practices developed over time:

e) Manage the removal of invasive vegetation and the retention of other riparian vegetation to reduce the potential for increased water temperatures and siltation and to improve fishery habitat.

> **Applicability:** The only drainage on the project site is an ephemeral drainage that has water in it during and shortly after large storm events. There is no riparian vegetation associated with the drainage and nowhere else on the project site supports riparian vegetation. Thus, riparian vegetation will not be impacted by the proposed project. There is no fish habitat on the project site.

h) Encourage the use of effective vegetated buffers between urban runoff and local storm drains.

> **Applicability:** There is no urban runoff from this rural property and there is no County stormdrain system anywhere near the project site.

n) Implement road construction and maintenance practices to minimize bank failure and sediment delivery to streams.

> **Applicability:** The ephemeral drainage is crossed in multiple locations on the project site via existing culverts that were installed many years ago to facilitate travel over/through this property. The 3 man-made detention basins act as silt collection basins and thus, treat stormwater prior to the time it leaves the project site.

7.7.2 POLICY CON-13

The County shall require that all discretionary residential, commercial, industrial, recreational, agricultural, and water development projects consider and address impacts to wildlife habitat and avoid impacts to fisheries and habitat supporting special-status species to the extent feasible. Where impacts to wildlife and special-status species cannot be avoided, projects shall include effective mitigation measures and management plans including provisions to:

> **Applicability:** There are no proposed impacts to the drainages and man-made basins onsite and the actively used area of the project site is unlikely to support special-status plants or animals; none have been identified during appropriately timed surveys.

d) Provide protection for habitat supporting special-status species through buffering or other means.

> **Applicability:** Appropriately timed surveys determined that there are no special-status plants present on the project site. Although unlikely, the project site provides suitable nesting habitat for purple martin, suitable roost sites of the Townsend's big-eared bat and pallid bat, and adjacent suitable habitat for California red-legged frog; all state designated species of special concern with the California red-legged frog also being a federally listed threatened species. In addition, the project site provides suitable nesting habitat tor raptors and passerine birds that are protected pursuant to California Fish and Game Codes §§3503 and 3503.5 and the Migratory Bird Treaty Act. A pair of red-shouldered hawks was identified nesting onsite in March 2015. Pre-disturbance surveys will be conducted to ensure that there are no impacts to these species. If any special-status species is found

on the project site avoidance and other protection measures will be applied as detailed in the Impacts and Mitigation section of this report.

e) Provide replacement habitat of like quantity and quality on- or off-site for special-status species to mitigate impacts to special-status species.

Applicability: Although unlikely, the project site provides suitable nesting habitat for purple martin, suitable roost sites of the Townsend's big-eared bat and pallid bat, and adjacent suitable habitat for California red-legged frog; all state designated species of special concern with California red-legged frog also a federally threatened species. In addition, the project site provides suitable nesting habitats tor raptors and passerine birds that are protected pursuant to California Fish and Game Codes §§3503 and 3503.5 and the Migratory Bird Treaty Act. Pre-disturbance surveys will be conducted to ensure that there are no impacts to these species. No roost/maternity sites were found during M&A's March 12, 2015 surveys. The Impacts and Mitigation Measures below fully address impacts to special-status species that could be found to occur on the project site, as well as appropriate avoidance measures, and mitigation measures should a special-status species be found on the project site.

f) Enhance existing habitat values, particularly for special-status species, through restoration and replanting of native plant species as part of discretionary permit review and approval.

Applicability: The proposed use areas of the project site do not support special-status plants and native trees onsite will not be impacted by the proposed project.

g) Require temporary or permanent buffers of adequate size (based on the requirements of the subject special-status species) to avoid nest abandonment by birds and raptors associated with construction and site development activities.

Applicability: If nesting passerine birds and/or raptors are identified during preconstruction surveys, mitigation measures BIO-1 and BIO-2 in the Mitigation Measures section below describe the temporary buffers that would be put into place to ensure that nesting birds are not impacted by the proposed activities.

h) Demonstrate compliance with applicable provisions and regulations of recovery plans for federally listed species.

Applicability: No species that are protected pursuant to the FESA are known or expected to occur on the project site. California red-legged frog, a federally listed threatened species, is known from the region of the project site. Federally permitted California red-legged frog biologists conducted surveys for this frog and it was not found. No suitable habitat for federally listed plant species occurs in the impact areas. Rare plant surveys conducted during the flowering period of all federally listed plant species known from the region of the project site were conducted by qualified botanists and no federally listed plants were identified during these surveys. Thus, no impacts to federally listed species are expected from the proposed project.

7.7.3 POLICY CON-14

To offset possible losses of fishery and riparian habitat due to discretionary development projects, developers shall be responsible for mitigation when avoidance of impacts is determined to be infeasible. Such mitigation measures may include providing and permanently maintaining similar quality and quantity habitat within Napa County, enhancing existing riparian habitat, or paying in-kind funds to an approved fishery and riparian habitat improvement and acquisition fund. Replacement habitat may occur either on-site or at approved off-site locations, but preference shall be given to on-site replacement.

Applicability: The project site does not support fisheries habitat or riparian vegetation.

7.7.4 POLICY CON-16

The County shall require a biological resources evaluation for discretionary projects in areas identified to contain or potentially contain special-status species based upon data provided in the Baseline Data Report (BDR), California Natural Diversity Database (CNDDB), or other technical materials. This evaluation shall be conducted prior to the approval of any earthmoving activities. The County shall also encourage the development of programs to protect special-status species and disseminate updated information to state and federal resource agencies.

Applicability: M&A reviewed the County's BDR and the CNDDB. This document addresses the project's potential effects on special-status species. This report evaluates potential impacts to all special-status species that are known to occur regionally in similar habitats as those found on the project site. See the Impacts and Mitigation Measures sections for details.

7.7.5 POLICY CON-17

Preserve and protect native grasslands, serpentine grasslands, mixed serpentine chaparral, and other sensitive biotic communities and habitats of limited distribution. The County, in its discretion, shall require mitigation that results in the following standards:

a) Prevent removal or disturbance of sensitive natural plant communities that contain special-status plant species or provide critical habitat to special-status animal species.

   Applicability: The proposed project will not affect the mixed oak woodlands or the wetlands/drainage onsite; these are the only native plant habitats onsite. There are no special-status plants on the project site, thus, none will be affected by the proposed project. Finally, the project site does not fall within critical habitat boundaries for special-status animal species.

b) In other areas, avoid disturbances to or removal of sensitive natural plant communities and mitigate potentially significant impacts where avoidance is infeasible.

   Applicability: There are no sensitive natural plant communities on the project site.

e) Require no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible. Where avoidance, restoration, or replacement is not feasible, preserve like habitat at a 2:1 ratio or greater within Napa County to avoid significant cumulative loss of valuable habitats.

Applicability: There are no sensitive natural plant communities on the project site.

7.7.6 POLICY CON-19

The County shall encourage the preservation of critical habitat areas and habitat connectivity through the use of conservation easements or other methods as well as through continued implementation of the Napa County Conservation Regulations associated with vegetation retention and setbacks from waterways.

Applicability: The applicant would comply with all setback requirements for the ephemeral drainage and ponds. No critical habitat areas occur on the project site.

7.7.7 POLICY CON-26

Consistent with Napa County's Conservation Regulations, natural vegetation retention areas along perennial and intermittent streams shall vary in width with steepness of the terrain, the nature of the undercover, and type of soil. The design and management of natural vegetation areas shall consider habitat and water quality needs, including the needs of native fish and special status species and flood protection where appropriate. Site-specific setbacks shall be established in coordination with Regional Water Quality Control Board, CDFW, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration National Marine Fisheries Service, and other coordinating resource agencies that identify essential stream and stream reaches necessary for the health of populations of native fisheries and other sensitive aquatic organisms within the County's watersheds. Where avoidance of impacts to riparian habitat is infeasible along stream reaches, appropriate measures will be undertaken to ensure that protection, restoration, and enhancement activities will occur within these identified stream reaches that support or could support native fisheries and other sensitive aquatic organisms to ensure a no net loss of aquatic habitat functions and values within the county's watersheds.

Applicability: The active project site area does not support sensitive habitats or sensitive plants or animals. No riparian habitat occurs on the project site. The applicant will ensure that the proposed project would comply with all setback requirements provided by the above-mentioned regulatory agencies for any proposed construction near the ephemeral drainage. No proposed activity will affect the jurisdictional limits of the U.S. Army Corps of Engineers, California Regional Water Quality Control Board, or the CDFW (the resource agencies). Any proposed activity inside established setbacks identified in Impact and Mitigation Measure BIO-4 may require regulatory permits from the resource agencies. As proposed, the project will not trigger regulatory permitting requirements from the resource agencies.

7.7.8 POLICY CON-27

The County shall enforce compliance and continued implementation of the intermittent and perennial stream setback requirements set forth in existing stream setback regulations, provide education and information regarding the importance of stream setbacks and the active management and enhancement/restoration of native vegetation within setbacks, and develop incentives to encourage greater stream setbacks where appropriate. Incentives shall include streamlined permitting for certain vineyard proposals on slopes between 5 and 30 percent and flexibility regarding yard and road setbacks for other proposals.

> **Applicability:** The applicant would ensure that the proposed project complies with all setback requirements. Setbacks requirements are identified in Impact and Mitigation Measure BIO-4. No impacts within setbacks are proposed. No riparian habitat occurs on the project site and thus, the project would not impact riparian habitat.

7.7.9 POLICY CON-28

To offset possible additional losses of riparian woodland due to discretionary development projects and conversions, developers shall provide and maintain similar quality and quantity of replacement habitat or in-kind funds to an approved riparian woodland habitat improvement and acquisition fund in Napa County. While on-site replacement is preferred where feasible, replacement habitat may be either on-site or off-site as approved by the County.

> **Applicability:** No riparian habitat occurs on the project site and thus, the project would not impact riparian habitat.

7.7.10 POLICY CON-30

All public and private projects shall avoid impacts to wetlands to the extent feasible. If avoidance is not feasible, projects shall mitigate impacts to wetlands consistent with state and federal policies providing for no net loss of wetland function.

> **Applicability:** No waters of the U.S. (or State), which include wetlands would be impacted by the proposed project.

7.7.11 POLICY CON-48

Proposed developments shall implement project-specific sediment and erosion control measures (e.g., erosion control plans and/or stormwater pollution prevention plans) that maintain pre-development sediment erosion conditions or at minimum comply with state water quality pollution control (i.e., Basin Plan) requirements and are protective of the County's sensitive domestic supply watersheds. Technical reports and/or erosion control plans that recommend site-specific erosion control measures shall meet the requirements of the County Code and provide detailed information regarding site specific geologic, soil, and hydrologic conditions and how the proposed measure will function.

> **Applicability:** As discussed in section 8.2, the proposed project will comply with all NPDES requirements, including the preparation of a *Stormwater Pollution Prevention*

Plan (SWPPP) if any future construction is proposed that would disturb greater than one acre of land.

7.7.12 POLICY CON-50

Elements a, e, g, and h below are the relevant elements of this water quality conservation policy pertaining to this project site. The County will take appropriate steps to protect surface water quality and quantity, including the following:

a) Preserve riparian areas through adequate buffering and pursue retention, maintenance, and enhancement of existing native vegetation along all intermittent and perennial streams through existing stream setbacks in the County's Conservation Regulations (also see Policy CON-27 which retains existing stream setback requirements).

e) In conformance with National Pollution Discharge Elimination System (NPDES) requirements, prohibit grading and excavation unless it can be demonstrated that such activities will not result in significant soil erosion, silting of lower slopes or waterways, slide damage, flooding problems, or damage to wildlife and fishery habitats.

g) Address potential soil erosion by maintaining sections of the County Code that require all construction-related activities to have protective measures in place or installed by the grading deadlines established in the Conservation Regulations. In addition, the County shall ensure enforceable fines are levied upon code violators and shall require violators to perform all necessary remediation activities.

h) Require replanting and/or restoration of riparian vegetation to the extent feasible as part of any discretionary permit or erosion control plan approved by the County, understanding that replanting or restoration that enhances the potential for Pierce's Disease or other vectors is considered infeasible.

Applicability:

a) The applicant would ensure that the proposed project complies with all setback requirements. No removal of riparian habitat would occur since none exists onsite.
e) The proposed project shall remain in compliance with the NPDES.
g) The County shall implement a Stormwater Pollution Prevention Plan if construction occurs during the proposed project that disturbs greater than one acre.
h) No removal of riparian habitat would occur since none occurs onsite.

7.8 Napa County Baseline Data Report

The Watershed Information Center and Conservancy (WICC) of Napa County guides and supports the community in its efforts to maintain and improve the health of Napa County's watershed lands. In part, the WICC maintains or makes available the Baseline Data Report (BDR). The BDR serves as a planning document available for use by Napa County and the public.

7.8.1 APPLICABILITY TO THE PROJECT

M&A reviewed the Biological Resource Section of the BDR for applicability to the proposed project. The BDR identifies "Critical Biological Areas" and shows that the project site is not within such a designated area. In addition, the BDR identifies six communities of limited distribution on a countywide scale: redwood forest, wet meadows, mudflats, Brewer willow scrub, ponderosa pine forest, and tanbark oak forest. Of these six communities, redwood forest is also recognized by CDFW as potentially sensitive. None of these communities occurs on the project site and as such these habitats would not be directly or indirectly affected by the proposed project.

The BDR states that there are eighty-one special-status plant species that occur or potentially occur in Napa County. Their distributions and habitat associations are summarized in the biological resources chapter of the BDR. Sixty special-status terrestrial wildlife species and 9 special-status fish species occur or potentially occur in the County. Associations of these species with particular biotic communities are discussed in the BDR and highlight the importance of a few plant communities that occur in Napa County. A detailed analysis of streams and the riparian corridors is also provided, including a discussion of which stream channels are supportive of sensitive fish species. In this biological report prepared for the proposed 2002 James Creek Road project potential impacts to special-status plants and animals are fully discussed. Special-status species listed in the BDR that potentially occur in the greater vicinity of the project site are presented in Tables 3 and 4. These lists were derived from the CDFW's CNDDB and CNPS' lists of sensitive plants in similar fashion to how special-status species are designated in the BDR. When impacts to special-status plants or animals from the proposed project could be regarded as potentially significant or significant, such impacts and prescribed mitigations are presented in the Impacts and Mitigations sections of this report.

Four wetland communities are listed as sensitive by the CDFW and are discussed in the BDR. These include Coastal and Valley freshwater marsh, coastal brackish marsh, northern coastal salt marsh, and vernal pool. The proposed project will not impact any sensitive wetland community; however, there is a small area of "seasonal wetland" running through the project site that will remain unaffected by the proposed project.

The BDR discusses 23 Sensitive Biotic Communities that are recognized by the CDFW and are included in the CNDDB. No Sensitive Biotic Communities would be affected by the proposed project.

Wildlife Movement Areas are discussed in the BDR. Three major, regional north-south wildlife movement routes have been identified in Napa County: the Western Mountains, the Napa River, and the Blue Ridge-Berryessa Natural Area. Constraints to east-west movement and the importance of riparian corridors are discussed in the BDR, as is the potential for zoning buildout to constrain wildlife movement in particular parts of the County. The proposed project will not affect the three major, regional north-south wildlife movement routes identified in Napa County in the BDR. The project site provides no known significant or regional movement corridor for fish species or terrestrial wildlife. *Accordingly, the proposed project is not expected to have significant adverse impacts on any significant wildlife movement corridor.*

8. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE

This section presents an overview of the criteria used by the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board, the State Water Resources Control Board, and the CDFW to determine those areas within a project area that would be subject to their regulation.

8.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting

8.1.1 SECTION 404 OF THE CLEAN WATER ACT

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill material into any water of the United States. In the Federal Register "waters of the United States" are defined as, "...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce..." (33 CFR Section 328.3).

Limits of Corps' jurisdiction.

(a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:
(1) Extends to the high tide line, or
(2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.

(c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:
(1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
(2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
(3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the ordinary high water mark (OHWM) or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is the "line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]). Wetlands are defined as "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands

usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

It should be noted that the extent of the Corps jurisdiction pursuant to Section 404 of the Clean Water Act was recently modified. In Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, the U.S. Supreme Court [148 L. Ed. 2d 576 (2001) (SWANCC)] ruled that the Corps exceeded its authority under the Clean Water Act when it regulated discharges of fill material into "isolated" waters used as habitat by migratory birds. Accordingly, waters (including wetlands) that are not connected hydrologically to navigable waters are not subject to regulation by the Corps.

Another recent Supreme Court decision also significantly changes how the Corps defines waters of the United States. On June 19, 2006 the United States Supreme Court, in a "four-one-four" decision, addressed the extent of Clean Water Act jurisdiction over wetlands adjacent to tributaries of navigable waters. In two consolidated cases, *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers*, a five-Justice majority of the Court remanded the case to the Sixth circuit for further consideration. The Court was unable to produce a majority vote in favor of any one jurisdictional standard for the Sixth Circuit to apply (or for the regulated community to follow). Instead, Justice Scalia authored a plurality opinion that would significantly narrow the reach of federal wetlands jurisdiction, while Justice Kennedy, concurring in the judgment only, concluded that the appropriate test for jurisdiction over wetlands was the presence of a "significant nexus" between wetlands and "navigable waters" in the traditional sense. The remaining four Justices, in a dissenting opinion by Justice Stevens, would have upheld the Corps of Engineers' assertion of jurisdiction and would have affirmed the Sixth Circuit's decision. When no opinion garners at least five votes, lower courts follow the concurrence that reached the result on the narrowest grounds. Here, that is Justice Kennedy's opinion. Unfortunately, Justice Kennedy did not provide specific guidance about the extent of federal jurisdiction over wetlands that are adjacent to tributaries of navigable waters.

Justice Kennedy concluded that the Clean Water Act applies only to those wetlands with a "significant nexus" to "navigable waters in the traditional sense." A significant nexus exists when a wetland, "either alone or in combination with similarly situated lands in the region, significantly affect[s] the chemical, physical, and biological integrity" of factually navigable waters. Under Supreme Court precedent, wetlands adjacent to navigable waters meet this test. For wetlands located near tributaries of navigable waters, however, each wetland demands a case-by-case jurisdictional inquiry. We know that a "mere hydrological connection" is not enough in all cases, and that "speculative or insubstantial" effects on water quality will not suffice to satisfy the test. [Preceding text excerpted from a newsletter prepared by Briscoe, Ivester, and Bazel LLP]. The Corps of Engineers and the Environmental Protection Agency jointly prepared an Instructional Guidebook to aid Corps field staff in completing the new “Approved Jurisdictional Determination Form,” and is intended to be used as the U.S. Army Corps of Engineers Regulatory National Standard Operating Procedures for conducting an approved jurisdictional determination.

To remain in compliance with Section 404 of the Clean Water Act, project proponents and property owners (applicants) are required to acquire authorization from the Corps prior to discharging or otherwise impacting "waters of the United States". In many cases, the Corps must visit a proposed project area to confirm the extent of area falling under their jurisdiction (to conduct a "jurisdictional determination") prior to authorizing any permit for that project. Typically, at the time the jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to "waters of the United States."

Pursuant to Section 404 of the Clean Water Act, the Corps normally provides two alternatives for permitting impacts to "waters of the United States." The first alternative would be to use Nationwide Permit(s). The second alternative is to apply to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes a public review (i.e., public notice and receipt of public comments) and must contain an "alternatives analysis" that is prepared pursuant to Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). The alternatives analysis is also typically reviewed by the federal Environmental Protect Agency (EPA), and thus brings another resource agency into the permitting framework. Both the Corps and EPA take the initial viewpoint that there are practical alternatives to any proposed project there would not result in impacts to waters of the U.S., if the proposed permitted action is not a water dependent project (e.g. a pier or a dredging project). Alternative analyses therefore must provide convincing reasons that the proposed impacts are unavoidable.

Nationwide Permit(s) (NWP) are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under the NWP program, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). In order to use NWP(s), a project must meet 27 general nationwide permit conditions, and all specific conditions pertaining to the NWP being used (as presented at 33 CFR Section 330). It is also important to note that pursuant to 33 CFR Section 330.4(e), there may be special regional conditions or modifications to NWPs that could have relevance to individual proposed projects. Finally, pursuant to 33 CFR Section 330.6(a), Nationwide permittees may, and in some cases, request from the Corps confirmation that an activity complies with the terms and conditions of the NWP intended for use (*i.e.*, must receive "verification" from the Corps).

Prior to finalizing design plans, the applicant needs to be aware that the Corps maintains a policy of "no net loss" of wetlands (waters of the United States). Therefore, it is incumbent upon applicants that propose to impact Corps regulated areas to submit a mitigation plan that demonstrates that impacted regulated areas would be recreated (*i.e.*, impacts would be mitigated). Typically, the Corps requires mitigation to be "in-kind" (i.e., if a stream channel would be filled, mitigation would include replacing it with a new stream channel), and at a minimum of a 1:1 replacement ratio (i.e., one acre or fraction thereof recreated for each acre or fraction thereof lost). Often a 2:1 replacement ratio is required. Usually the 2:1 ratio is met by recreation or enhancement of an equivalent amount of wetland that is impacted, in addition to preserving an equivalent amount of wetland. In some cases, the Corps allows "out-of-kind" mitigation if the compensation/mitigation has greater value than the impacted area. Finally, there

are many Corps approved wetland mitigation banks where wetland mitigation credits can be purchased by applicants to meet their mitigation requirements. Mitigation banks have limited distribution and the Corps typically only allows their use when projects have limited impacts. If a project meets conditions of Nationwide Permits, and an Individual Permit is not required by the Corps, then typically the Corps allows use of wetland mitigation banks (if available) to meet its no net loss requirement and to otherwise mitigate the impacts to waters of the United States resulting from the proposed project.

8.1.2 APPLICABILITY TO THE PROPOSED PROJECT

No Corps jurisdictional wetlands are proposed to be impacted by the proposed project. Thus, pursuant to Section 404 of the Clean Water Act a permit from the Corps is not required.

8.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)

8.2.1 SECTION 401 OF THE CLEAN WATER ACT

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers permitting programs that authorize impacts to waters of the United States, including wetlands, and other waters, any Corps permit authorized for a proposed project would be invalid unless it is a NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific certification or waiver of water quality. Certification of NWPs requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the issued NWP (the term is typically for five years). Certification must be consistent with the requirements of the federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification or waiver of water quality.

Additionally, if a proposed project would impact waters of the State, including wetlands, and the project applicant cannot demonstrate that the project is unable to avoid these adverse impacts, water quality certification will most likely be denied. Section 401 Certification may also be denied based on significant adverse impacts to waters of the United States, including wetlands. The RWQCB has also adopted the Corps' policy that there shall be "no net loss" of wetlands. Thus, prior to certifying water quality, the RWQCB will impose avoidance mitigation requirements on project proponents that impact waters of the State.

The RWQCB requires a complete pre- and post-development Best Management Practices Plan (BMPs) of any portion of the project site that is developed. This means that a water quality treatment plan for the pre- and post-developed project site must be prepared and implemented. Preconstruction requirements must be consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES). That is, a *Stormwater Pollution Prevention Plan* (SWPPP) must be developed prior to the time that a site is graded (see NPDES section below). In addition, a post construction BMPs plan, or a Stormwater Management Plan (SWMP) must be developed and incorporated into any site development plan.

8.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The proposed project will not impact waters of the State regulated by the RWQCB pursuant to the Section 401 of the Clean Water Act. Thus, no Clean Water Act Section 401 permit is required from the RWQCB for implementation of the proposed project.

8.2.3 PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act, Water Code § 13260, requires that "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge" with the RWQCB through an application for waste discharge (Water Code Section 13260(a)(1). The term "waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (Water Code § 13050(e)). It should be noted that pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB also regulates "isolated wetlands," or those wetlands considered to be outside of the Corps' jurisdiction pursuant to the SWANCC decision (see Corps Section above).

The RWQCB generally considers filling in waters of the State to constitute "pollution." Pollution is defined as an alteration of the quality of the waters of the state by waste that unreasonably affects its beneficial uses (Water Code §13050(1)). The RWQCB litmus test for determining if a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act is if the action could result in any "threat" to water quality.

8.2.4 APPLICABILITY TO THE PROPOSED PROJECT

No waters of the State will be impacted by the proposed project. Since any "threat" to water quality can conceivably be regulated by the RWQCB pursuant to the Porter-Cologne Water Quality Control Act, care will be required if any construction is proposed as part of the proposed project to be sure that adequate pre- and post-construction Best Management Practices (BMPs) are incorporated into the project implementation plans. Preconstruction requirements would be consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES). That is, a *Stormwater Pollution Prevention Plan* (SWPPP) would have to be developed prior to earth moving construction (see NPDES section below).

With respect to the proposed project, horse manure dispersal may occur on the project site, but should remain a minimum of 50 feet away from the project site's ephemeral drainage and the man-made ponds. A vegetated buffer should be maintained between any manure disposal areas and any tributary or wetland (that is, the drainage and ponds).

8.3 California Department of Fish and Wildlife Protections

8.3.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE

Pursuant to Section 1602 of the California Fish and Game Code: "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

(1) CDFW receives written notification regarding the activity in the manner prescribed by CDFW. The notification shall include, but is not limited to, all of the following:
(A) A detailed description of the project's location and a map.
(B) The name, if any, of the river, stream, or lake affected.
(C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
(D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
(E) A copy of any other applicable local, state, or federal permit or agreement already issued.
(F) Any other information required by CDFW" (Fish & Game Code 2014).

Please see Section 1602 of the current California Fish and Game Code for further details.

Please also note that while not stated in the regulations above, CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, would require entering into a Streambed Alteration Agreement (SBAA) with CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, CDFW typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

8.3.2 APPLICABILITY TO PROPOSED PROJECT

The proposed project will not disturb the bed, channel, or bank of a stream and there is no riparian vegetation on the project site. As proposed the project will not require a SBAA pursuant to Section 1602 of the Fish and Game Code. Should there be any proposal to modify the ephemeral drainage on the project site an application for a 1602 Agreement should be submitted to the CDFW. If the CDFW determines a 1602 Agreement will be necessary for the proposed activities, a SBAA shall be secured by the applicant prior to implementing any proposed modifications to the ephemeral drainage on the project site.

9. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g. an occupancy permit must be issued), the lead agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an "Initial Study." If there could be significant environmental impacts, the lead agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are "Categorical Exemptions" that apply to the proposed activity; thus the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. If the project

is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a "Negative Declaration." If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a "Mitigated Negative Declaration" is typically prepared by the lead agency. Finally those projects that may have significant effects on the environment, or that have impacts that can't be mitigated to a level considered less than significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines "endangered" species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. "Rare" species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will "substantially affect a rare or endangered species of animal or plant or the habitat of the species." The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

9.1.1 APPLICABILITY TO THE PROPOSED PROJECT

This report has been prepared as a Biology Section that is suitable for incorporation into the biology section of a CEQA review document such as a Mitigated Negative Declaration or Negative Declaration. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA. This document is suitable for use by the CEQA lead agency (in this case Napa County) for preparation of any CEQA review document prepared for the proposed project.

10. IMPACTS ANALYSIS

In this section we discuss potential impacts to sensitive biological resources including special-status animal species and waters of the United States and/or State. Below we discuss impacts which with a mitigation prescription would reduce impacts to the greatest extent possible.

10.1 Significance Criteria

A significant impact is determined using CEQA and the CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other Federal, State, and local agencies' considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as "significant," "potentially significant," or "less than significant." Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated "waters of the United States" and/or stream channels.

10.1.1 THRESHOLDS OF SIGNIFICANCE

10.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it 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 U.S. Fish and Wildlife Service.

- 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 US Fish and Wildlife Service.

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

- 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.

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

10.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged or fill material into waters of the United States, which includes wetlands, as discussed in the bulleted item above, and also includes "other waters" (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the state. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

10.1.1.3 Stream Channels

Finally, pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which the CDFW typically considers to include riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

11. IMPACT ASSESSMENT AND PROPOSED MITIGATION

This impact assessment is based on M&A's understanding of the project as explained to us by Mr. John Stitt of Stitt Engineering, the applicant's engineer.

11.1 Impact BIO-1. Nesting Passerine Birds

Nesting passerine (perching) birds, including purple martin, could be impacted by the proposed project if avoidance measures are not implemented. The purple martin is a California "species of special concern." Passerine birds and their nests are protected under California Fish and Game Code (Sections 3503, 3503.5), and the Federal Migratory Bird Treaty Act. Impacts to nesting birds, their eggs, and/or young caused by implementation of the proposed project would be in violation of these regulations. These impacts can be avoided by the project with implementation of mitigation measures and thus impacts to nesting birds are regarded as less than significant pursuant to CEQA.

11.2 Mitigation Measure BIO-1. Nesting Passerine Birds

A preconstruction nesting bird survey should be conducted on the project site and within a zone of influence around the project site if any construction occurs between March 1 and September 1st. The zone of influence includes those areas off the project site where birds could be disturbed by earth-moving vibrations or construction noise. Accordingly, the nesting survey(s) must cover the project site and an area around the project site boundary. If project site disturbance associated with the project would commence between March 1 and September 1st, the nesting surveys should be completed 15 days prior to commencing with the work. If common bird species (that is, not special-status) for example, California towhee, western scrub jay, or Nuttall's woodpeckers are identified nesting on or adjacent to the project site, a non-disturbance buffer of 75 feet should be established or at a distance as otherwise prescribed by a qualified ornithologist based on the nesting birds' response and acclimation to existing noise/disturbance. For special-status passerine bird species, for example, the purple martin, the nesting buffer should be 100 feet or as otherwise prescribed by a qualified ornithologist. The buffer should be demarcated with orange construction fencing to ensure no construction equipment or people enter this non-disturbance zone. Disturbance around an active nest should be postponed until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to leave the area.

Typically, most passerine birds in the region are expected to complete nesting by August 1st. However, many species can complete nesting by the end of June or in early to mid-July. Regardless, nesting buffers should be maintained until August 1st unless a qualified ornithologist determines that young have fledged and are independent of their nests at an earlier date. If

buffers are removed prior to August 1st, the qualified biologist conducting the nesting surveys should prepare a report that provides details about the nesting outcome and the removal of buffers. This report should be submitted to the Napa County prior to the time that buffers are removed if the date is before August 1st. **Implementation of this mitigation measure would ensure that there are no impacts to common or special-status passerine nesting bird species and thus, impacts are regarded as less than significant pursuant to the CEQA.**.

11.3 Impact BIO-2. Nesting Raptors

Impacts to nesting raptors (birds of prey), their eggs, and/or young caused by implementation of the proposed project would be in violation of the Migratory Bird Treaty Act and Fish and Game Codes that protect nesting raptors. Potential impacts to nesting raptors from the proposed project include disturbance to nesting birds, and possibly death of eggs, young, and possibly adults. A pair of red-shouldered hawks was identified nesting on the project site during spring 2015 surveys. While red-shouldered hawks and other birds of prey may maintain traditional nest sites, they are mobile animals that can readily move nests each year. Since the red-shouldered hawks and other nesting raptors could nest on the project site in the future, impacts to nesting raptors, their eggs and/or young are considered **potentially significant** pursuant to CEQA. Impacts to nesting raptors must be avoided to reduce impacts to less than significant pursuant to CEQA**.**

11.4 Mitigation Measure BIO-2. Nesting Raptors

In order to avoid impacts to nesting raptors, a nesting survey shall be conducted prior to commencing with construction/demolition work if this work would commence between February 1st and August 31st .The raptor nesting surveys shall include examination of all grassland habitat and all trees within 300 feet of the entire project site, not just trees that could be impacted by the proposed project.

If tree-nesting raptors are identified during the surveys a 300-foot radius around the nest tree must be staked with bright orange construction fencing. If the tree is located off the project site, then the buffer shall be demarcated per above where the buffer occurs on the project site. *The size of the buffer may be altered if a qualified raptor biologist conducts: 1) an analysis of geographic barriers between the nest and the project site and believes that the nesting attempt will not be affected by the proposed project activities. 2) behavioral observations and determines the nesting raptors are acclimated to human disturbance at a level and to a degree that proposed activities at the project site would not be expected to impact the nesting outcome.* If a modified buffer is prescribed by the raptor biologist it shall allow sufficient buffer to prevent undue disturbance/harassment to the nesting raptors. No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified raptor biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones or that the nesting cycle is otherwise complete. This typically occurs by July 15th for smaller raptors and by August 1st for larger raptors. Nesting date may be completed earlier or later, and would have to be determined by the qualified raptor biologist. If a qualified biologist is not hired to watch the nesting raptors then nest protection buffers shall be maintained in place through the month of August. Work within the buffer can commence September 1st.

Impacts to nesting raptors can be avoided by the project with implementation of these mitigation avoidance measures and thus there will be no impacts to nesting raptors. **Implementation of this**

mitigation measure would ensure that there are no impacts to nesting raptors and thus impacts are regarded as less than significant pursuant to the CEQA.

11.5 Impact BIO-3. Bats.

The existing building and trees onsite, although unlikely, may provide roosting and/or maternity habitat for the pallid bat and Townsend's western big eared bat. These bat species are designated by the State as "species of special concern." In accordance with the CEQA Guidelines (Section 15380) which protects "rare" and "endangered" species as defined by CEQA (species of special concern meet this CEQA definition), impacts to these bats are regarded as less than significant pursuant to CEQA with the implementation of mitigation avoidance measures**.**

11.6 Mitigation Measure BIO-3. Bats

No roost/maternity sites were found during M&A's March 12, 2015 surveys. As bats are highly mobile species in order to avoid impacts to roosting special-status bats, a biologist shall survey trees and buildings that would be impacted by the project 15 days prior to commencing with any removal or demolition. All bat surveys shall be conducted by a biologist with experience surveying for bats. If no special-status bats are found during the surveys, then there would be no further regard for special-status bat species.

If special-status bat species are found roosting on the project site the biologist shall determine if there are young bats present (i.e., the biologist shall determine if there are maternal roosts). If young are found roosting in any tree or building that will be impacted by the project, such impacts shall be avoided until the young are flying free and are feeding on their own. A non-disturbance buffer fenced with orange construction fencing shall also be established around the maternity site. The size of the buffer zone shall be determined by a qualified bat biologist at the time of the surveys. If adults are found roosting in a tree or building on the project site but no maternal sites are found, then the adult bats can be flushed or a one-way eviction door can be placed over the tree cavity (or building access opening) for a 48 hour period prior to the time the tree or building in question would be removed or disturbed. No other mitigation compensation would be required. **Implementation of these mitigation measures would ensure that impacts to bats remain at a level considered less than significant pursuant to the CEQA.**

11.7 Impact BIO-4. Impacts to Waters of the United States and/or State

The Corps and the RWQCB have jurisdiction over waters of the United States and State pursuant to Sections 404 and 401 of the Clean Water Act, respectively. The ephemeral drainage and the man-made ponds would meet the criteria of "waters of the United States/State" and any impacts to these features would require prior authorization from the Corps and RWQCB. These agencies also require suitable non-disturbance buffers to protect water quality from surface runoff/ possible contamination. Under the currently proposed project the drainage and ponds would not be filled and a suitable non-disturbance buffer would be proposed. Thus, impacts to waters of the United States and State are regarded as less than significant pursuant to CEQA with the implementation of mitigation avoidance measures**.**

11.8 Mitigation Measure BIO-4. Impacts to Waters of the United States and/or State

The proposed project will maintain a distance of 50 feet from the waters of the United States and State (the drainage and ponds) to protect water quality. The ephemeral drainage and ponds would also be subject to the County's stream setback requirements; as slopes are between 1 and 5 percent, a 45-foot setback for new construction would be required adjacent to these features on the project site. The proposed 50-foot setback meets this requirement. **Implementation of this mitigation measure would ensure that there are no impacts to waters of the United States and State and thus impacts are regarded as less than significant pursuant to the CEQA.**

LITERATURE CITED

Baldwin D.H, Goldman D.H., Keil D.J., Patterson R, Rosatti T.J., Wilken D.H. (ed.). 2012. The Jepson Manual Vascular Plants of California. University of California Press, Berkeley. 1568 pp.

California Department of Fish and Wildlife. 2014. Special animals. California Natural Diversity Data Base. 53 pp.

California Department of Fish and Game. 2008. Complete list of amphibian, reptile, bird, and mammal species in California. September 2008. 27 pps.

CNDDB (California Natural Diversity Data Base). 2015. RareFind 3.0. Computer printout for special-status species within a 5-mile radius of the project site. California Natural Heritage Division, California Department of Fish and Game, Sacramento, CA.

CNPS (California Native Plant Society). 2001. Inventory of rare and endangered plants of California (sixth edition). Rare plant scientific advisory committee, David P. Tibor, convening editor. California Native Plant Society. Sacramento, CA. x+338 pps.

Holland, V.L. & D.J. Keil. 1995. California vegetation. Kendall/Hunt Publishing Company.

Jennings, M.R., M.P. Hayes 1994. Amphibian and Reptile Species of Special Concern in California. Final Report Submitted to the California Department of Fish & Game, Inland Fisheries Division. Rancho Cordova, CA. 255 pp. November 1.

Palmer, Ralph S., editor. 1988. Handbook of North American birds. Volume 5. New Haven, CT: Yale University Press. 463 p.

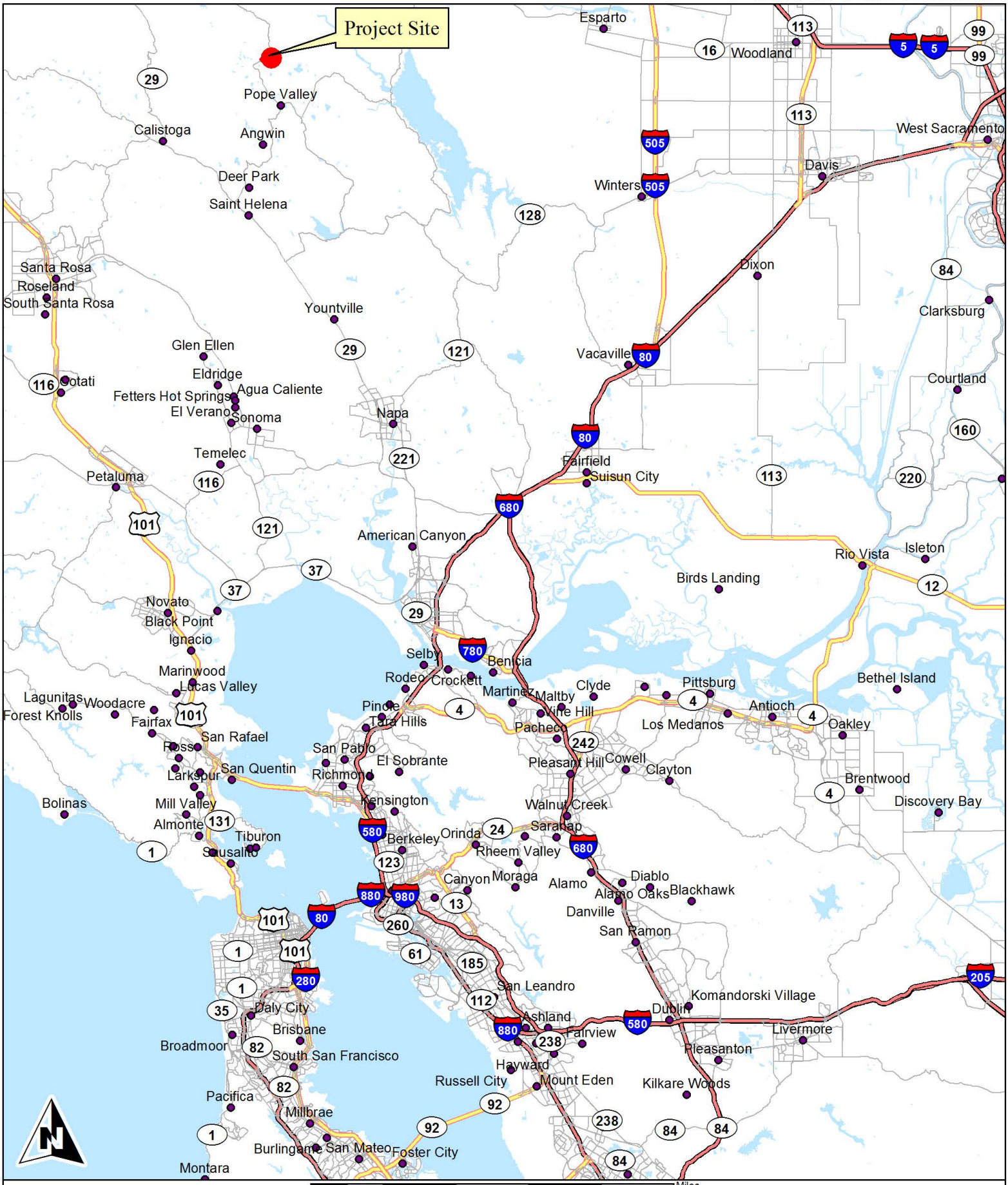
Schlorff, Ronald W. and Peter H. Bloom. 1984. Importance of riparian systems to nesting Swainson's hawks in the Central Valley of California. In: Warner, Richard E.; Hendrix, Kathleen M., eds. California riparian systems: Ecology, conservation, and productive management: Proceedings of a conference; 1981 September 17-19; Davis, CA. Berkeley, CA: University of California Press: 612-618.

Stebbins, R.C. 2003. Western reptiles and amphibians. Third edition. Houghton Mifflin Company, New York, NY. 533 pps.

USFWS (U.S. Fish & Wildlife Service). 2002. Recovery plan for the California red-legged frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, Oregon. Viii + 173 pps.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1988. California's wildlife, volume I, amphibians and reptiles. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990a. California's wildlife, volume II, birds. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

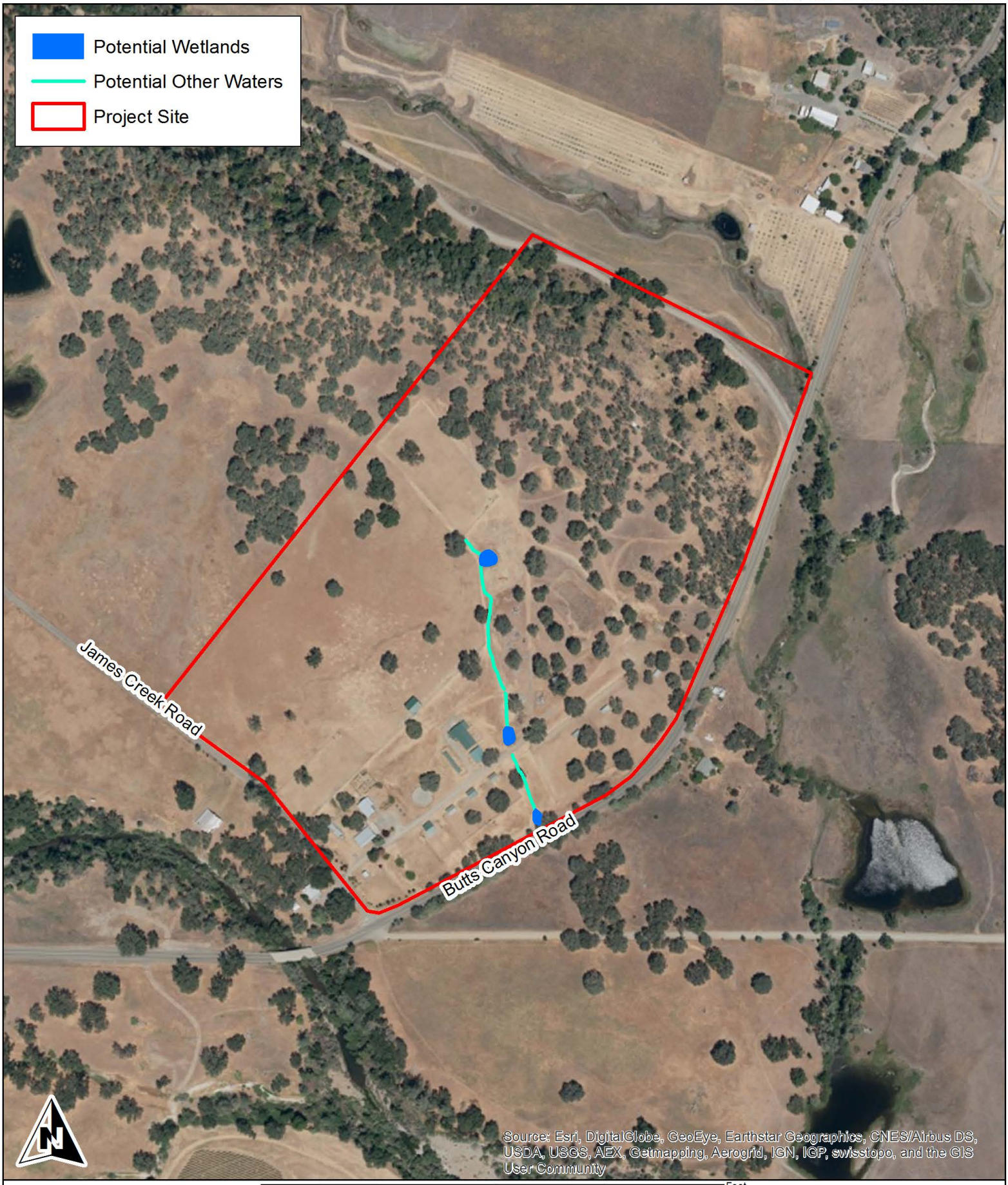
Figure 1. 2002 James Creek Road Project Site
Regional Map
Pope Valley, California

County: Napa
Map Preparation Date: October 23, 2014

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 2. 2002 James Creek Road Project Site Location Map
Pope Valley, California

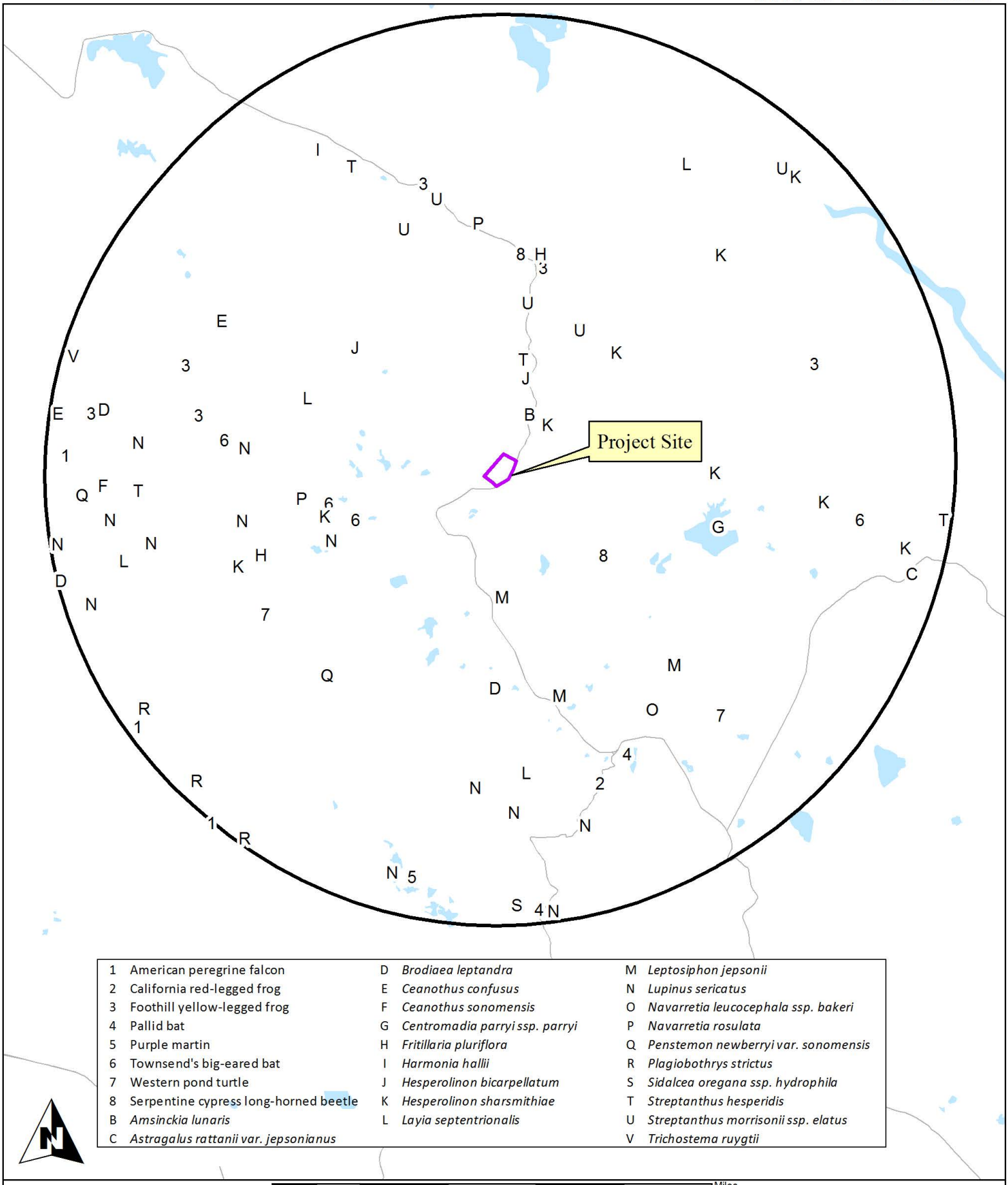
Sections: 5 & 32; T9N R5W & T10N R5W
7.5-Minute Aetna Springs quadrangle
Topography Source:ESRI
Map Preparation Date: October 23, 2014



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 3. Aerial Photograph of the
2002 James Creek Road Project Site
Pope Valley, California

Aerial Photograph Source: ESRI
Map Preparation Date: August 31, 2015



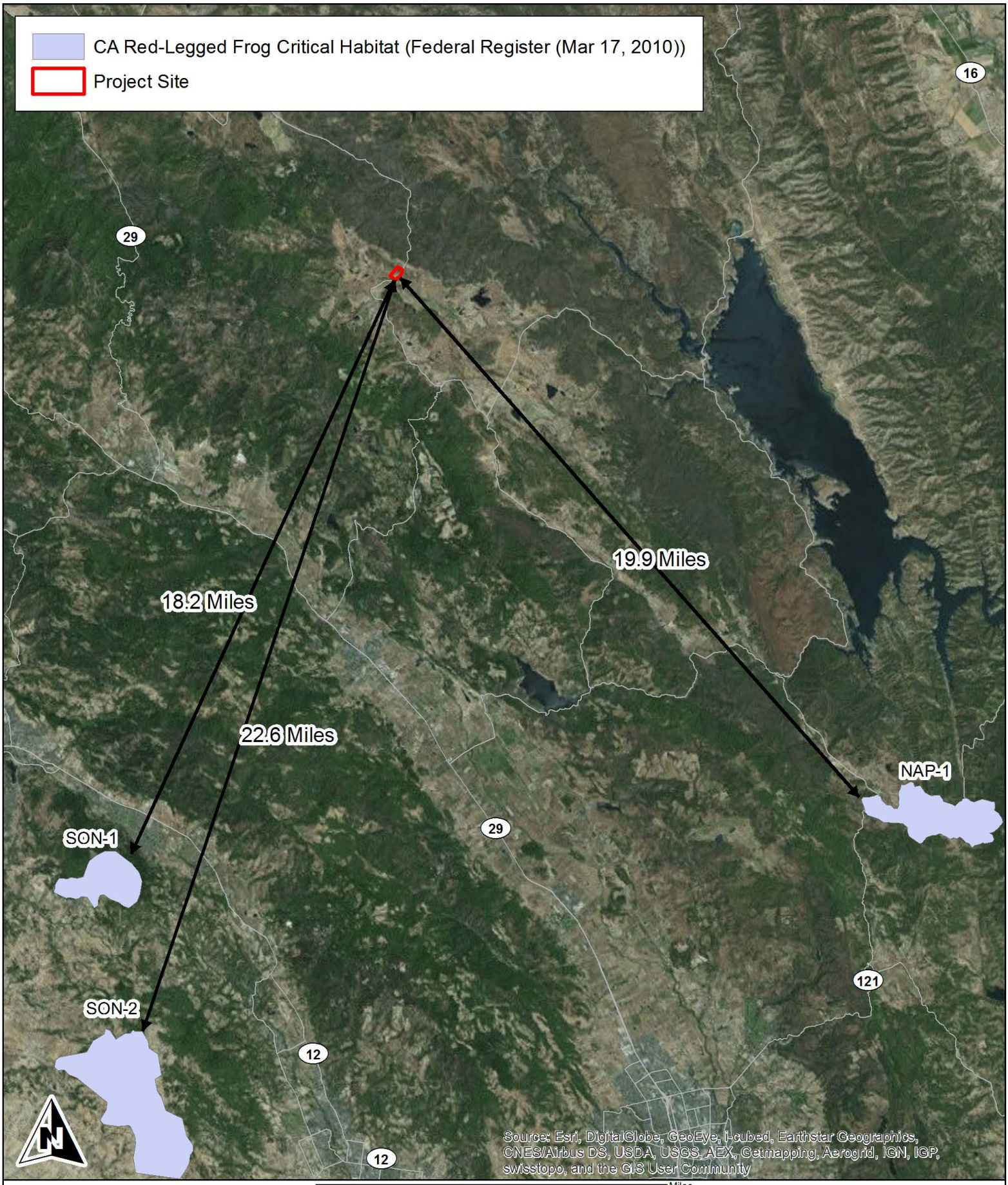
1	American peregrine falcon	D	*Brodiaea leptandra*	M	*Leptosiphon jepsonii*
2	California red-legged frog	E	*Ceanothus confusus*	N	*Lupinus sericatus*
3	Foothill yellow-legged frog	F	*Ceanothus sonomensis*	O	*Navarretia leucocephala ssp. bakeri*
4	Pallid bat	G	*Centromadia parryi ssp. parryi*	P	*Navarretia rosulata*
5	Purple martin	H	*Fritillaria pluriflora*	Q	*Penstemon newberryi var. sonomensis*
6	Townsend's big-eared bat	I	*Harmonia hallii*	R	*Plagiobothrys strictus*
7	Western pond turtle	J	*Hesperolinon bicarpellatum*	S	*Sidalcea oregana ssp. hydrophila*
8	Serpentine cypress long-horned beetle	K	*Hesperolinon sharsmithiae*	T	*Streptanthus hesperidis*
B	*Amsinckia lunaris*	L	*Layia septentrionalis*	U	*Streptanthus morrisonii ssp. elatus*
C	*Astragalus rattanii var. jepsonianus*			V	*Trichostema ruygtii*

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

0 0.5 1 2 3 4 5 Miles

Figure 4. CNDDB Special-Status Species Occurrences within 5 Miles of the 2002 James Creek Road Project Site

Map Preparation Date: December 31, 2014
5-Mile Radius
Source: CDFW, California Natural Diversity Data Base, 2014



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 5. California Red-legged Frog Critical Habitat in the Vicnity of 2002 James Creek Road Project Site Pope Valley, California

Aerial Photograph Source: ESRI
Map Preparation Date: December 1, 2014

Table 1

Plants Observed at 2002 James Creek Rd in Oct. 2014 and March, May, July 2015

Gymnosperms	
Pinaceae	
Pinus sabiniana	Gray pine
Angiosperms - Dicots	
Anacardiaceae	
Toxicodendron diversilobum	Western poison-oak
Apiaceae	
**Anthriscus caucalis*	Bur-chervil
Daucus pusillus	Rattlesnake weed
Eryngium aristulatum var. aristulatum	California coyote-thistle
Sanicula bipinnata	Poison sanicle
Sanicula bipinnatifida	Purple sanicle
**Scandix pecten-veneris*	Venus' needle
**Torilis arvensis*	Tall sock destroyer
Asteraceae	
**Centaurea melitensis*	Tocalote
**Centaurea solstitialis*	Yellow starthistle
Centromadia fitchii	Fitch's spikeweed
**Cirsium vulgare*	Bull thistle
Holocarpha virgata subsp. virgata	Virgate tarweed
**Hypochaeris glabra*	Smooth cat's-ear
**Hypochaeris radicata*	Rough cat's-ear
**Logfia gallica*	Narrowleaf cottonrose
Madia gracilis	Slender tarweed
Micropus californicus var. californicus	Cottontop
Psilocarphus tenellus	Slender woolly-marbles
**Senecio vulgaris*	Common groundsel
**Soliva sessilis*	Field burrweed
**Sonchus asper subsp. asper*	Prickly sow-thistle
Wyethia glabra	Mules ears
Xanthium strumarium	Cocklebur
Boraginaceae	
Amsinckia intermedia	Common fiddleneck
Cynoglossum grande	Grand hound's tongue
Nemophila heterophylla	White nemophila
Plagiobothrys canescens var. canescens	Valley popcornflower
Plagiobothrys nothofulvus	Rusty popcornflower
Brassicaceae	
Athysanus pusillus	Athysanus
**Capsella bursa-pastoris*	Shepherd's purse
Cardamine oligosperma	Few-seed bittercress
Lepidium dictyotum	Sharp-podded peppergrass
Lepidium nitidum	Shining peppergrass

* Indicates a non-native species

Table 1

Plants Observed at 2002 James Creek Rd in Oct. 2014 and March, May, July 2015

**Raphanus raphanistrum*	Jointed charlock
**Raphanus sativus*	Wild radish
**Sisymbrium altissimum*	Tumble mustard
Thysanocarpus curvipes	Lacepod
Caryophyllaceae	
**Cerastium glomeratum*	Mouse-ear chickweed
**Polycarpon tetraphyllum var. tetraphyllum*	Four-leaved allseed
Sagina apetala	Dwarf pearlwort
**Silene gallica*	Windmill-pink
**Spergula arvensis*	Stickwort
**Spergularia rubra*	Ruby sand-spurrey
**Stellaria media*	Common chickweed
Chenopodiaceae	
**Chenopodium vulvaria*	Goosefoot
Crassulaceae	
**Crassula tillaea*	Mossy pygmy-weed
Ericaceae	
Arctostaphylos sp.	Manzanita
Euphorbiaceae	
Croton setiger	Turkey mullein
Fabaceae	
Acmispon americanus var. americanus	Spanish-clover
Acmispon parviflorus	Hill lotus
Acmispon wrangelianus	Common trefoil
**Lathyrus cicera*	Wild-pea
Lupinus bicolor	Bicolored lupine
Lupinus nanus	Sky lupine
Trifolium depauperatum var. depauperatum	Dwarf sack clover
**Trifolium dubium*	Little hop clover
**Trifolium glomeratum*	Clustered clover
Trifolium gracilentum .	Pinpoint clover
**Trifolium hirtum*	Rose clover
**Trifolium subterraneum*	Subterranean clover
Trifolium willdenovii	Tomcat clover
**Vicia benghalensis*	Purple vetch
**Vicia sativa*	Common vetch
**Vicia villosa*	Winter vetch
Fagaceae	
Quercus douglasii	Blue oak
Quercus kelloggii	California black oak
Quercus lobata	Valley oak
Gentianaceae	
Zeltnera muehlenbergii	June centaury

* Indicates a non-native species

Table 1

Plants Observed at 2002 James Creek Rd in Oct. 2014 and March, May, July 2015

Geraniaceae	
**Erodium botrys*	Broad-leaf filaree
**Erodium cicutarium*	Red-stem filaree
**Erodium moschatum*	White-stem filaree
**Geranium molle*	Dove's-foot geranium
Lamiaceae	
**Lamium amplexicaule*	Deadnettle
**Mentha pulegium*	Pennyroyal
Trichostema lanceolatum	Vinegar weed
Limnanthaceae	
Limnanthes douglasii subsp. nivea	Douglas' meadowfoam
Lythraceae	
**Lythrum hyssopifolia*	Hyssop loosestrife
Malvaceae	
**Malva parviflora*	Cheeseweed
Montiaceae	
Calandrinia ciliata	Red maids
Claytonia perfoliata	Miner's lettuce
Montia fontana	Blinks
Myrsinaceae	
Lysimachia minima	Chaffweed
Onagraceae	
Clarkia purpurea subsp. quadrivulnera	Four spot
Clarkia unguiculata	Canyon clarkia
Epilobium torreyi	Brook spike-primrose
Orobanchaceae	
Castilleja attenuata	Valley tassels
Triphysaria versicolor subsp. faucibarbata	Triphysaria
Papaveraceae	
Eschscholzia californica	California poppy
Phrymaceae	
Mimulus guttatus	Common monkeyflower
Plantaginaceae	
Callitriche marginata	Winged water-starwort
Collinsia heterophylla var. heterophylla	Chinese houses
Gratiola ebracteata	Bractless hedge-hyssop
Plantago erecta	Plantain
**Plantago lanceolata*	English plantain
Veronica peregrina subsp. xalapensis	Purslane speedwell
Polemoniaceae	
Leptosiphon parviflorus	Linanthus
Navarretia intertexta subsp. intertexta	Needle-leaved navarretia

* Indicates a non-native species

Table 1

Plants Observed at 2002 James Creek Rd in Oct. 2014 and March, May, July 2015

Navarretia pubescens	Downy navarretia
Navarretia tagetina	Marigold navarretia
Polygonaceae	
Eriogonum vimineum	Wicker-stem wild buckwheat
**Polygonum aviculare*	Common knotweed
**Rumex acetosella*	Sheep sorrel
**Rumex crispus*	Curly dock
**Rumex pulcher*	Fiddle dock
Ranunculaceae	
**Ranunculus muricatus*	Spiny-fruit buttercup
Ranunculus occidentalis var. occidentalis	Western buttercup
Rubiaceae	
**Galium murale*	Tiny bedstraw
**Galium parisiense*	Wall bedstraw
Galium porrigens var. porrigens	Climbing bedstraw
Scrophulariaceae	
Scrophularia californica	California figwort
**Verbascum thapsus*	Woolly mullein
**Verbascum virgatum*	Wand mullein
Solanaceae	
**Physalis philadelphica*	Tomatillo
Angiosperms -Monocots	
Agavaceae	
Chlorogalum pomeridianum var. pomeridianum	Soap plant
Alismataceae	
Alisma triviale	Water plantain
Cyperaceae	
Bolboschoenus maritimus subsp. paludosus	Alkali bulrush
Cyperus eragrostis	Tall flatsedge
Eleocharis macrostachya	Creeping spikerush
Juncaceae	
Juncus bufonius	Toad rush
**Juncus capitatus*	Dwarf rush
Juncus tenuis	Slender rush
Juncaginaceae	
Triglochin scilloides	Flowering quillwort
Liliaceae	
Calochortus luteus	Yellow mariposa-lily
Poaceae	
**Aegilops triuncialis*	Barbed goatgrass
**Aira caryophyllea*	Silver European hairgrass

* Indicates a non-native species

Table 1

Plants Observed at 2002 James Creek Rd in Oct. 2014 and March, May, July 2015

**Avena barbata*	Slender wild oat
**Brachypodium distachyon*	Purple falsebrome
**Briza minor*	Small quaking grass
**Bromus diandrus*	Ripgut grass
**Bromus hordeaceus*	Soft chess
**Crypsis schoenoides*	Swamp pricklegrass
**Cynosurus echinatus*	Dogtail Grass
**Glyceria declinata*	Low mannagrass
Hordeum brachyantherum	Meadow barley
**Hordeum marinum subsp. gussoneanum*	Mediterranean barley
**Poa annua*	Annual bluegrass
**Polypogon monspeliensis*	Annual beard grass
Stipa pulchra	Purple needlegrass
Themidaceae	
Dichelostemma capitatum subsp. capitatum	Blue dicks
Dichelostemma congestum	Forktoothed ookow
Triteleia hyacinthina	White brodiaea

* Indicates a non-native species

Table 2
Wildlife Observed on the 2002 James Creek Road Project Site 2014 and 2015

Amphibians	
Sierran treefrog	*Pseudacris sierra*
Bullfrog	*Rana catesbeiana*
Reptiles	
Sagebrush lizard	*Sceloporus graciosus*
Birds	
Turkey vulture	*Cathartes aura*
Hooded merganser	*Lophodytes cucullatus*
Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
Golden eagle	*Aquila chrysaetos*
American kestrel	*Falco sparverius*
California quail	*Callipepla californica*
Mourning dove	*Zenaida macroura*
Anna's hummingbird	*Calypte anna*
Rufous hummingbird	*Selasphorus rufus*
Acorn woodpecker	*Melanerpes formicivorus*
Nuttall's woodpecker	*Picoides nuttallii*
Northern flicker	*Colaptes auratus*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
Steller's jay	*Cyanocitta stelleri*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
Tree swallow	*Tachycineta bicolor*
Barn swallow	*Hirundo rustica*
Oak titmouse	*Baeolophus inornatus*
Bushtit	*Psaltriparus minimus*
White-breasted nuthatch	*Sitta carolinensis*
Bewick's wren	*Thryomanes bewickii*
Ruby-crowned kinglet	*Regulus calendula*
Western bluebird	*Sialia mexicana*
American robin	*Turdus migratorius*
Northern mockingbird	*Mimus polyglottos*
European starling	*Sturnus vulgaris*
American pipit	*Anthus rubescens*
Yellow warbler	*Dendroica petechia*
White-crowned sparrow	*Zonotrichia leucophrys*
Golden-crowned sparrow	*Zonotrichia atricapilla*
Dark-eyed junco	*Junco hyemalis*
Red-winged blackbird	*Agelaius phoeniceus*
Western meadowlark	*Sturnella neglecta*
Brewer's blackbird	*Euphagus cyanocephalus*
Bullock's oriole	*Icterus bullockii*
House finch	*Carpodacus mexicanus*

Table 2
Wildlife Observed on the 2002 James Creek Road Project Site 2014 and 2015

Lesser goldfinch	*Spinus psaltria*
House sparrow	*Passer domesticus*

Mammals

Virginia opossum	*Didelphis virginiana*
California ground squirrel	*Spermophilus beecheyi*
Botta's pocket gopher	*Thomomys bottae*
Columbian black-tailed deer	*Odocoileus hemionus ssp. Columbianus*
California meadow vole	*Microtus californicus*
Coyote	*Canis latrans*

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 2002 James Creek Road Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Asteraceae					
Centromadia parryi parryi Pappose tarplant	Fed: - State: - CNPS: Rank 1B.2	May-November	Coastal prairie; meadows and seeps; marshes and swamps; vernally wet grassland (sometimes alkaline).	Closest known occurrence is approximately 2.0 miles east of the project site (CNDDB Occurrence No. 17).	None. No meadows, seeps, marshes, swamps, or vernal grassland on site. Was not observed during appropriately timed surveys. No impact expected.
Harmonia hallii Hall's harmonia	Fed: - State: - CNPS: Rank 1B	April-May	Chaparral (serpentinite).	Closest known occurrence is approximately 2.5 miles west of the project site (CNDDB Occurrence No. 2).	None. No chaparral on site. Was not observed during appropriately timed surveys. No impact expected.
Layia septentrionalis Colusa layia	Fed: - State: - CNPS: Rank 1B	April-May	Chaparral; cismontane woodland, valley and foothill grassland; [sandy, serpentinite].	Closest known occurrence is approximately 2.1 miles west of the project site (CNDDB Occurrence No. 25).	None. Was not detected during appropriately timed surveys conducted in 2015. No impact expected.
Boraginaceae					
Amsinckia lunaris Bent-flowered fiddleneck	Fed: - State: - CNPS: Rank 1B.2	March-June	Cismontane woodland, valley and foothill grassland, coastal bluff scrub.	Closest known occurrence is approximately 0.1 mile north of the project site (CNDDB Occurrence No. 19).	None. Was not detected during appropriately timed surveys conducted in 2015. No impact expected.
Plagiobothrys strictus Calistoga popcornflower	Fed: FE State: CT CNPS: Rank 1B	March-June	Broad-leaved upland forest; meadows; valley and foothill grassland; [alkaline areas near thermal springs].	Closest known occurrence is approximately 4.7 miles southwest of the project site (CNDDB Occurrence No. 2).	None. No alkaline areas on site. Was not observed during appropriately timed surveys. No impact expected.
Brassicaceae					
Streptanthus hesperidis Jewelflower	Fed: State: CNPS: Rank 1B.2	May-July	serpentinite, rocky	Closest known occurrence is approximately 0.2 mile north of the project site (CNDDB Occurrence No. 18).	None. No serpentinite or rocky soils/rock outcrops on site. Was not observed during appropriately timed surveys. No impact expected.

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 2002 James Creek Road Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Streptanthus morrisonii elatus Three Peaks jewelflower	Fed: FC State: - CNPS: Rank 1B	June-September	Chaparral (serpentinite).	Closest known occurrence is approximately 1.2 miles north of the project site (CNDDB Occurrence No. 3).	None. No serpentinite or chaparral on site. Was not observed during an appropriately timed July survey. No impact expected.
Fabaceae					
Amorpha californica napensis Napa false indigo	Fed: - State: - CNPS: Rank 1B.2	April-July	Broadleaved upland forest (openings); chaparral, cismontane woodland. 150-2000 m.	On CNPS inventory.	None. Was not detected during appropriately timed surveys conducted in 2015. No impact expected.
Astragalus rattanii jepsonianus Jepson's milkvetch	Fed: - State: - CNPS: Rank 1B	April-June	Cismontane woodland; valley and foothill grassland [often serpentinite].	On CNPS inventory.	None. Was not detected during appropriately timed surveys conducted in 2015. No impact expected.
Lupinus sericatus Cobb Mountain lupine	Fed: - State: - CNPS: Rank 1B	March-June	Chaparral; cismontane woodland; lower coniferous forest.	Closest known occurrence is approximately 1.7 miles west of the project site (CNDDB Occurrence No. 19).	None. No chaparral, cismontane woodland, or coniferous forest on site. Was not observed during appropriately timed surveys. No impact expected.
Lamiaceae					
Trichostema ruygtii Napa bluecurls	Fed: - State: - CNPS: Rank 1B.2	June-October	Chaparral; cismontane woodland; lower montane coniferous forest; valley and foothill grassland; vernal pools. Elevation 30 - 680 meters.	Closest known occurrence is approximately 5.0 miles west of the project site (CNDDB Occurrence No. 21).	None. Was not detected during appropriately timed surveys conducted in 2015. No impact expected.
Liliaceae					
Fritillaria pluriflora Adobe-lily	Fed: - State: - CNPS: Rank 1B	February-April	Chaparral; cismontane woodland; valley and foothill grassland; [often adobe].	Closest known occurrence is approximately 1.8 miles north of the project site (CNDDB Occurrence No. 102).	None. Was not detected during appropriately timed surveys conducted in 2015. No impact expected.

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 2002 James Creek Road Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Linaceae					
Hesperolinon bicarpellatum Two-carpellate western flax	Fed: - State: - CNPS: Rank 1B	May-July	Chaparral (serpentinite).	Closest known occurrence is approximately 0.2 mile north of the project site (CNDDB Occurrence No. 6).	None. No chaparral on site. Was not observed onsite during appropriately timed surveys. No impact expected.
Hesperolinon sharsmithiae Sharsmith's western flax	Fed: State: CNPS: Rank 1B.2	May-July	serpentinite.	Closest known occurrence is approximately 0.1 mile north of the project site (CNDDB Occurrence No. 10).	None. No serpentinite on site. Was not observed during appropriately timed surveys. No impact expected.
Malvaceae					
Sidalcea oregana hydrophila Marsh checkerbloom	Fed: - State: - CNPS: Rank 1B	July-August	Meadows; riparian forest [mesic].	Closest known occurrence is approximately 4.9 miles south of the project site (CNDDB Occurrence No. 1).	None. No mesic meadows or riparian forest on site. Was not observed during surveys. No impact expected.
Plantaginaceae					
Penstemon newberryi sonomensis Sonoma beardtongue	Fed: - State: - CNPS: Rank 1B	May-July	Chaparral (rocky).	Closest known occurrence is approximately 3.0 miles southwest of the project site (CNDDB Occurrence No. 7).	None. No chaparral on site. Was not observed during appropriately timed surveys. No impact expected.
Polemoniaceae					
Leptosiphon jepsonii Jepson's leptosiphon	Fed: - State: - CNPS: Rank 1B.2	March-May	Chaparral; cismontane woodland (usually volcanic).	Closest known occurrence is approximately 1.4 miles south of the project site (CNDDB Occurrence No. 29).	None. No chaparral or cismontane woodland on site. Was not observed during appropriately timed surveys. No impact expected.

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 2002 James Creek Road Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Navarretia leucocephala bakeri Baker's navarretia	Fed: - State: - CNPS: Rank 1B.1	May-July	Cismontane woodland; lower montane coniferous forest; meadows (mesic); valley and foothill grassland; vernal pools.	Closest known occurrence is approximately 2.8 miles southeast of the project site (CNDDB Occurrence No. 25).	None. Was not detected during appropriately timed surveys conducted in 2015. No impact expected.
Navarretia rosulata Marin County navarretia	Fed: - State: - CNPS: Rank 1B	June-July	Closed-cone coniferous forest; chaparral; [serpentinite].	Closest known occurrence is approximately 2.1miles west of the project site (CNDDB Occurrence No. 13).	None. No serpentinite on site. Was not observed during appropriately timed surveys. No impact expected.
Rhamnaceae					
Ceanothus confusus Rincon Ridge ceanothus	Fed: - State: - CNPS: Rank 1B.1	February-April	Closed-cone coniferous forest; chaparral; cismontane woodland; [volcanic or serpentinite].	Closest known occurrence is approximately 3.4 miles northwest of the project site (CNDDB Occurrence No. 13).	None. No volcanic or serpentinite on site. No Ceanothus onsite. No impact expected.
Themidaceae					
Brodiaea leptandra Narrow-anthered California brodiaea	Fed: - State: - CNPS: Rank 1B.2	May-July	Broadleafed upland forest; chaparral; cismontane woodland; lower montane coniferous forest; valley and foothill grassland. Elevation 110 - 915 meters.	Closest known occurrence is approximately 2.5 miles south of the project site (CNDDB Occurrence No. 12).	None. Was not detected during appropriately timed surveys conducted in 2015. No impact expected.

Table 4

Special-Status Wildlife Species Known To Occur within 5 Miles of the 2002 James Creek Road Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Insects				
Serpentine cypress long-horned beetle *Vandykea tuberculata*	Fed: State: CR Other:	Very Little is known about this beetle except that it is an extremely rare endemic restricted to serpentine cypresses in the Clear Lake area in Lake County, CA.	Closest record for this species is located 1.2 miles southeast of the project site (Occurrence No. 1)	None. An extremely rare endemic restricted to serpentine cypresses in the Clear Lake area in Lake County, CA. No serpentine cypress trees occur on or near the project site. None would be impacted by the project.
Amphibians				
California red-legged frog *Rana draytonii*	Fed: FT State: CSC Other:	Occurs in lowlands and foothills in deeper pools and streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.	Closest record for this species is located 3.4 miles south of the project site (Occurrence No. 738)	Low. No permanent sources of deep water on or near the site. Record is not hydrologically connected to the site or in the same watershed. See text.
Foothill yellow-legged frog *Rana boylii*	Fed: -- State: CSC Other:	Found in partially shaded, shallow streams with rocky substrates. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.	Closest record for this species is located 1.9 miles north of the project site (Occurrence No. 246)	None. Only seasonally wet ponds on site. No cobble-sized rocks. No perennial streams. Record is not hydrologically connected to the site.
Reptiles				
Western pond turtle *Emys marmorata*	Fed: -- State: CSC Other:	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County.	Closest record for this species is located 3.0 miles southwest of the project site (Occurrence No. 671)	None. Only seasonally wet ponds on site.

Table 4

Special-Status Wildlife Species Known To Occur within 5 Miles of the 2002 James Creek Road Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Birds				
American peregrine falcon *Falco peregrinus anatum*	Fed: - State: CE Other:	Nests on high cliffs. Also nests on human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Closest record for this species is located 4.0 miles west of the project site (Occurrence No. 11)	None. No high cliffs on or near the site.
Purple martin *Progne subis*	Fed: State: CSC Other:	Inhabits woodlands, low elevation coniferous forest of Douglas fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, also in human made structures. May avoid heavily grazed areas.	Closest record for this species is located 4.6 miles south of the project site (Occurrence No. 12)	Low. Oaks with woodpecker cavities provide nesting habitat. Surveys will be conducted. See text.
Tricolored blackbird *Agelaius tricolor*	Fed: -- State: CE Other:	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	Closest record for this species is located 1.7 miles southeast of the project site (Occurrence No. 407)	None. No cattails or other dense wetland vegetation on site.
Mammals				
Townsend's big-eared bat *Corynorhinus townsendii townsendii*	Fed: -- State: CSC Other: CC	Occurs in humid coastal regions of northern and central California. Roosts in limestone caves, lava tubes, mines, and buildings. Extremely sensitive to disturbance.	Closest record for this species is located 1.7 miles west of the project site (Occurrence No. 127)	Low. Project site is highly disturbed and subject to existing continuous disturbance. Surveys will be conducted. See text.
Pallid bat *Antrozous pallidus*	Fed: - State: CSC Other:	Occurs in deserts, grasslands, shrublands, woodlands, and forests. Most common in dry habitats with rocky areas for roosting. Roosts in caves, crevices, mines, and occasionally hollow trees. Night roosts in open areas such as porches and open buildings.	Closest record for this species is located 2.9 miles south of the project site (Occurrence No. 224)	Low. Project site is highly disturbed and subject to existing continuous disturbance. Surveys will be conducted. See text.

Table 4

Special-Status Wildlife Species Known To Occur within 5 Miles of the 2002 James Creek Road Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site

***Status**

Federal:	State:
FE - Federal Endangered	CE - California Endangered
FT - Federal Threatened	CT - California Threatened
FPE - Federal Proposed Endangered	CR - California Rare
FPT - Federal Proposed Threatened	CC - California Candidate
FC - Federal Candidate	CSC - California Species of Special Concern
FPD - Federally Proposed for delisting	FP - Fully Protected
	WL - Watch List. Not protected pursuant to CEQA

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 2002 James Creek Road Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site

***Status**

Federal:
FE - Federal Endangered
FT - Federal Threatened
FPE - Federal Proposed Endangered
FPT - Federal Proposed Threatened
FC - Federal Candidate

State:
CE - California Endangered
CT - California Threatened
CR - California Rare
CC - California Candidate
CSC - California Species of Special Concern

CNPS:
Rank 1A - Presumed extinct in California
Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/ high degree and immediacy of threat)
Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)
Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

CNPS Continued:
Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 2A - Extirpated in California, common elsewhere
Rank 2B.1 - Seriously endangered in California, but more common elsewhere
Rank 2B.2 - Fairly endangered in California, but more common elsewhere
Rank 2B.3 - Not very endangered in California, but more common elsewhere
Rank 3 - Plants about which we need more information (Review List)
Rank 3.1 - Plants about which we need more information (Review List) Seriously endangered in California
Rank 3.2 - Plants about which we need more information (Review List) Fairly endangered in California
Rank 4 - Plants of limited distribution - a watch list